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Liability for Biodiversity Damage in European Union Law

About the Role of Environmental Administrative Liability and Environmental Criminal Liability in the Protection of Biodiversity in the European Union: Challenges and Opportunities

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Dedication

This dissertation is dedicated to my father, whose warmth, intellect, and quiet strength have been a guiding light throughout my life.

To my husband, Florian, for his steadfast support and love.

To our daughters – Salome, Seraphine, and Sofia – whose presence and inquisitiveness fill my days with joy, laughter, and happiness, and who embody the care owed to present and future generations.

And to my dearest friend Polly, whose curiosity and courage inspired this work.

With enduring gratitude and love.

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Abstract (DE)

Diese Dissertation untersucht die Rolle der Haftung im Biodiversitätsschutz der Europäischen Union (EU) und stellt die erste umfassende Analyse des unionsrechtlichen Haftungsregimes für Biodiversitätsschäden dar. Im Mittelpunkt steht die Untersuchung der Umwelthaftungsrichtlinie (ELD) und der Umweltstrafrechtsrichtlinie (ECD), die derzeit die zentralen Instrumente zur Durchsetzung umweltrechtlicher Haftung darstellen, sowie ihres Zusammenspiels mit der Vogelschutz- und der Fauna-Flora-Habitat-Richtlinie, die das Fundament der EU-Biodiversitätspolitik bilden und eng mit den Haftungsrichtlinien verknüpft sind. Eingebettet in den breiteren Governance-Kontext der EU-Umweltpolitik analysiert die Arbeit die verwaltungsrechtliche (ELD) und strafrechtliche (ECD) Haftung als umweltpolitische Steuerungsinstrumente sowie deren bestehenden und potenziellen Beitrag zum Schutz der biologischen Vielfalt. Auf Grundlage einer detaillierten rechtlichen Analyse, unter Einbeziehung der jüngsten Überarbeitung der ECD, werden bestehende Lücken, Unstimmigkeiten und Begrenzungen des Haftungsrahmens identifiziert und Reformoptionen aufgezeigt, die auf eine Erhöhung seiner Wirksamkeit abzielen.

Abstract (EN)

This dissertation examines the role of liability in the protection of biodiversity within the legal framework of the European Union (EU). It presents the first comprehensive analysis of the EU's liability regime for biodiversity damage, focusing on the Environmental Administrative Liability Directive (ELD) and the Environmental Criminal Liability Directive (ECD) — the main instruments governing environmental liability — alongside the Birds and Habitats Directives (BHD), which underpin EU biodiversity policy and are closely intertwined with both liability instruments.

Situated within the broader context of EU environmental governance, the dissertation analyses administrative (ELD) and criminal (ECD) liability as regulatory tools and assesses their current and potential contribution to biodiversity protection. Through detailed legal analysis, and taking into account the recent revision of the ECD, it identifies gaps, inconsistencies, and limitations in the existing liability framework, and proposes potential amendments to improve its coherence and effectiveness.

Preface

Biodiversity is undergoing documented and accelerating declines, representing one of the most critical environmental challenges of our time. Despite the adoption of ambitious policy targets over recent decades, the European Union (EU) continues to experience significant biodiversity loss. Persistent shortfalls in achieving biodiversity objectives raise serious concerns for public health, societal well-being, and the stability of economic systems, all of which depend on biodiversity and the ecosystem services it underpins—such as food and freshwater provision, pollination, and climate and flood regulation. As the legal framework evolves in response to these challenges, assessing the effectiveness of existing legal instruments for biodiversity protection, and identifying ways to strengthen their effectiveness, becomes increasingly important.

This dissertation, titled *"Liability for Biodiversity Damage in European Union Law: The Role of Environmental Administrative Liability and Environmental Criminal Liability in the Protection of Biodiversity in the European Union—Challenges and Opportunities"*, explores the critical role of liability in protecting and safeguarding biodiversity. The research focuses on evaluating the effectiveness of the Environmental Administrative Liability Directive (ELD) and the Environmental Criminal Liability Directive (ECD) in addressing the loss of biodiversity.

At present, the ELD and ECD are the two main instruments governing liability for damage to biodiversity in the EU. Introduced within a time frame of less than four years, the ELD (2004) and the ECD (2008), have each established a framework of environmental liability, imposing further obligations on Member States (MS) to implement and enforce EU environmental law. Both Directives are deeply intertwined with key provisions of the Birds and Habitats Directives (BHD), which form the cornerstones of EU biodiversity policy. In 2024, the ECD (2008) was replaced by a substantially revised version, with the new Directive (nECD) coming into force on 20 May 2024.

This dissertation presents the first comprehensive assessment of liability for biodiversity damage within the EU, examining the intricate interplay between four key Directives: the ELD and ECD, which form the legal basis for environmental liability, and the Birds and Habitats Directives (BHD), which underpin EU biodiversity policy.

Situating its analysis within the broader context of EU environmental governance, this study evaluates the role of liability in protecting biodiversity and its current and potential contributions. Through detailed analysis, and considering the recent changes introduced by the nECD, it identifies gaps, inconsistencies and limitations within the current liability framework, proposing potential amendments to enhance its effectiveness. The findings aim to contribute to the ongoing development of environmental law in the EU, providing insights that could help strengthen liability for damage to biodiversity and help shape future legal reforms, ensuring more effective protection of biodiversity within the European Union.

List of Acronyms

AC	Aarhus Convention
AG	Advocate General
BD	Birds Directive
BHD	Birds and Habitats Directives
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species
COE	Council of Europe
COREPER	Committee of Permanent Representatives
COM	Communication of the European Commission
DG ENV	Directorate-General for Environment of the European Commission
EAP	Environment Action Programme
EC	European Community
ECD	Environmental Criminal Liability Directive 2008/99/EC
ECJ	European Court of Justice
ECOSOC	Economic and Social Committee
ECPI	European Criminal Policy Initiative
EEA	European Environment Agency
EEB	European Environmental Bureau
EEC	European Economic Community
EESC	European Economic and Social Committee
EFCA	European Fisheries Control Agency
EIA	Environmental Impact Assessment
ELD	Environmental Administrative Liability Directive 2004/35/EC
ENEC	European Network against Environmental Crime
eNGO	Environmental Nongovernmental Organisation
ENPE	European Network of Prosecutors for the Environment
EnviCrimeNet	European Network for Environmental Crime
EP	European Parliament
EPA	US Environmental Protection Agency
EU	European Union
EUFJE	European Union Forum of Judges for the Environment
FCS	Favourable Conservation Status
GFCC	German Federal Constitutional Court
HD	Habitats Directive
HEA	Habitat Equivalency Analysis
ICC	International Criminal Court
ICJ	International Court of Justice
IEEP	Institute for European Environmental Policy
IMPEL	Network for the Implementation and Enforcement of Environmental Law
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IROPI	Imperative Reasons of Overriding Public Interest
MEP	Member of the European Parliament

MS	EU MS
nECD	New Environmental Criminal Liability Directive (EU) 2024/1203
NGO	Non-governmental Organisation
N.y.r.	Not yet reported
OECD	Organisation for Economic Co-operation and Development
OJ	Official Journal
pECD	Proposal for a Directive on the Protection of the Environment through Criminal Law and Replacing Directive 2008/99/EC
pSCI	proposed Site of Community Importance
REA	Resource Equivalency Analysis
SAC	Special Area of Conservation
SCI	Site of Community Importance
SEA	Single European Act
SEC	European Commission internal working paper
SEF	Stop Ecocide Foundation
SPA	Special Protection Area
SSP	Ship-Source Pollution
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
VHRM	Flemish High Enforcement Council for Spatial Planning and Environment
WFD	Water Framework Directive

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1 Introduction

Biodiversity is undergoing documented and accelerating declines, representing one of the most critical environmental challenges of our time. According to the Global Assessment Report on Biodiversity and Ecosystem Services (2019), biodiversity is declining at an unprecedented rate in modern history, with more than 1 million animal and plant species facing the risk of extinction in the coming decades due to human activities.[1] Scientific studies show that current extinction rates far exceed natural background rates, the typical pace of species loss over geological timescales without major disturbances.[2] Losses have accelerated particularly since the industrial revolution, driven by habitat destruction, climate change, and overexploitation.[3]

Efforts at the European Union (EU) and international levels over the past decades have led to important policy advancements in biodiversity conservation. Yet these efforts have not translated into halting overall declines. At the EU level, this shortfall is reflected in the repeated failure to meet targets set under various biodiversity strategies, highlighting a persistent gap

[1]IPBES, *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, Brondizio ES, Settele J, Díaz S and Ngo HT (eds) (2019, IPBES Secretariat, Bonn), [online] [IPBES, *Global Assessment Report*]; The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent intergovernmental body established by states to strengthen the science-policy interface for biodiversity and ecosystem services, supporting their conservation and sustainable use, as well as promoting long-term human well-being and sustainable development. It was established in Panama City on 21 April 2012 by 94 governments. IPBES is not a United Nations body (IPBES, *About IPBES*, https://ipbes.net/about, accessed 16 May 2025). Other recent reports documenting the accelerating loss of biodiversity include: P Dasgupta, *The Economics of Biodiversity: The Dasgupta Review* (2021, HM Treasury, London) [online] [Dasgupta, *Economics of Biodiversity*]; International Resource Panel, *Global Resources Outlook 2019: Natural Resources for the Future We Want. A Report of the International Resource Panel* (2019, United Nations Environment Programme, Nairobi), [online] [IRP, *Global Resources Outlook 2019*].

[2] The background extinction rate refers to the natural pace at which species go extinct under normal ecological conditions, without major human or environmental disturbances. Estimates suggest a baseline of approximately 0.1 to 2 extinctions per million species per year, see S Pimm et al., *The Biodiversity of Species and Their Rates of Extinction, Distribution, and Protection*, Science (New York, N.Y.) 344:6187 (2014) [Pimm et al., *Biodiversity of Species and Extinction Rates*]; J De Vos et al, 'Estimating the Normal Background Rate of Species Extinction' (2014) 29(2) *Conservation Biology: The Journal of the Society for Conservation Biology* [online] [De Vos et al.]. However, current extinction rates are significantly higher, with some studies indicating that modern species loss is occurring at least 100 times faster than the background level due to human activities, see G. Ceballos et al., *Accelerated Modern Human-Induced Species Losses: Entering the Sixth Mass Extinction* (2015) 1(5) *Science Advances* [online] [Ceballos et al., *Species Losses*]

[3] IPBES, *Global Assessment Report*.

between political commitments and their implementation.[4] According to the European Environment Agency (EEA), biodiversity loss in Europe continues at an "alarming" rate.[5]

Although the term "biodiversity" is frequently used in EU legislation and policy, it has so far not been legally defined by the EU legislator, either as a stand-alone concept or by reference to existing definitions, such as that in the Convention on Biological Diversity (CBD).[6] Rather, its meaning in EU law depends on the specific legislative context in which it is used.[7]

Broadly speaking, the term "biodiversity" refers to the variety of life on Earth. In this dissertation, a scientific rather than a legal definition is used to avoid reliance on definitions tied to specific legal instruments. Accordingly, the understanding of biodiversity is guided by the definition published by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), which defines it as:

> "Variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. This includes variations in genetic, phenotypic, phylogenetic and functional traits, as well as changes in abundance and distribution over time and space within and among species, biological communities and ecosystems."[8]

[4] For further reference, see Chapter 3.3, *The European Union's Biodiversity Strategies as Guiding Frameworks*. In recent decades, the EU has regularly adopted strategies to protect biodiversity. However, despite some progress, both the EU and its MS have consistently failed to meet the objectives set under these strategies.

[5] see European Environment Agency, *The European Environment — State and Outlook 2020: Knowledge for Transition to a Sustainable Europe* (2019) [online] [EEA, SOER 2020 Report]; The European Environment Agency (EEA) is an agency of the European Union, tasked with providing sound, independent information on the environment. The European Environment – State and Outlook 2020 report is published by the EEA every five years, as mandated by its founding regulation.

[6] Convention on Biological Diversity, 1760 UNTS 79 (entered into force 29 December 1993).The international Convention on Biological Diversity (CBD), for example, defines biodiversity for the purposes of the Convention in its Article 2 as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems".

[7] During the drafting of the Environmental Administrative Liability Directive (ELD), for example, the term "biodiversity" was initially used to describe the natural resources covered. However, because this interpretation differed from established definitions such as that in the CBD, the final version of the ELD replaced the term with "protected species and habitats," using the Birds and Habitats Directives (BHD) as a reference framework. For a detailed discussion of biodiversity under the ELD, see Chapter 11.1.1, *Scope of biodiversity protected under the ELD*.

[8] IPBES, *Regional Assessment Report on Biodiversity and Ecosystem Services for Europe and Central Asia*, Rounsevell M, Fischer M, Torre-Marin Rando A and Mader A (eds) (2018, Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn), [online] [IPBES, *Europe and Central Asia Assessment*], Annex I, *Glossary*.

In the EU, the two main pieces of legislation for the protection of biodiversity are Directive 2009/147/EC on the conservation of wild birds (hereinafter referred to as the "Birds Directive", or short: BD) [9] and Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (hereinafter referred to as the "Habitats Directive", or short: HD) [10]. Often quoted together as the "Birds and Habitats Directives" (short: BHD) or "Nature Directives", the aims of the two Directives are in the case of the Birds Directive

> to **maintain or adopt** the population of all wild bird species naturally occurring in the EU at a level which corresponds to "**ecological, cultural and scientific requirements,**[11]

and in the case of the Habitats Directive

> to **maintain or restore** protected natural habitats and species of wild fauna and flora in the territory of the EU at "**favourable conservation status**".[12]

To achieve their aims, the BHD prescribe the implementation of three main sets of measures in the EU MS:

- **Site designation measures** for the designation of sites for the protection of species and habitat types listed in the Annexes of the BHD, as well as for all migratory birds. These designated sites form part of a **coherent** ecological network of nature areas and are referred to as the **European Natura 2000 Network**.
- **Site protection measures**, which are designed to maintain and restore protected species and habitats at favourable conservation status.
- **Species protection measures**, which apply both inside and outside Natura 2000 sites.

These sets of measures are furthermore supported by monitoring and research measures.

As with all EU legislation, the achievement of their objectives depends on their proper implementation and enforcement in the Member States (MS). Conflicts surrounding the implementation and enforcement of the BHD have been an integral part of the history of the two Directives.[13] Despite their adoption and an overall discernible increase in the scope and

[9] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds [2009] OJ L20/7; codifying Council Directive 79/409/EEC of 2 April 1979.
[10] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [1992] OJ L206/7.
[11] See BD, Arts. 1 – 2.
[12] See HD, Art. 2(1).
[13] For further reference, see also A Jordan and J Tosun, *Policy Implementation*, in: A Jordan and C Adelle (eds), *Environmental Policy in the EU: Actors, Institutions and Processes* (3rd ed, 2013, Routledge, London) [Jordan & Tosun, *Policy Implementation in Environmental Policy in the EU*], 257, referring to conflicts surrounding the implementation of EU environmental legislation in more general terms as "an integral part of the policy game-

content of EU environmental legislation since the early 1970s, the scale and pace of biodiversity loss continue to grow.[14] A comprehensive evaluation of the BHD ("Fitness Check"), published by the European Commission (hereinafter referred to as the "Commission") in December 2016, concluded that while the two Directives were "fit for purpose", achieving their objectives and realising their full potential would depend upon substantially improving their implementation.[15]

Numerous infringement procedures brought by the Commission against Member States (MS) for failing to transpose, implement, and properly enforce the Birds and Habitats Directives (BHD), along with extensive case law from the European Court of Justice (ECJ), illustrate the scale of the problem. Since the 1980s, nature-related breaches, including but not limited to the Nature Directives, have accounted for the largest share of environmental infringements reported, with 2,374 cases (30.2%) out of 7,866.[16]

play between state and non-state actors in the EU", noting that "at the end of 2009, 451 of the 1860 infringements (i.e. 24,3 %) of EU policy related to environmental legislation" (including further references).

[14] see WWF, *Living Planet Report 2020 - Bending the Curve of Biodiversity Loss*, R E A Almond, M Grooten and T Petersen (eds), WWF, Gland, Switzerland (2020) [online] [WWF, *Living Planet Report 2020*].

[15] European Commission, *Fitness Check of the EU Nature Legislation (Birds and Habitats Directives): Staff Working Document* SWD(2016) 472 final, Brussels, 16 December. [European Commission, *Fitness Check of the EU Nature Legislation*]. The Fitness Check is one of many activities undertaken as part of the Commission's Regulatory Fitness and Performance Programme (REFIT).

[16] This figure also covers infringements of other nature-related directives beyond the Birds Directive. For further reference, see Milieu, IEEP & ICF, *Evaluation Study to Support the Fitness Check of the Birds and Habitats Directives*, study commissioned by the European Commission (2016) [online] [Milieu et al., *Fitness Check Birds and Habitats Directives*], 37.

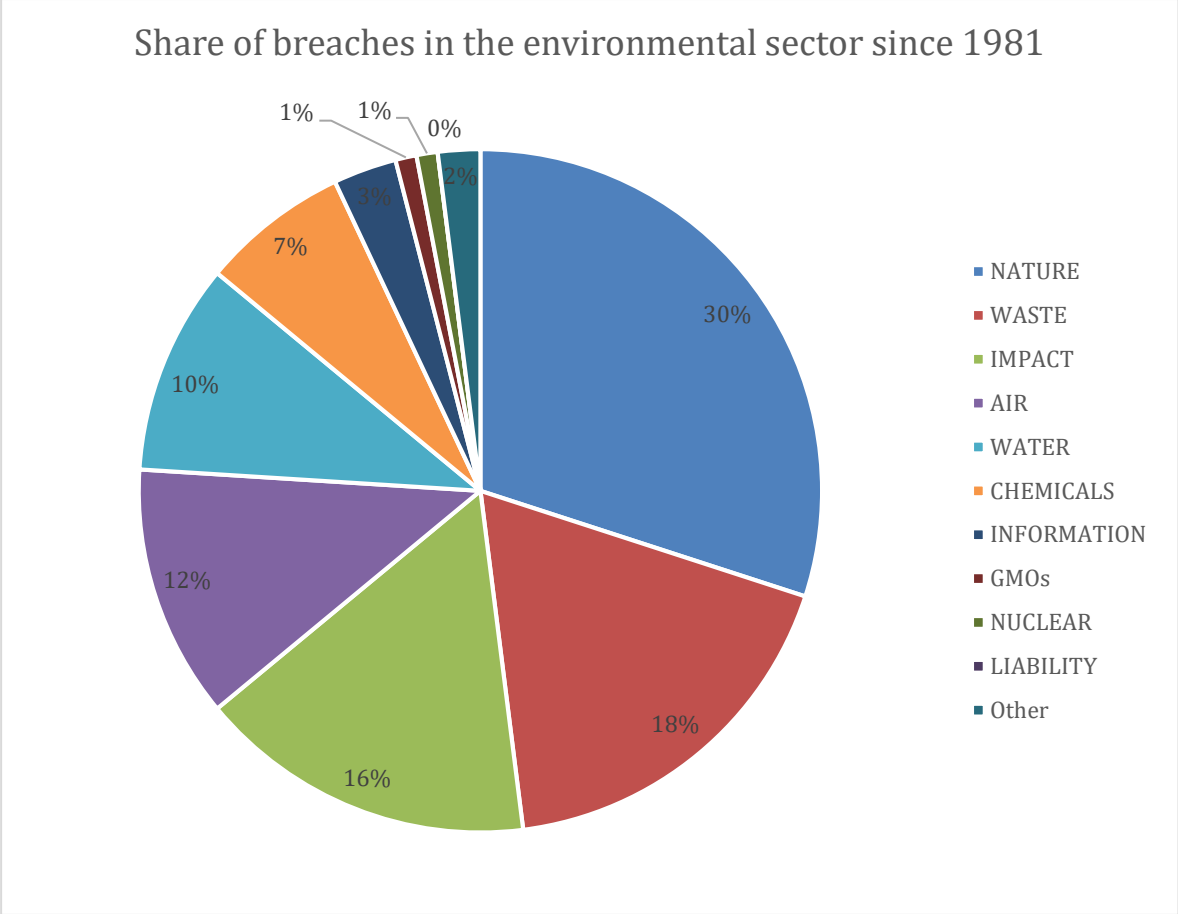

Figure 1: Share of reported breaches in the environmental sector per area (100% = 7866)[17]

In a broader context, environmental cases continue to form one of the largest groups of open infringement proceedings. Between 2011 and 2023, environmental infringements accounted for the highest number of open cases across all policy areas in nearly every year.[18] The only exception was in 2016, when another policy area led by a margin of just one case. This pattern reflects long-standing compliance challenges within the environmental sector. Data going back to 1998 shows that the environment has consistently been among the most affected sectors, regularly ranking first or second—typically alongside transport—in terms of the number of unresolved infringement cases.[19] The 2024 Annual Report on the monitoring of the application

[17] see Milieu et al., *Fitness Check Birds and Habitats Directives*, 37.

[18] For the period 2011–2023, the environment consistently accounted for the highest number of open infringement cases by year-end. This conclusion is based on data presented in the European Commission's *Annual Reports on the Monitoring of the Application of EU Law*, which—since 2011—have included accessible visual summaries facilitating year-on-year comparison. Earlier reports do not offer comparable formats or datasets, and conducting an independent count of infringement cases across policy areas falls outside the scope of this research. The analysis therefore relies on Commission publications and other secondary sources that have synthesised the underlying primary data. The reports are available at: https://commission.europa.eu/publications/annual-reports-monitoring-application-eu-law_en, accessed 16 May 2025.

[19] M Smith, *Centralised Enforcement, Legitimacy and Good Governance in the EU* (Routledge, London 2009), 124-126. European Parliament, Directorate-General for Internal Policies, Challenges in the Implementation of EU Law at National Level, Briefing PE 608.841 (2018) [online].

of EU law confirms this trend, identifying the environment as the policy area with the highest number of new infringement cases, with 109 cases opened in 2023 alone.[20]

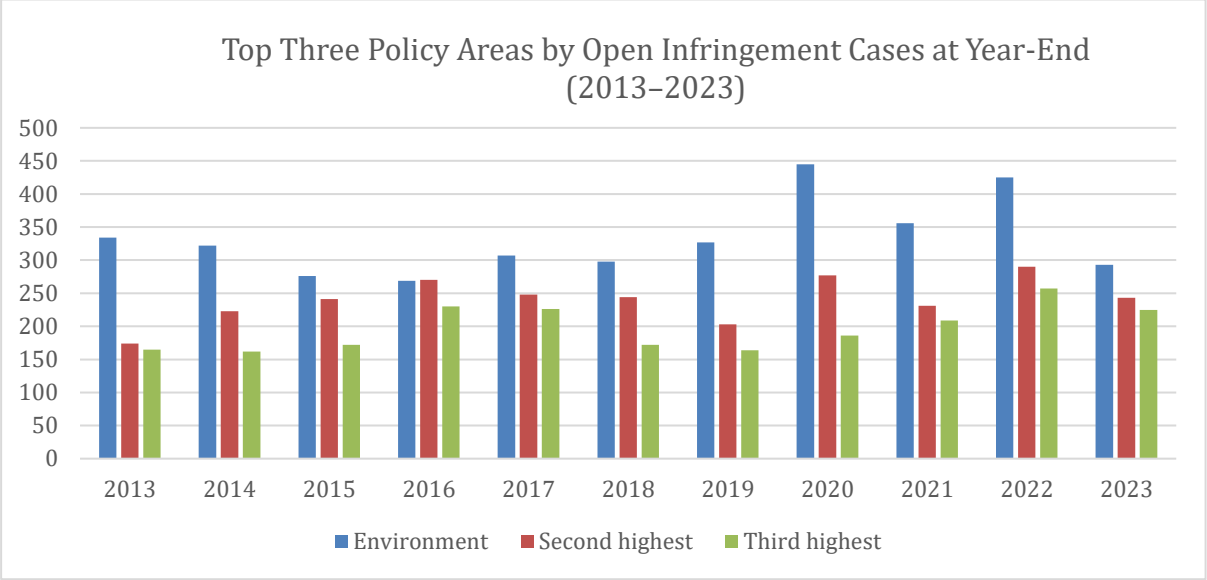

Figure 2: Open infringement cases by policy area at year-end (2013–2023); the environment consistently ranked highest, except in 2016 (270 vs 269).

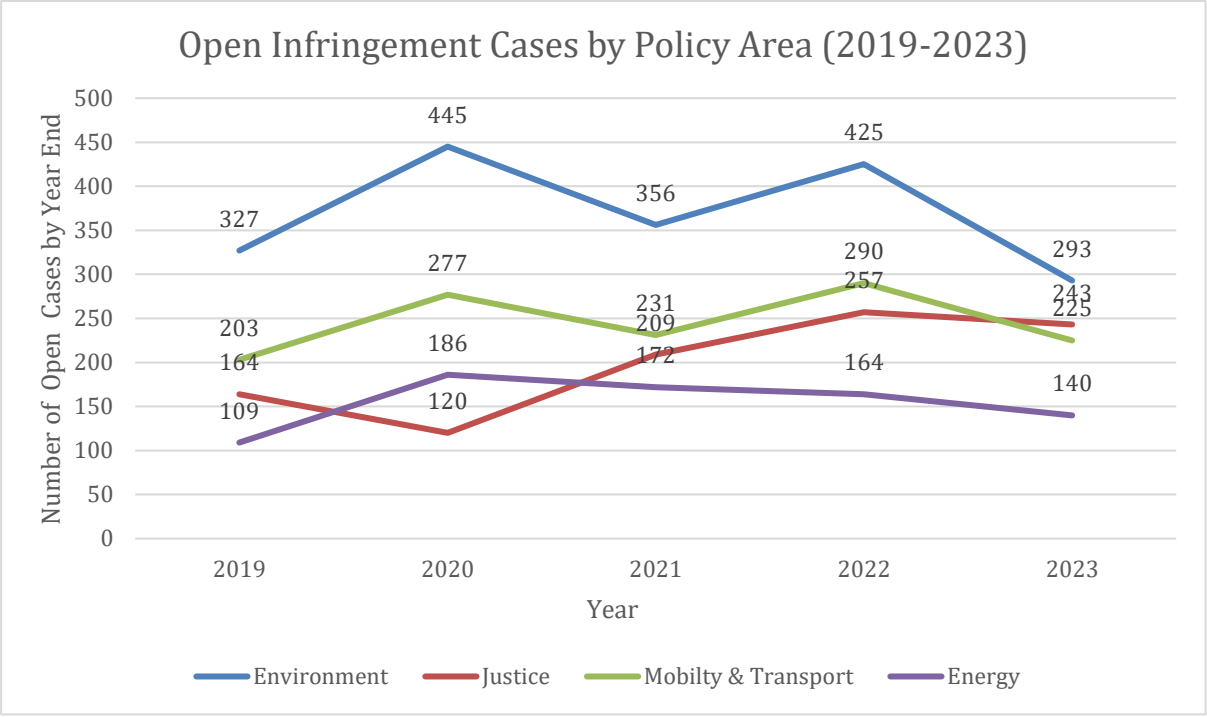

Figure 3: Trends in infringement cases by policy area (2019-2023) [21]

[20] European Commission, *Report from the Commission: Monitoring the Application of European Union Law – 2023 Annual Report* COM(2024) 358 final, Brussels, 25 July 2024 [online][European Commission, *Monitoring the Application of EU Law – 2023 Annual Report*].

[21] The Commission no longer publishes infringement data by policy area in a Staff Working Document (SWD); this information is now available online at: https://commission.europa.eu/law/application-eu-law/implementing-eu-law/infringement-procedure/2023-annual-report-monitoring-application-eu-law_en#infringements.

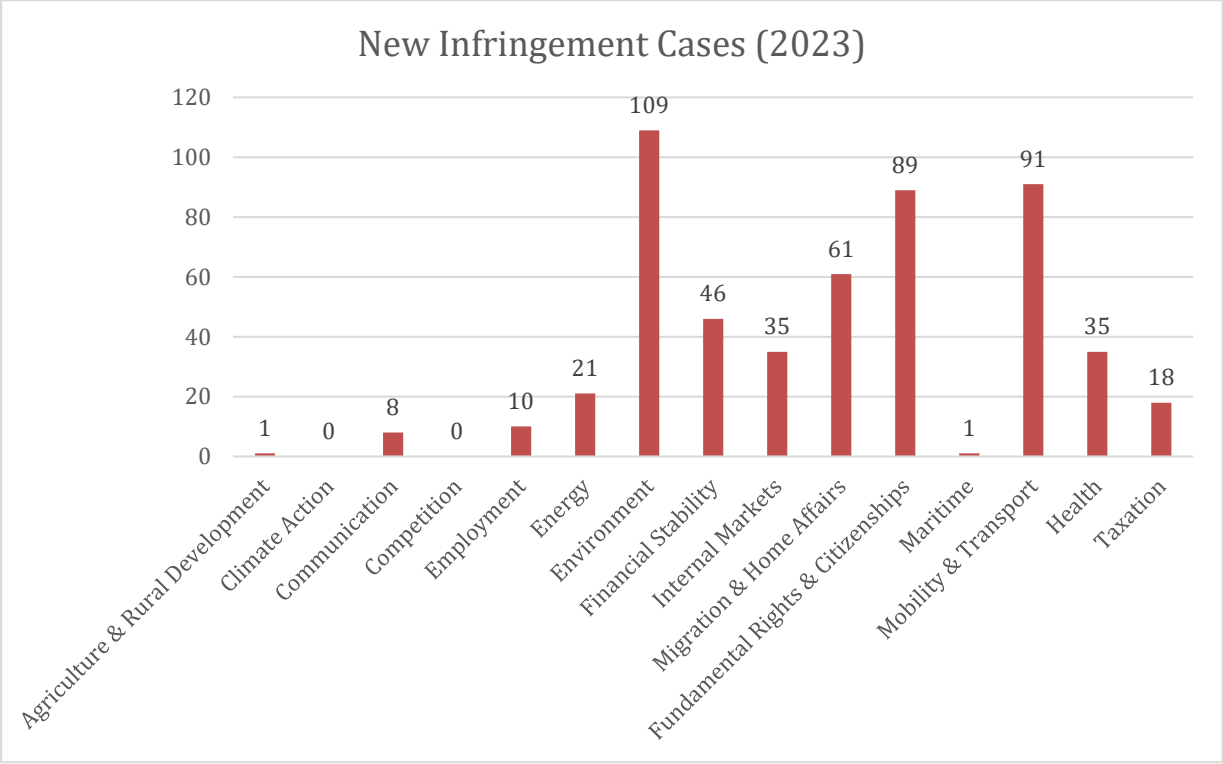

Figure 4: New infringement cases by policy area in 2023, with the environment continuing to lead.

In its 2024 Annual Report on monitoring the application of EU law, the Commission identified the environment as the policy area with the highest number of new infringement cases, with 109 cases opened in 2023 alone.[22]

This lack of compliance has direct consequences: according to the EEA (2020), 60% of species assessments and 77% of habitat assessments remain in unfavourable conservation status, highlighting the failure to secure the protection guaranteed under the BHD.[23]

Improving the implementation and enforcement of the BHD is also important from an economic perspective. If not fully implemented, EU environmental legislation cannot be effective and the level of protection in the MS continues to vary, sometimes drastically. The resulting uneven playing field distorts competition between market players and, in theory, prepares the ground

[22] See European Commission, *Monitoring the Application of EU Law – 2023 Annual Report*. In its report, the Commission noted that the environment was the policy area with the highest number of new infringement cases opened in 2023. Specifically, 109 new cases concerned the environment, compared to 91 in Mobility & Transport, 89 in Justice, Fundamental Rights & Citizenship, and 61 in Migration & Home Affairs.
[23] EEA, *The European Environment — State and Outlook 2020: Knowledge for Transition to a Sustainable Europe* (2019) [online] [EEA, *SOER 2020 Report*], 75-91. Published every five years as mandated by its regulation.

for a "race to the bottom" among national environmental standards - something that EU environmental legislation is indeed expected to prevent.[24]

The EU commissioned study "The costs of not implementing EU environmental law" (2019) estimates that a failure to fully implement environmental legislation costs the EU around €55 billion every year in health costs and direct costs to the environment.[25] The costs of not having fully implemented the BHD alone are estimated to amount to EUR 13,1 billion per year.[26]

To increase pressure and strengthen MS' compliance efforts, the EU has, over the decades, taken various measures.[27] Initially, it relied on the powers conferred by the Treaties of the EU (hereinafter referred to as the "Treaties").[28] The Commission launched numerous infringement proceedings against MS. Simultaneously, the European Court of Justice (hereinafter referred to as the "Court", or short: ECJ) escalated the use of penalty payments against those MS that did not adhere to the Court's rulings, an option introduced by the Treaty of Maastricht in 1992.[29] Nevertheless, the measures available within the existing legal framework ultimately proved insufficient to bring about a significant improvement in compliance.[30]

[24] See Jordan & Tosun, *Policy Implementation in Environmental Policy in the EU*, 247.
[25] See COWI and Eunomia, *Study on the Costs of Not Implementing EU Environmental Law* (2019, Brussels, commissioned by the European Commission) [online] [COWI & Eunomia, *Costs of Not Implementing EU Environmental Law*], 14. According to the study, the costs were calculated in three steps. First, the authors estimated "the implementation gap as the difference between the environmental status and the respective environmental target—given that the target has not been reached." Second, they assessed "the impacts of an implementation gap on the health of the population and the environment." Finally, they applied "socioeconomic unit cost measures to the impact estimates to obtain implementation gap cost estimates in EUR."
[26] See COWI & Eunomia, *Costs of Not Implementing EU Environmental Law*, 38,166. The study, conducted for the European Commission, estimates that the costs of not fully implementing the BHD amount to EUR 13.1 billion per year. This figure is based on estimates by ten Brink et al (2008), who calculated that the Natura 2000 network provides EUR 200–300 billion per year in benefits, and that around 5% of this amount could be seen as the annual cost of ecosystem deterioration due to incomplete implementation of EU legislation.
[27] See also in this regard, A Farmer, 'Environmental Crime in Europe: State of Affairs and Future Perspectives' in A Farmer, MG Faure and GM Vagliasindi (eds), *Environmental Crime in Europe* (2017, Hart Publishing) [online] [Farmer, *Environmental Crime: State of Affairs*], 320.
[28] *Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community*, 13 December 2007, 2007/C 306/01.
[29] Faure, *The Development of Environmental Criminal Law in the EU and its Member States* (2017) 26(2) Review of European, Comparative & International Environmental Law 139–146 [MG Faure, *Development of Environmental Criminal Law*], 143. In the seminal ruling *Francovich and Others*, C-6/90 and C-9/90, the Court established that EU Member States may be held liable for loss and damage caused to individuals by failure to properly implement an EU Directive into national law. Prior to this, the ECJ had already made clear in *Commission v Greece*, C-68/88 that Member States must not only implement but also effectively enforce EU environmental law.
[30] Faure, *Development of Environmental Criminal Law*, 143.

In the early 2000s, against the backdrop of these developments, the EU began introducing several pieces of legislation and other instruments aimed at imposing additional obligations on MS to implement and enforce EU environmental law.[31] These measures included the following:

- In 2001, a recommendation to improve environmental inspections in MS: **Recommendation 2001/331/EC providing for Minimum Criteria of Environmental Inspections in the Member States** (thereinafter referred to as "Recommendation 2001/331/EC", or short: RMCEI).[32]
- In 2004, a directive introducing administrative liability for environmental damage: the **Environmental Administrative Liability Directive** (short: ELD).[33]
- In 2008, a directive introducing criminal liability for serious breaches of EU environmental law: **Environmental Criminal Liability Directive** (short: ECD).[34]

The **RMCEI**, adopted in 2001, was introduced in response to the large disparities observed between inspection systems in the MS.[35] Inspections fall within the competence of the MS and are carried out to supervise compliance with environmental laws. The disparities concerned both MS" capacity to carry out inspection tasks as well as the scope and content of the inspection tasks undertaken at MS level.[36] The framework for inspections set out under Recommendation 2001/331/EC introduced minimum criteria for national environmental inspections in the MS, albeit only in the form of a (**non-binding**) **recommendation**.

The adoption of Recommendation 2001/331/EC was followed by **two legally binding instruments** that further strengthened the role of national competent authorities (short: NCAs) in implementing and enforcing environmental law: Firstly, the **2004 Environmental**

[31] See also M Hedemann-Robinson, *Enforcement of EU Environmental Law: Taking Stock of the Evolving Union Legal Framework* (2015) 5 European Energy and Environmental Law 115–129 [Hedemann-Robinson, *Enforcement of EU Environmental Law: Taking Stock*], 16. For further details on the historical context, see the discussion of the history of the Directives in Parts II and III of this dissertation.
[32] Recommendation 2001/331/EC providing for Minimum Criteria of Environmental Inspections in the Member States [2001] OJ L 118/41 (RMCEI). Recommendations are non-binding measures under EU law (Art. 288(5) TFEU). Environmental inspections fall within the competence of Member States and are carried out to supervise compliance with environmental laws. Several studies have revealed significant disparities between inspection systems across Member States. In recognition of these differences, the European Parliament and the Council adopted RMCEI in 2001.
[33] Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143/56, 30 April 2004.
[34] Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law, OJ L 328, 6 December 2008.
[35] For further reference, see Part V of this dissertation, *The role of inspections in the enforcement of the BHD*.
[36] RMCEI, Recital 8.

Administrative Liability Directive (ELD), which applies the polluter pays principle and obliges MS to hold operators whose activities have caused environmental damage (or an imminent threat of such damage) financially liable for the prevention and remediation of the damage. Secondly, the **2008 Environmental Criminal Liability Directive (ECD)**, which obliges MS to punish serious breaches of EU environmental legislation by holding the perpetrator criminally liable. Both Directives, the EDL and the ECD, include the BHD within their scope. The effectiveness of the ELD and the ECD and their contribution to the protection of biodiversity in the EU are the subject of this dissertation. They are briefly summarised in the following.

The **Environmental Administrative Liability Directive (ELD)** aims to prevent and remedy environmental damage.[37] To this end, the Directive creates "**operator liability**" and establishes an EU system of environmental administrative liability for the prevention and remediation of environmental damage.[38] In direct application of the **polluter pays principle**, the Directive requires NCAs to hold any operator whose activities have caused environmental damage or an imminent threat of such damage financially liable for preventing or remedying the damage. Through the incentives generated by liability, the Directive aims to induce operators to adopt measures and develop practices to minimise the risks of environmental damage.[39]

In contrast to the ELD, the **Environmental Criminal Liability Directive (ECD)**, states its primary aim in rather broad terms as "to ensure a more effective protection of the environment".[40] To this end, the ECD establishes a criminal law regime that provides for **minimum standards of criminal liability for serious breaches of EU environmental legislation** at MS level. MS are obliged to enforce a large number of EU environmental law provisions through the use of "effective, proportionate and dissuasive" criminal penalties. Two of the offences listed under the ECD directly relate to the BHD, namely "the killing, destruction, possession or taking of specimens of protected wild fauna or flora species" and "the significant deterioration of a habitat within a protected site".[41]

[37] ELD, Recitals 3 and 11.
[38] ELD, Recital 3.
[39] ELD, Recital 2.
[40] ECD, Recital 14.
[41] ECD, Arts. 3(f) and 3(h).

The provisions of the ELD and ECD and their requirements for liability are closely intertwined with the provisions of the BHD. As will be demonstrated in the course of this dissertation, this creates manifold problems with their implementation and enforcement.

The two Liability Directives have been the focus of numerous studies and reports commissioned by the Commission and other EU institutions, which have investigated their effectiveness.[42] In the case of the ECD, the assessment resulted in the adoption of a new ECD in 2024, [43] which replaces the 2008 Directive in its entirety.[44] This dissertation examines the effectiveness of the ELD and ECD and provides a comprehensive analysis of the amendments introduced by the 2024 nECD.

1.1 Research problem and state of research: Mapping the existing research landscape

This chapter examines the current state of research on the ELD and ECD, with a particular focus on their contributions to biodiversity protection within the EU. It reviews and maps the existing literature, highlighting significant gaps that this dissertation aims to address. This process lays the foundation for defining the main research aim and formulating the research questions that will guide the remainder of this study.

1.1.1 Literature on ELD and ECD as independent instruments

The literature examining the ECD and ELD as independent instruments, without delving into their interrelation or focusing specifically on biodiversity, includes a broad range of publications and research. Legal scholarship, as well as EU-commissioned studies, have addressed various aspects of their implementation, enforcement, and effectiveness. For the ELD, reports prepared by the MS and the European Commission as part of their reporting requirements provide valuable insights into the implementation of the Directive across the MS. [45] This includes information from the two Multi-Annual ELD Work Programmes,

[42] For further reference, see Chapter 1.1, *Research Problem and State of Research*.
[43] Directive (EU) 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law and replacing Directives 2008/99/EC and 2009/123/EC. Based on the findings from its 2019/2020 evaluation of the Environmental Crime Directive (ECD), the Commission decided to revise the Directive and included a legislative proposal in its 2021 Work Programme. See European Commission, *Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law and Replacing Directive 2008/99/EC* COM(2021) 851 final, 2021/0422 (COD), Brussels, 15 December 2021.
[44] nECD, Art. 26.
[45] European Commission, *Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions under Art 14(2) of Directive 2004/35/EC on*

published in response to these reports, which aim to guide the implementation and improvement of the ELD.[46]

Regarding the ECD, a comprehensive evaluation conducted by several EU institutions between 2019 and 2020 resulted in a number of publications that offer both empirical data and qualitative assessments of the implementation and enforcement of the Directive.[47]

In addition to these official EU publications, another crucial source of information are EU commissioned studies and reports that critically assess and discuss the ELD and ECD, or specific aspects thereof.[48] Also noteworthy is the EFFACE project— a 40-month EU-funded research initiative involving eleven European research institutions and think tanks— which has generated a wide range of publications on the impacts of environmental crime, along with policy options for addressing it from an interdisciplinary perspective.[49]

Finally, legal scholarship has contributed significantly to debates on various aspects of the ELD and ECD. Notable scholars in this field include Michael Faure, who has published extensively on the ECD, as well as his counterpart for the ELD, Valerie Fogleman.[50]

Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage, COM (2010) 581 final, Brussels, 12 October 2010; European Commission, *Report under Article 18(2) Environmental Liability Directive*, COM (2016) 204, 10; European Commission, *REFIT Evaluation of the Environmental Liability Directive: Commission Staff Working Document Accompanying the Document "Report from the Commission to the European Parliament and to the Council pursuant to Article 18(2) of Directive 2004/35/EC on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage"* SWD(2016) 121 final, Brussels, 14 April.2016, [European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*].For further reference and context, see Chapter 10, *National Transposition and Implementation of the ELD.*

[46] European Commission, *Multi-Annual ELD Work Programme (MAWP) for the Period 2017–2020: "Making the Environmental Liability Directive More Fit for Purpose"* (2017) [online] [European Commission, ELD MAWP 2017–2020]. European Commission, *Multi-annual ELD Work Programme (MAWP) for the Period 2021–2024: "Making the Environmental Liability Directive More Fit for Purpose"* (Version: 18 November 2020) [online] [European Commission, *ELD MAWP 2021–2024*], 3.

[47] Council of the European Union, *EU Environmental Criminal Law - Presidency Report* 12801/19, Brussels, 4 October 2019, [Council of the EU, *EU Environmental Criminal Law - Presidency Report 12801/19*]; Council of the European Union, *Final Report of the Eighth Round of Mutual Evaluations on Environmental Crime* 14852/19, Brussels, 5 December 2019 [Council of the EU, *Final Report on Environmental Crime* (14852/19)]); European Economic and Social Committee, *Evaluation on the Environmental Crime Directive* (Information Report) NAT/767-EESC-2019-01597, adopted 11 December 2019, Brussels, https://www.eesc.europa.eu/en/documents/evaluation-environmental-crime-directive accessed 1 May 2025 [EESC, Evaluation on Environmental Crime Directive]; European Commission, *Commission Staff Working Document – Evaluation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law (Environmental Crime Directive) – Part I* SEC(2020) 373 final, SWD(2020) 260 final, Brussels, 28 October 2020 [European Commission, ECD Evaluation/Part I, SWD(2020) 260 final].

[48] For further reference, see numerous references throughout this dissertation and bibliography.

[49] For further information on the project, see the project website, available online at: https://efface.eu/index/index.html (accessed 1 May 2025).

[50] For further reference, see numerous references throughout this dissertation and bibliography.

1.1.2 The ELD and ECD in tandem: Literature on their combined application

As for the literature on the ELD and the ECD, only a small number of publications address both EU Directives together, and even fewer attempt to explore their interaction, integration, or complementarity. One author who has examined both Directives is Hedemann-Robinson.[51] However, his analysis primarily focuses on the general role of the ELD and ECD within the broader context of EU environmental law enforcement and governance, without a detailed exploration of their integration or interaction in specific cases, or indeed their connection to the protection of biodiversity. Publications arising from the EFFACE project, which concentrates on environmental crime, include an evaluation of the ELD and critically discuss its complementarity with the ECD.[52] However, due to limitations of scope, this assessment remains focused on a few key points and does not provide a more detailed analysis.

1.1.3 Literature on the ELD and ECD in relation to the BHD

Few publications currently examine the ELD and ECD in relation to protected species and habitats. In the case of the ELD, research and publications on the application of the ELD to biodiversity damage are more numerous than under the ECD. Among the prominent authors to publish on the critical interface between the ELD and the BHD is Fogleman with important observations on the threshold for biodiversity damage under the ELD as well as the application of preventive measures to cases of biodiversity damage, especially when these originate from authorised activities.[53] Other notable, albeit early, publications are those by Van den Broek (2009) and de Sadeleer (2007), both of which make important observations on the assessment

[51] M Hedemann-Robinson, *Enforcement of European Union Environmental Law: Legal Issues and Challenges* (2nd ed, 2015, Routledge) [Hedemann-Robinson, EU Environmental Law Enforcement]; Hedemann-Robinson, *Enforcement of EU Environmental Law: Taking Stock*.

[52] U Salanitro, *Directive 2004/35/EC on Environmental Liability*, Study in the framework of the EFFACE research project, Catania: University of Catania (2015) [online] [Salanitro, *Environmental Liability Directive*]; C Gerstetter et al, *Environmental Crime and the EU: Synthesis of the Research Project "European Union Action to Fight Environmental Crime" (EFFACE)* (2016) [online] [Gerstetter et al, *EFFACE Environmental Crime and the EU - Synthesis*]; G M Vagliasindi, A Lucifora and F Bianco, Contribution to Conclusions and Recommendations on Environmental Crime: Environmental Liability. Study in the Framework of the EFFACE Research Project, Catania: University of Catania (2016) [online] [Vagliasindi, Lucifora & Bianco, *Contribution on Environmental Liability*].

[53] V Fogleman, *The Threshold for Liability for Ecological Damage in the EU: Mixing Environmental and Conservation Law*, in: C-H Born, A Cliquet, H Schoukens, D Misonne & G Van Hoorick (eds), *The Habitats Directive in Its EU Environmental Law Context: European Nature's Best Hope?* (Routledge 2015) [Fogleman, *Threshold for Liability in the EU*]; V Fogleman, *The Duty to Prevent Environmental Damage in the Environmental Liability Directive; a Catalyst for Halting the Deterioration of Water and Wildlife* (2019) 20 ERA Forum 707–721 [Fogleman, *Duty to Prevent Environmental Damage*]; V Fogleman, *Biodiversity Damage from Authorised Activities: The Polluter Pays and Precautionary Principles and the Significance Threshold in the Environmental Liability Directive* (2020) 26(2) Environmental Liability 35–54, [Fogleman, *Biodiversity Damage from Authorised Activities*].

of damage to protected species and habitats under the ELD and the difficulties inherent in this assessment.[54]

An EU-commissioned study carried out by Milieu & IUCN (2014) examined the implementation of the ELD in relation to biodiversity damage, investigating and comparing its application in ten EU MS.[55] Another, more recent EU-commissioned study (2021), albeit with a broader focus on the enforcement of the ELD as such, also includes observations on the interface between the ELD and the BHD.[56] Notably, this study was co-authored by Fogleman, and many of the observations included therein originate from her earlier research.

In summary, while there have been publications on the application of the ELD to biodiversity damage, these are scarcely more than a handful, and, in recent years, the only notable and consistent voice has remained Fogleman. All of these studies have shed light on important issues that emerge with the application of the ELD to biodiversity damage. However, none of these has explored the additional interface with the ECD.

In the case of the ECD, the research landscape linking the ECD to the BHD appears notably sparse. Indeed, only two publications have been identified that directly address wildlife and habitat crime, the two offences under the ECD that are directly linked to the BHD. One publication is authored by Faure (2018), who has also widely published on criminal environmental law and the ECD in more general terms.[57] His work explores the use of criminal liability for the exploitation of natural resources in a broader sense, and in this context, it also investigates the ECD, drawing particular attention to the use of vague terminology in the definitions of the two offences. Notably, the examination of wildlife and habitat crime is confined to a single page within an 18-page book chapter. Accordingly, while the assessment

[54] N De Sadeleer, *The Birds, Habitats, and Environmental Liability Directives to the Rescue of Wildlife Under Threat* (2007) 7 *Yearbook of European Environmental Law* 36–75 [De Sadeleer, *Wildlife under Threat*]; G M Van Den Broek, *Environmental Liability and Nature Protection Areas: Will the EU Environmental Liability Directive Actually Lead to the Restoration of Damaged Natural Resources?* (2009) 5(1) Utrecht Law Review 117–131 [Van Den Broek, *Environmental Liability and Nature Protection Areas*].

[55] Milieu & IUCN, *Experience Gained in the Application of ELD Biodiversity Damage.* Final Report for the European Commission, DG Environment (2014), [online] [Milieu & IUCN, *ELD Biodiversity Damage Report*].

[56] V Fogleman, Stevens & Bolton LLP and Cardiff University School of Law and Politics, *Facilitating Enforcement of the ELD by Competent Authorities*, Final Report for the European Commission (2021), [online] [Fogleman et al, *Facilitating Enforcement of the ELD*].

[57] M Faure, *Criminal Liability for Exploitation of Natural Resources* in S Alam, J H Bhuiyan and J Razzaque (eds), *International Natural Resources Law, Investment and Sustainability*, vol 1 (1st edn, Routledge 2018) 435–52 Faure, [*Criminal Liability for Exploitation of Natural Resources*].

of these two offences is insightful, it remains superficial. Another, more comprehensive publication is an EU-funded study by the European Network Against Environmental Crime (ENEC) (2016), a network of several nature conservation NGOs.[58] The report, entitled *Recommendations to Tackle Habitat Destruction in the European Union*, evaluates the transposition of Articles 3 and 5 of the Directive by MS and includes a comparative analysis of the criminal penalties introduced by MS, as well as a qualitative analysis based on information gathered from national experts via a questionnaire. This qualitative analysis specifically focuses on the criminalisation of conduct set out under Articles 3(f) and 3(h) of the ECD, and thus wildlife and habitat crime. Again, none of these reports analysed the additional interface to the ELD.

1.1.4 Literature on the RMCEI in relation to the ECD and ELD and/or the BHD

As mentioned above, the RMCEI, together with the ELD and ECD, is one of the measures that the EU started to introduce in the early 2000s to further strengthen the role of NCAs in the implementation and enforcement of EU environmental law. Given this historical context, the research for this dissertation has, from the outset, included an investigation into Recommendation 2001/331/EC, which sets out Minimum Criteria for Environmental Inspections in the MS (RMCEI). Two key areas of research related to the RMCEI are of particular interest in the present context: first, the relationship between the RMCEI and the ELD and ECD; and second, the connection between the RMCEI and the implementation and enforcement of the BHD.

One author who has explored the relationship between the RMCEI and the ELD and ECD is Hedeman-Robinson, who, as previously noted, is also one of the few scholars to explore the ELD and ECD collectively. In his work, he focuses primarily on the role of these instruments in strengthening the implementation and enforcement of EU environmental law by imposing additional obligations on NCAs, situating his analysis within the broader framework of EU environmental governance.[59] His investigations concern the general implementation and enforcement of EU environmental law and do not specifically address the BHD.

[58] European Network Against Environmental Crime (ENEC), *Recommendations to Tackle Habitat Destruction in the European Union* (III European Workshop on Environmental Crime: Habitat Destruction, 26 February 2016) [online] [ENEC, Habitat Destruction 2016]. The network comprises: SEO/BirdLife and the Royal Society for the Protection of Birds (RSPB) and, as associate partner, BirdLife Europe, Hellenic Ornithological Society and the Czech Society for Ornithology.

[59] Hedemann-Robinson, *EU Environmental Law Enforcement: Legal Issues*; Hedemann-Robinson, *Enforcement of EU Environmental Law: Taking Stock*; M Hedemann-Robinson, *Enforcement of European Union*

Other publications specifically address the role of inspections in the implementation and enforcement of the BHD. These include EU-commissioned reports, as well as publications by BirdLife International and IMPEL, the European Network for the Implementation and Enforcement of Environmental Law.[60] However, these studies make no reference to the ELD or ECD.

In summary, while studies have explored the RMCEI from various angles, none has examined the interplay of the ELD, ECD, and RMCEI in relation to biodiversity protection or the BHD—an interplay that could significantly strengthen the EU framework for implementing and enforcing the BHD.

1.1.5 Conclusions

This chapter examined the current state of research on the ELD and ECD, with a particular focus on their contributions to biodiversity protection within the EU. The aim of the chapter was to establish the research problem with a view towards defining the research aim and questions that would guide the remainder of the study.

From the findings of this chapter, it is evident that legal scholarship and literature, including policy-oriented research and studies, predominantly treat the ECD and ELD as distinct acts, with limited attention given to their interaction or biodiversity-related considerations. often focuses on these Directives in isolation, offering limited exploration of their interplay or specific impact on biodiversity. Similarly, the critical question of the role inspections might

Environmental Law: An Investigation into Developments and Challenges Concerning the Union's Legal Framework for Addressing Non-Compliance (2017, Doctor of Laws (LLD) thesis, University of Kent) [Hedemann-Robinson, *Addressing Non-Compliance*].

[60] IEEP, Bio Intelligence Service and Ecologic Institute, *Study on Possible Options for Strengthening the EU Level Role in Environmental Inspections and Strengthening the Commission's Capacity to Undertake Effective Investigations of Alleged Breaches in EU Environment Law*. Final Report for the European Commission, DG Environment (January 2013, Institute for European Environmental Policy, Brussels and London), [online] [IEEP et al., *Environmental Inspections Study*]; IEEP, Bio Intelligence Service and Ecologic Institute, *Information Collection and Impact Assessment of Possible Requirements for Environmental Inspections in the Area of EU Legislation on Water, Nature Protection and Trade in Certain Environmentally Sensitive Goods. Final Report for the European Commission, DG Environment* (July 2013, Institute for European Environmental Policy, Brussels and London), [online] [IEEP et al., *Impact Assessment Environmental Inspections*]; BirdLife International, *BirdLife Position on Improvements Needed to Environmental Inspections Regimes in the European Union* (2013) (BirdLife International) [online] [BirdLife International, *Inspections Regimes*]; IMPEL, Nature Protection in Permitting and Inspection of Industrial Installations – Implementation of Art. 6(3) of the Habitats Directive (Phase 4): Roadmap for Planning Tool for Inspection of Natura 2000 Sites (2017), [online] [IMPEL, *Habitats Directive Planning Tool*], Chapter 3.2.

play, in combination with the ELD and ECD, for the protection of biodiversity remains unexplored. Overall, existing scholarship and literature lack a comprehensive examination and analysis of these instruments, whose effective interaction is likely to be of significant importance for their overall effectiveness. With a view to addressing these gaps, the aim and research question for this dissertation are formulated in the following.

1.2 Aim of the dissertation

This dissertation aims to evaluate the effectiveness of the Environmental Administrative Liability Directive (ELD) and the Environmental Criminal Liability Directive (ECD) in protecting biodiversity within the EU and to explore potential amendments that enhance their effectiveness.

1.3 Research Questions

To achieve this aim, the dissertation will:

1. **Examine the concept of biodiversity and related policies:** Investigate the concept of biodiversity, the factors driving its decline, and the general policies in place for its protection at both international and EU levels. Identify key provisions under the EU's principal legal instruments for biodiversity protection—the Birds and Habitats Directives—and the challenges that have emerged in their implementation and enforcement. – Part I
2. **Assess the effectiveness of the ELD and ECD in biodiversity protection:** Explore to what extent the Environmental Administrative Liability Directive and the Environmental Criminal Liability Directive, in their current design and wording, have delivered on their stated aims, thereby improving the implementation and enforcement of the Birds and Habitats Directives, thus strengthening the protection of biodiversity in the EU. - Parts II and III
3. **Investigate the role of inspections**: Examine the role of inspections in the implementation and enforcement of the Birds and Habitats Directives, and how they interact with, and potentially complement, the frameworks established by the ELD and the ECD. - Part IV
4. **Assess the coherence between ELD and ECD frameworks**: Explore to what extent the Environmental Administrative Liability Directive and the Environmental Criminal Liability Directive are aligned in their design and wording, ensuring that complementary aspects of

administrative and criminal liability are effectively leveraged to address damage to protected species and habitats. - Part V

5. **Evaluate potential amendments**: Assess whether amendments to the design or wording of the ELD and/or the ECD could improve their ability to deliver on their stated aims. – Part VI

1.4 Research approach and methodology

The research method for this dissertation was designed to provide a comprehensive analysis of the effectiveness of the ELD and ECD, drawing from various sources of information and data. The main sources of information used for this dissertation were:

- A review of existing academic literature, of reports and studies, publications from EU institutions and information from relevant professional networks and environmental non-governmental organisations (NGOs);
- Evidence on the implementation and enforcement of the BHD, on the one hand, and the ELD and ECD, on the other, provided by, inter alia, MS reports, Commission reports and evaluation studies commissioned by the Commission;
- ECJ Case Law resulting from infringement procedures and preliminary proceedings;
- National Court Cases;
- Commission's guidance and other authoritative sources on the interpretation and implementation of the four Directives.

The following sections further detail the research methods and sources used to gather the necessary information for this study.

1.4.1 Review of academic literature, reports, studies, and publications

A critical component of this research was an extensive review of existing academic scholarship, reports, studies, and publications related to the Directives as well as EU environmental law and its enforcement mechanisms in more general terms. This literature review aimed to establish a foundational understanding of the relevant legal framework and to identify key areas of concern and interest. It also provided insights into legal concepts, historical developments, and theoretical perspectives on liability rules and nature protection. In addition, reports and studies from EU institutions, environmental non-governmental organisations (NGOs), and relevant professional networks offered important information on the implementation and enforcement of the Directives and their impact on MS. It also allowed for the integration of diverse

approaches, arguments and expert insights into the analysis and provided and understanding of the practical challenges and advocacy efforts surrounding the Directives, helping to contextualise the legal aspects within the broader environmental policy landscape.

1.4.2 European Court of Justice Case Law

Another critical source of information for this dissertation was the case law developed by the European Court of Justice (ECJ). The research included an in-depth examination of ECJ judgments resulting from infringement procedures and preliminary proceedings related to the BHD as well as the ELD and ECD. These cases were crucial in understanding how the Directives are interpreted and to identify problems with their implementation and enforcement, especially in the case of the BHD, for which substantial case law was available. The analysis of ECJ case law also provided valuable insights into the role of the ECJ in shaping EU environmental law.

1.4.3 Evidence from implementation and enforcement

A significant aspect of the research involved gathering empirical evidence on the implementation and enforcement of the BHD on the one hand, and the ELD and ECD on the other hand. This evidence included Member State (MS) reports, Commission reports, and evaluation studies commissioned by the European Commission as well as reports and studies from environmental non-governmental organizations (NGOs), and relevant professional networks. These sources supplied concrete data and evaluations of the practical outcomes of implementing the Directives, shedding light on the challenges and successes in the MS. By analysing this evidence, it was possible to identify both successful practices and areas where substantial improvements were needed in the implementation and enforcement of the Directives.

1.4.4 National Court Cases

In addition to ECJ case law and evidence from EU institutions and other critical sources, this dissertation also examined relevant national court cases. National courts play a crucial role in the enforcement of EU environmental law, and their decisions can have a significant impact on the implementation of Directives. The study of national court cases allowed for a more nuanced understanding of how the Directives interact with national legal systems and the challenges that may arise in the process.

1.4.5 Commission's Guidance and Authoritative Sources

Lastly, the research relied on the guidance and other authoritative sources provided by the European Commission and relevant EU institutions, which serves as a reference point for MS and stakeholders. These documents provided a valuable contribution to the understanding of the interpretation and implementation of the four Directives.

1.5 Chapter Overview

The aim of this study is to evaluate the effectiveness of the Environmental Administrative Liability Directive (ELD) and the Environmental Criminal Liability Directive (ECD) in protecting biodiversity within the EU and to explore potential amendments that strengthen their effectiveness. Organised around the research questions designed to address this central aim, the dissertation is divided into six main parts. **Part I (Chapters 2 to 6)** of the dissertation starts out with an examination of the concept of biodiversity, the factors driving its decline, and the general policies employed for its protection at both the international and EU levels. This section also identifies key provisions under the EU's two principal legal instruments for biodiversity protection and conservation, the Birds and Habitats Directives, along with the challenges that have emerged in their implementation and enforcement.

Building on this, the study shifts focus to the Environmental Administrative Liability Directive and the Environmental Criminal Liability Directive. **Parts II and III (Chapters 7 to 21)** explore the extent to which these two Liability Directives, in their current design and wording, have succeeded in meeting their aims, thereby improving the implementation and enforcement of the Birds and Habitats Directives and thus strengthening the effectiveness of the two Nature Directives in conserving and protecting natural habitats and wild fauna and flora across the EU.

Following this, **Part IV (Chapters 22 to 26)** investigates the role of inspections, specifically focusing on Recommendation 2001/331/EC, which provides minimum criteria for environmental inspections within the MS (RMCEI). Recommendation 2001/331/EC predates both the ELD and ECD, representing an early initiative aimed at strengthening the regulatory role of NCAs. This part explores how inspections contribute to the implementation and enforcement of the BHD, complementing the frameworks provided by the ELD and ECD.

In **Part V (Chapters 27 to 33)**, the analysis turns to the integration of the ELD and ECD, examining whether design and wording of the two Liability Directives are sufficiently integrated to leverage any complementary aspects of administrative and criminal liability for damage to protected species and habitats.

Next, **Part VI (Chapters 34 to 35)** assesses whether amendments to the design or wording of the Environmental Administrative Liability Directive and/or the Environmental Criminal Liability Directive could further improve their effectiveness in achieving their stated aims. This part also addresses and assesses the amendments introduced in the fully revised version of the ECD, which was adopted in May 2024 (ECD 2024).

Finally, in **Part VII (Chapters 36 to 40)** the study's key findings and their significance are discussed and conclusions are drawn.

1.6 Definitions of terms used in this dissertation

To ensure clarity and consistency throughout this dissertation, key terms relevant to the subject matter are defined below.

Transposition

The process whereby European Directives are incorporated into national law in order to make their objectives, requirements and deadlines directly applicable in Member States (MS).[61]

Implementation

The process whereby EU law is applied at national and subnational levels.[62]

Enforcement

The process whereby full compliance with EU law is monitored and secured, and non-compliance is systematically sanctioned by national and supranational courts.[63]

[61] The definition of these terms is retrieved from L Allio and M-H Fandel, *Making Europe Work: Improving Transposition, Implementation and Enforcement of EU Legislation*, EPC Working Paper No 25 (June 2006, European Policy Centre) [online] [Allio & Fandel], 10/11.
[62] *Ibid.*, 11.
[63] *Ibid*.

Environmental Administrative Liability Directive

Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143/56, 30.4.2004.

Environmental Criminal Liability Directive

Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law, OJ L 328, 6.12. 2008.

Liability Directives

A collective term referring to both the Environmental Administrative Liability Directive and the Environmental Criminal Liability Directive.

Birds Directive

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds [2009] OJ L20/7; codifying Council Directive 79/409/EEC of 2 April 1979.

Habitats Directive

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [1992] OJ L 206/7.

Birds and Habitats Directives

A collective term referring to both the Birds Directive and the Habitats Directive.

Nature Directives

An alternative term used to refer to the “Birds and Habitats Directives.”

Biodiversity Damage

Damage to species and habitats protected under the Birds and Habitats Directives.

Ecological Damage

"Damage to unowned natural resources and natural resources subject to property rights but only insofar as these natural resources (owned as well as unowned) are of particular value to the public. The term does not include damage to persons, purely private property and pure economic loss, although such damage might be the result of environmental damage".[64]

Environmental Governance

The way in which rules of environmental law are developed, applied, and enforced.[65] It involves two processes: decision-making on the one hand, and implementation and enforcement of decisions on the other.

Authorisation Exception

The exception stated under Article 2(1)(a) of the Environmental Liability Directive (ELD) for environmental damage caused by acts authorised under the Birds and Habitats Directives (BHD).

Permit Defence

The optional defence stated under Article 8(4)(a) ELD for damage caused by events or emissions expressly authorised under the legislation listed in Annex III of the ELD.

Biodiversity Protection

Efforts and measures specifically aimed at safeguarding biodiversity from threats such as habitat destruction, pollution, or illegal activities. It implies a more direct, active defence of biodiversity, such as those provided for under the ELD and ECD.

Biodiversity Conservation

A broader range of activities including the management, restoration, and protection of biodiversity over the long term, as provided for under the Birds and Habitats Directives

[64] Definition developed by EHP Brans and M Uilhoorn, *Liability for Damage to Natural Resources: Background Paper for EU White Paper on Environmental Liability* (1997) [Brans & Uilhoorn, *Liability for Damage to Natural Resources*].
[65] Based on Tim Stephens (2010) International Courts and Environmental Protection, p.7, with further references

(BHD). It often implies both preserving existing biodiversity and restoring degraded ecosystems.

PART I The Birds and Habitats Directives

Part I examines the BHD and thus lays the foundation for the subsequent analysis of the ELD and ECD. As will be demonstrated in Part II and III of this dissertation, neither the ELD nor the ECD provide stand-alone provisions for the protection of biodiversity. Instead, liability under both directives is closely intertwined with the provisions of the BHD. Through various references, the ELD and ECD link to key concepts and provisions of the BHD. As a result, scope and content of the BHD largely determine scope and content of the ELD and ECD, and thus liability for biodiversity damage. Any examination of the role of the ELD and ECD in the protection of biodiversity therefore necessitates a thorough understanding of the BHD as well as the problems that have emerged with their implementation and enforcement. To this end, PART I investigates

> the **concept of biodiversity**, the **importance of biodiversity protection**, **drivers behind its decline**, and the **general policies employed for its protection at both international and EU level**. It identifies key provisions under the **Birds and Habitats Directives**, the EU's two principal legal instruments for biodiversity protection, and the **problems** that have evolved **with their implementation and enforcement**.

Part I is divided into Chapters 2 to 6. To provide context and enable a better understanding of the measures provided for under the BHD, **Chapter 2** starts with an exploration of the term "biodiversity", key drivers of biodiversity loss and the rationale for government involvement**.**

Chapter 3 moves on to describe the initiatives taken at both international and EU level to halt the loss of biodiversity and highlights developments that led to the adoption of the BHD.

After these introductory explorations, **Chapter 4** describes the aim, scope and main substantive provisions of the BHD, laying the foundation for understanding the legal framework established by the BHD.

Chapter 5 then delves into the practical aspects of implementing and enforcing the BHD, examining the effectiveness of the two Directives and investigating difficulties with their implementation and enforcement. The analysis begins with an assessment of the different key actors in the implementation and enforcement of the BHD. Next the focus shifts to the European

Court of Justice (ECJ) to examine the Court's extensive and growing jurisprudence on the BHD from infringement procedures and references for preliminary rulings.

The aim of this analysis is twofold: Firstly, to improve understanding of the substantive provisions of the BHD and their interpretation in ECJ case law. Secondly, to clarify the problems that have evolved with their implementation and enforcement. Since an understanding of the BHD's main substantive provisions is key for the analysis of the ELD and ECD, which cross-reference to the BHD, the findings on the interpretation of key provisions of the BHD are summarised in a separate section for future reference.

Finally, in **Chapter 6** the findings are discussed and conclusions are drawn on the main substantive provisions of the BHD, key issues in their implementation and enforcement and the role of different players in this process.

2 Biodiversity, drivers of biodiversity loss, the tragedy of the commons and the rationale for government involvement

This Chapter addresses the term "biodiversity", explores key drivers of biodiversity loss and investigates the rationale for government involvement. It explores the definition, importance, and implications of biodiversity and biodiversity loss, setting the stage for discussing the various aspects related to biodiversity conservation efforts and protection.

2.1 What is biodiversity and why it matters

The term "biodiversity", while frequently used in EU legislation and policy, has so far not been defined by the EU legislator, be it as a stand-alone definition or by reference to existing definitions such as the one contained in the international Convention of Biodiversity (CBD). [1] Rather, its meaning in EU law depends on the specific legislative context in which it is used.[2]

[1] The international Convention on Biological Diversity (CBD), for example, defines biodiversity for the purposes of the Convention in its Article 2 as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems".

[2] During the drafting of the Environmental Administrative Liability Directive (ELD), for example, the term "biodiversity" was initially used to describe the natural resources covered. However, because this interpretation differed from established definitions such as that in the CBD, the final version of the ELD replaced the term with "protected species and habitats," using the Birds and Habitats Directives (BHD) as a reference framework. For a detailed discussion of biodiversity under the ELD, see Chapter 11.1.1, *Scope of biodiversity protected under the ELD*.

Broadly speaking, the term "biodiversity" refers to the variety of life on Earth. In this dissertation, a scientific rather than a legal definition is used to avoid reliance on definitions tied to specific legal instruments. Accordingly, the understanding of biodiversity is guided by the definition published by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).[3] It defines biodiversity as the

> "Variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. This includes variations in genetic, phenotypic, phylogenetic and functional traits, as well as changes in abundance and distribution over time and space within and among species, biological communities and ecosystems." [4]

Biodiversity is an essential component for the functioning of ecosystems, which in turn, through their functioning, provide services upon which all life on Earth depends.[5] These services are referred to as "ecosystem services" and are divided by scientists and economists into four categories, namely **provisioning services** (e.g. food, freshwater), **regulating services** (e.g. pollination, climate regulation, flood regulation), **supporting services** (e.g., soil formation, nutrient cycling) and **cultural services** (e.g. recreation, aesthetic).[6] Yet, despite biodiversity's fundamental importance for humans and efforts at EU and international level, biodiversity loss continues at an alarming rate in the EU and worldwide. According to the Global Assessment Report on Biodiversity and Ecosystem Services (May 2019), biodiversity is globally declining at rates unprecedented in human history: due to human activities more than 1 million animal and plant species are under threat of extinction over the next decades.[7] Similarly to this, the

[3] The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) is an independent intergovernmental body established by states to strengthen the science-policy interface for biodiversity and ecosystem services, supporting their conservation and sustainable use, as well as promoting long-term human well-being and sustainable development. It was established in Panama City on 21 April 2012 by 94 governments. IPBES is not a United Nations body (IPBES, *About IPBES*, https://ipbes.net/about, accessed 16 May 2025).

[4] IPBES, *Regional Assessment Report on Biodiversity and Ecosystem Services for Europe and Central Asia*, Rounsevell M, Fischer M, Torre-Marin Rando A and Mader A (eds) (2018, Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn), [online] [IPBES, *Europe and Central Asia Assessment*], Annex I, *Glossary*.

[5] L Glowka, F Burhenne-Guilmin, H Synge, J A McNeely and L Gündling, *A Guide to the Convention on Biological Diversity*, IUCN, Environmental Policy and Law Paper No 30 (1994), [online] [Glowka et al, *Guide to the CBD*].

[6] See Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: Synthesis*, Island Press, Washington, DC (2005), [online] [Millennium Ecosystem Assessment, *Ecosystems and Human Well-being*], 28-29 [online]. The Millennium Ecosystem Assessment defines ecosystem services as "the benefits people derive from ecosystems" and divides the services into four categories.

[7] IPBES, *Global Assessment Report*, XIV.

EEA (2019) reports that despite ambitious targets, Europe continues to lose biodiversity at an alarming rate and that many agreed policy targets have not been achieved. [8] Assessments of species and habitats protected under the EU Habitats Directive show predominantly unfavourable conservation status at 60 % for species and 77 % for habitats.[9] And this decline in biodiversity is not confined to the rare or threatened species protected under the BHD: The EEA (2019) also reports downward trends in populations of common birds and butterflies, with the most pronounced declines in farmland birds (32 %) and grassland butterflies (39 %) and predicts that, if current trends continue, biodiversity in Europe will further deteriorate.[10]

2.2 Drivers of biodiversity loss

The human drivers of biodiversity loss are powerful. Since the onset of the Industrial Revolution around 250 years ago, an increasing pace of change in human activities has led to unprecedented and accelerating human-induced changes of the global environment. This development, in particular after the 1950s, has become known as the "Great Acceleration", a term coined by scientists to describe the continuous and more or less simultaneous surge in growth rates across a broad range of measures of human activity, including population, economics, water usage, food production, transportation, technology, greenhouse gases, surface temperature, and natural resource usage. [11]

Since the 1950s, the world's population has tripled from around 2.5 billion to around 7.5 billion by 2016 [12] and economic output measured in gross domestic product (GDP) has increased 12-fold during this time. [13] The world's growing population coupled with an economic model, that continues to drive overconsumption of resources, puts enormous and increasing pressure on the environment and results in an accelerated degradation of ecosystems and loss of biodiversity.

[8] EEA, *The European Environment — State and Outlook 2020: Knowledge for Transition to a Sustainable Europe* (2019) [online] [EEA, *SOER 2020 Report*]. The *"European environment – state and outlook"* is published by the EEA every five years as mandated in its regulation.
[9] *Ibid.*, 74.
[10] *Ibid.*, 74.
[11] W Steffen et al., *The Anthropocene: Conceptual and Historical Perspectives*, Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences 369 (2011), 842–867 [Steffen et al., *The Anthropocene*].; W Steffen et al., *The Trajectory of the Anthropocene: The Great Acceleration*, The Anthropocene Review 2:1 (2015), 81–98 [Steffen et al., *Great Acceleration*].
[12] EEA, *SOER 2020 Report*, 25, referring to UNDESA, *World Population Prospects: The 2017 Revision - Key Findings and Advance Tables*, Working Paper No ESA/P/WP/248, United Nations Department of Economic and Social Affairs, New York, NY (2017) [online] [UNDESA, *World Population Prospects 2017*].
[13] *Ibid.*, 35 [online] referring to J Bolt, et al, *Maddison Project Database, Version 2018* (Maddison Project Working Paper No 10, University of Groningen 2018) [online] [Bolt et al.].

Biodiversity in Europe, more than on any other continent, has been profoundly shaped and altered by human activity and continues to be under constant pressure from the exploitation of natural resources driven by human production and consumption.[14] Threats to biodiversity in Europe originate from different sources. According to the latest IPBES regional assessment report for Europe and Central Asia (2018), the main drivers of biodiversity loss in Europe are land use change as well as climate change, extraction of natural resources, pollution and invasive alien species.[15] Among these, land use change, including habitat loss, fragmentation and degradation have been identified as the major direct driver of the loss of both biodiversity and ecosystem services in Europe. [16] The link between the intensification of agriculture and forestry and biodiversity decline is acknowledged as well established. Conventional intensive agriculture, especially overuse of agrochemicals is reported to diminish natural and semi-natural habitats, leading to significant adverse effects on biodiversity and ecosystem function.[17]

2.3 The tragedy of the commons and the rationale for government involvement

Market mechanisms often fail to capture the full value of biodiversity, ecosystems, and the services they provide. As a result, nature is often approached in simplified economic terms, overlooking its broader ecological significance. This chapter examines the problems of uncontrolled resource use and why governments must intervene to coordinate, monitor and control the use of natural resources and protect biodiversity from deterioration and loss. The findings presented here provide a basis for reflecting upon the role of the ELD and the ECD in governing natural resource use and in safeguarding biodiversity within the broader framework of EU environmental policy.

When seeking explanations for the challenges of shared natural resource use, and the rationale for government intervention, two theories are central: the tragedy of the commons and the free rider problem. Both the tragedy of the commons and the free rider problem result from so-called market failures where the actions of individuals do not correspond with the broader environmental interests of society.

[14] EEA, *SOER 2020 Report*, 75.
[15] IPBES, *Europe and Central Asia Assessment*, XIX-XX.
[16] *Ibid.*, XIX-XX.
[17] *Ibid.*, XXXIV.

The **tragedy of the commons** describes a situation where individuals, acting in their own self-interest, exploit shared resources to the point of depletion. Coined by biologist Garrett Hardin in 1968, this concept illustrates how communal resources, such as grazing land or fisheries without clear ownership or regulation, are prone to overuse.[18] Each individual benefits from exploiting the resource, but the collective impact leads to environmental degradation.

The **free rider problem** complements the tragedy of the commons by addressing situations where individuals or businesses benefit from public goods or services without contributing their fair share to their provision.[19] In terms of environmental protection, this problem arises when some individuals or businesses avoid the costs associated with conservation or environmental protection measures, relying on others to bear the burden. For instance, fishermen may overexploit a fishery, assuming others will restrain themselves, leading to depletion of the fish population. Similarly, landowners might clear forests for agriculture, relying on others to maintain forested areas for conservation and biodiversity.[20]

In economic terms, these situations are referred to as **externalities**—costs or benefits that affect third parties not directly involved in the transaction.[21] For example, habitat loss or pollution generate costs that are not reflected in market prices.[22] As shown, the decline of biodiversity can disrupt ecosystem services like pollination and water purification, which are vital for agriculture, human health and well-being.[23]

Governmental intervention can correct these market failures by "internalising" externalities. Such an internalisation involves ensuring that the costs and benefits of resource use or pollution

[18] G. Hardin, *The Tragedy of the Commons* (1968) 162 Science 1243–1248 [Hardin, *Tragedy of the Commons*]; See also R Stavins, *The Problem of the Commons: Still Unsettled after 100 Years*, American Economic Review 101:1 (2011), 81–108 [Stavins, *Problem of the Commons*], discussing unresolved issues related to the commons, particularly in the context of natural resources, and the challenges of managing renewable resources such as open-access fisheries, which are prone to degradation.

[19] C Baldwin and M Lodge, *Understanding Regulation: Theory, Strategy, and Practice* (2nd edn, Oxford University Press 2012) [Baldwin & Lodge, *Understanding Regulation*], 20-21; M Faure and R Partain, *Environmental Law and Economics: Theory and Practice* (Cambridge University Press 2019) [Faure & Partain, *Environmental Law and Economics*], Chapter 9.3.

[20] See A-S Lafuite, G Denise and M Loreau, *Sustainable Land-use Management Under Biodiversity Lag Effects*, *Ecological Economics* 154 (2018), 272–281 [Lafuite et al, *Sustainable Land-use Management and Biodiversity Lag Effects*]. The article examines land conversion as a negative externality, highlighting how the destruction of natural habitats for agricultural purposes leads to local biodiversity loss, which, in turn, negatively impacts agricultural production.

[21] See Faure & Partain, *Environmental Law and Economics*, Chapter 2.3.

[22] See Lafuite et al, *Sustainable Land-use Management and Biodiversity Lag Effects*.

[23] See above, Chapter 2.1, for a discussion on *What is biodiversity and why it matters*.

are accounted for in decision-making. Common instruments available to governments for this purpose are: **Firstly**, command and control measures which set limits on activities that harm the environment, including specific standards or limits on pollution emissions, resource extraction, or land use. [24] An example are the rules set out under the BHD. **Secondly**, economic instruments such as environmental taxes, subsidies or market-based mechanisms that influence consumer and producer choices.[25] An example are payments for ecosystem services (PES), which reward activities that preserve biodiversity, creating economic incentives for conservation. **Thirdly**, instruments that ensure compliance with environmental laws and regulations. Examples are the ELD and ECD. Criminal liability involves fines or imprisonment for breaches of environmental law, while administrative liability holds parties financially accountable for damages caused to the environment. **Fourthly**, so-called suasive instruments which guide behaviour without imposing specific duties on operators, often through educational campaigns, or informational publications. [26] These tools may also involve mandating the disclosure of environmental impacts or encouraging businesses to share environmental information, incentivising improved environmental performance.

Effective environmental governance often involves a combination of these instruments.[27]

3 International and EU policies for biodiversity protection

International and regional instruments have played a crucial role in the global effort to protect biodiversity. Key international agreements include the Ramsar Convention on Wetlands (1971), the Convention on International Trade in Endangered Species (CITES, 1973), the Bonn Convention on Migratory Species (1979), and the Convention on Biological Diversity (CBD, 1992). [28] These treaties provide frameworks for the conservation and sustainable use of biodiversity, addressing issues such as habitat protection, species conservation, and the regulation of wildlife trade.

[24] J A W van Zeben, *The Untapped Potential of Horizontal Private Enforcement within EC Environmental Law* (2008) The Georgetown Int'l Environmental Law Review 22 241, Amsterdam Center for Law & Economics Working Paper No 2008-09 [online] [van Zeben, *Untapped Potential*], 246-247.
[25] Faure & Partain, *Environmental Law and Economics*, Chapter 2.4.4.
[26] *Ibid.* Chapter 2.4.5.
[27] *Ibid.* Chapter 9.7.5.
[28] Convention on Wetlands of International Importance (Ramsar, opened for signature 2 February 1971), as amended, in force 21 December 1975, 996 UNTS 245; Convention on the Conservation of Migratory Species of Wild Animals (Bonn, opened for signature 23 June 1979), in force 1 November 1983, 1651 UNTS 333; Convention on Biological Diversity (Rio de Janeiro, opened for signature 5 June 1992), in force 29 December 1993, 1760 UNTS 79.

At the regional level, particularly within the EU, several important instruments have shaped biodiversity policy. The Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) set a foundational framework for protecting species and habitats.[29] Building on this, the EU developed the Birds Directive (1979) and the Habitats Directive (1992), collectively known as the Birds and Habitats Directives (BHD) or Nature Directives. Together, they establish the Natura 2000 network, a cornerstone of EU biodiversity conservation efforts aimed at ensuring the long-term survival of Europe's most valuable and threatened species and habitats.

The following chapters will first address the development of international policies for biodiversity conservation (Chapter 3.1) and then the evolution of EU policies (Chapter 3.2), placing the BHD within the broader historical context of biodiversity policy development. Chapter 3.3 examines the EU's biodiversity strategies as guiding frameworks, highlighting past challenges and shortcomings in meeting established conservation targets. Lastly, Chapter 3.4 reviews the outcomes of the European Commission's Fitness Check on the BHD, considering its implications for future EU biodiversity policy.

3.1 International policies for biodiversity protection

Early efforts to tackle issues related to the protection and conservation of wildlife at the international level can be traced back to the beginning of the last century, including *inter alia* the London Convention Relative to the Preservation of Fauna and Flora in their Natural State (1933)[30] or the Washington Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere (1940)[31].[32] These early conventions, however, suffered from a number of shortcomings, that limited their effectiveness including their geographical scope and a lack of

[29] Convention on the Conservation of European Wildlife and Natural Habitats (Bern, opened for signature 19 September 1979), in force 1 June 1982, Council of Europe Treaty Series No. 104.
[30] Convention Relative to the Preservation of Fauna and Flora in their Natural State (London, opened for signature 8 November 1933), in force 14 January 1936, 172 LNTS 241.
[31] Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (Washington, opened for signature 12 October 1940), in force 1 May 1942, 161 UNTS 193.
[32] Other early conventions include the London Convention Designed to Ensure the Conservation of Various Species of Wild Animals in Africa which are Useful to Man or Inoffensive (1900) or the Algiers African Convention on the Conservation of Nature and Natural Resources (1968).

political will. Additionally, with the end of colonial rule, these agreements gradually became outdated.[33]

Most conventions and agreements on the conservation of wildlife are of a far more recent nature. The origins of modern nature conservation law can be traced back to 1972,[34] when the Stockholm Declaration called for flora and fauna to be safeguarded and declared in its Principle 4 that

> "Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat, which are now gravely imperilled by a combination of adverse factors. Nature conservation, including wildlife, must therefore receive importance in planning for economic development."[35]

Since the Stockholm Declaration, a large number of international and regional biodiversity-related agreements have been adopted, most notably the 1992 Convention on Biological Diversity (CBD), which was negotiated under the auspices of UNEP and signed by 153 states and the EU at UNCED in June 1992. The Convention has three main objectives, which are the conservation of biodiversity, the sustainable use of biological resources and the access to and benefit sharing of genetic resources.[36] At present, the Convention provides the principal framework for the development and implementation of international and regional biodiversity-related agreements.[37] It entered into force on 29 December 1993. With currently 196 parties, the Convention has practically universal participation.[38] Other important international legal instruments for the conservation of biodiversity include the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat (1971),[39] the UNESCO World Heritage Convention (1972),[40] the Washington Convention on International Trade in

[33] See also P Birnie, A Boyle and C Redgwell, *International Law and the Environment* (3rd edn, Oxford University Press 2009) [Birnie et al., *International Law and the Enviroment*], Chapter 11, noting that earlier efforts were primarily focused on maintaining sufficient stocks of a species for exploitation, with over-exploitation seen as the primary problem.
[34] P Sands & J Peel, *Principles of International Environmental Law*, Cambridge University Press (3rd ed.) (2012) [Sands & Peel, *Principles of International Environmental Law*], 451.
[35] Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972), UN Doc. A/CONF.48/14/REV.1 (1972).
[36] CBD, Article 1.
[37] See also Sands & Peel, *Principles of International Environmental Law*, 461.
[38] For list of parties to the CBD, see Convention's website at: https://www.cbd.int/information/parties.shtml, accessed 16 May 2025.
[39] Convention on Wetlands of International Importance (Ramsar, opened for signature 2 February 1971), as amended, in force 21 December 1975, 996 UNTS 245.
[40] UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, opened for signature 16 November 1972), in force 17 December 1975.

Endangered Species of Fauna and Flora (1973),[41] the Bonn Convention on Conservation of Migratory Species of Wild Animals (1979),[42] the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)[43] or the African Eurasian Waterbird Agreement (1995)[44].

3.2 EU policies for biodiversity protection and the adoption of the BHD

At the EU level, the first piece of biodiversity legislation was the Wild Birds Directive (BD). Adopted in 1979, the Directive responded to the, in some cases, very rapid decline of wild bird species within the EU.[45] Notably, the BD was also the first piece of environmental legislation ever adopted at the EU level. At the time, the European Communities did not yet possess specific environmental competence, leading the Council to base the Directive on the "catch-all" Article 235 EEC.[46]

The influence of international agreements on the design of the BD is evident in its approach and key substantive provisions. Similar to the international Bern Convention, adopted in the same year, the EU BD establishes rules for the protection of habitats (Articles 3 and 4) on the one hand, and provisions for the direct protection of species (Articles 5 to 9) on the other.

13 years later, in 1992, the **Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora**, in short Habitats Directive (HD), was adopted. The adoption of the HD was preceded by discussions on a broader EU legal framework for habitat conservation, which began as early as 1977 in parallel with the negotiations on the Bern Convention.[47] A first

[41] Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, opened for signature 3 March 1973), in force 1 July 1975, 993 UNTS 243.
[42] Convention on the Conservation of Migratory Species of Wild Animals (Bonn, opened for signature 23 June 1979), in force 1 November 1983, 1651 UNTS 333.
[43] Convention on the Conservation of European Wildlife and Natural Habitats, 19 September 1979, in force since 1 June 1982.
[44] Agreement on the Conservation of African-Eurasian Migratory Waterbirds (The Hague, opened for signature 16 June 1995), in force 1 November 1999, 2401 UNTS 45.
[45] BD, Recital 3.
[46] Article 235 EEC states that "If any action by the Community appears necessary to achieve, in the functioning of the Common Market, one of the aims of the Community in cases where this Treaty has not provided for the requisite powers of action, the Council, acting by means of a unanimous vote on a proposal of the Commission and after the Assembly has been consulted, shall enact the appropriate provisions."
[47] The Environment Action Programme (1977) stated that the Commission was participating in the preparation of a Council of Europe instrument on wildlife and biotope protection and would propose Community action if needed to ensure its effective application. See Resolution of the Council of the European Communities and of the Representatives of the Governments of the Member States meeting within the Council of 17 May 1977 on the Continuation and Implementation of a European Community Policy and Action Programme on the Environment,

proposal for a directive "on the protection of natural and semi-natural habitats and of wild fauna and flora" was presented by the Commission to the Council eleven years later, on 16 August 1988.[48] Finally, another four years later, the final text of the **Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora** was adopted by the Council on **21 May 1992**. In the meantime, the Single European Act (1987) had been adopted and the Council was consequently able to base the Directive on the newly introduced Article 130s EC-Treaty, which empowered the EC to take environmental action.[49] On 21 June 1994, two years after the adoption of the Directive, the HD finally entered into force. Like the BD, the HD adopts the two-pronged approach of the Bern Convention, establishing rules for the protection of habitats on the one hand and for the direct protection of species on the other.

To date, the BD and the HD are the EU's two main legal instruments for the protection of biodiversity. Their aim, scope and content as well as problems with their implementation and enforcement are further addressed in Chapters 4 to 6 of this dissertation.

3.3 The European Union's biodiversity strategies as guiding frameworks: Repeated failures to meet established targets

To guide its overarching policies on biodiversity, the EU regularly adopts Communications outlining its goals and priorities for biodiversity protection, as well as the measures necessary for their implementation—commonly referred to as biodiversity strategies. The first Communication on a Biodiversity Strategy was adopted by the Commission in 1998 and subsequently endorsed by the Council and the Parliament.[50]

Three years later, in 2001, the Council, in its role of defining the EU's overall political direction and priorities, agreed at the Gothenburg Meeting "**to halt the decline of biodiversity [in the EU] by 2010**".[51] However, this ambitious attempt to halt biodiversity loss by 2010 ultimately failed.

Official Journal C 139, 13 June 1977, Annex: *European Community Policy and Action Programme on the Environment* (1977–1981), Title III, Chapter 2: Protection of Flora and Fauna, 25.

[48] European Commission, *Proposal for a Council Directive on the protection of natural and semi-natural habitats and of wild fauna and flora* COM(88) 381 final [1988] OJ C247, Brussels, 21 September 1988.

[49] Single European Act, 17 February 1986, 1987 O.J. (L 169) 1, 25 I.L.M. 506

[50] European Commission, *Communication on a European Biodiversity Strategy* COM(1998) 42 final, Brussels, 4 February 1998.

[51] Presidency Conclusions, Göteborg European Council 15 and 16 June 2001.

In **May 2011**, the Commission published a new strategy entitled *Our Life Insurance, Our Natural Capital: An EU Biodiversity Strategy to 2020*.[52] This strategy introduced a long-term vision extending to 2050 and set a concrete target for 2020. This concrete target aimed at "[h]alting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss". Despite some progress made, the EU and its MS once again fell short of achieving its 2020 target of halting biodiversity loss.[53]

In **May 2020**, the Commission published the current *EU Biodiversity Strategy for 2030: Bringing Nature Back into Our Lives*.[54] As a milestone, the strategy aims to ensure that "Europe's biodiversity will be on the path to recovery by 2030". The strategy emphasises the critical importance of nature restoration, stating that protecting the nature we currently have will not be enough to bring nature back into our lives. To reverse biodiversity loss, the Strategy calls for more ambitious efforts in nature restoration. In place of the previous Strategy's unsuccessful voluntary target, the new Strategy calls for the adoption of legally binding targets. Key commitments include the protection of 30% of the EU's land and sea, alongside a proposal for binding targets to restore degraded ecosystems across the EU, to be published by the Commission in 2021.[55] The Nature Restoration Regulation (NRR), adopted in June 2024, is the delivery on that commitment: it sets binding obligations for MS to restore degraded ecosystems (e.g., wetlands, forests, marine habitats) on land and sea.[56]

3.4 European Commission Fitness Check on the BHD

In 2014, the BHD underwent a so-called "Fitness Check", a formal evaluation initiated by the European Commission to assess whether the two Directives are "fit for purpose".[57] The BHD were assessed against five criteria: effectiveness, efficiency, relevance, coherence, and EU added value.

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[52] European Commission (2011) *Our Life Insurance, Our Natural Capital: An EU Biodiversity Strategy to 2020*, COM(2011) 244, Brussels, 3 May 2011.
[53] EEA, *SOER 2020 Report*, 90.
[54]European Commission, *Biodiversity Strategy 2030*, COM(2020) 380 final.
[55] *Ibid*., Sections 2.1. *A coherent network of protected areas*, and 2.2.1. *Strengthening the EU legal framework for nature restoration.*
[56] Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869, OJ L 1991, 29 July 2024.
[57] The Fitness Check is one of many activities undertaken as part of the Commission's Regulatory Fitness and Performance Programme (REFIT).

The Fitness Check concluded that the two Directives are "fit for purpose", but that realising their potential and achieving their objectives would depend on substantial improvements in the implementation of the BHD. [58] To deliver practical results on the ground, these improvements would need to focus on both effectiveness and efficiency. [59]

A report published by an environmental NGO in 2018 reached similar conclusions. The report found that while the majority (67%) of the assessed MS had by now fully transposed the BHD into national law, they still failed to implement them properly. [60] Recent data from the EEA (2019) on Europe's biodiversity shows that 60% of species assessments and 77% of habitat assessments continue to be in unfavourable conservation status.[61] Only 23% per cent of the protected species and 16% of the habitats protected under the HD in the EU are stated to indicate favourable conservation status, while many more species and habitats are reported to remain under threat. [62]

In conclusion, the problems with the implementation and enforcement of the BHD persist and MS' lack of compliance with their legal obligations under the BHD "remains an unresolved issue".[63]

Against this background, the following chapters explore the main provisions of the BHD (Chapter 4) and investigate problems with their implementation and enforcement (Chapter 5). The focus will be placed on those aspects of the BHD that become particularly relevant to the subsequent discussion of the ELD and the ECD and their interplay with provisions of the BHD.

4 The main provisions of the Birds and Habitats Directives

In the EU, the Birds Directive and the Habitats Directive are the two most important pieces of legislation for the protection of biodiversity.[64] Often quoted together as the "Birds and Habitats

[58] European Commission, *Fitness Check of the EU Nature Legislation*, 8.
[59] *Ibid.*
[60] BirdLife International, European Environmental Bureau, Friends of the Earth Europe and WWF, *The State of Implementation of the Birds and Habitats Directives in the EU – An Analysis by National Environmental NGOs in 18 Member States* (2018) [online] [BirdLife International et al., *State of BHD Implementation*].
[61] EEA, *SOER 2020 Report*, 75-91.
[62] *Ibid.*
[63] See Milieu et al., *Fitness Check Birds and Habitats Directives*, 37.
[64] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds [2009] OJ L20/7; codifying Council Directive 79/409/EEC of 2 April 1979; Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [1992] OJ L206/7.

Directives" (BHD) or "Nature Directives", the aims of the two Directives are in the case of the Birds Directive

> to **maintain or adopt** the population of all wild bird species naturally occurring in the EU at a level which corresponds to "**ecological, cultural and scientific requirements**",[65]

and in the case of the Habitats Directive

> to **maintain or restore** protected natural habitats and species of wild fauna and flora in the territory of the EU at "**favourable conservation status**".[66]

To achieve their aims, the BHD prescribe the implementation of three main sets of measures in the EU MS:

- **Site designation measures** for the designation of sites for the protection of species and habitat types listed in the Annexes of the BHD, as well as for all migratory birds. These designated sites form part of a coherent ecological network of nature areas and are referred to as the European Natura 2000 Network.
- **Site protection measures**, which are designed to maintain and restore protected species and habitats at favourable conservation status.
- **Species protection measures**, which apply both inside and outside Natura 2000 sites.

These sets of measures are furthermore supported by monitoring and research measures.

4.1 Birds Directive

The Birds Directive (BD), adopted in 1979, aims to maintain or adopt the population of **all** wild bird species naturally occurring in the EU at a level which corresponds to ecological and scientific requirements.[67] The list of wild bird species that are considered to be covered by the directive currently covers over 500 wild bird species.[68] According to the EEA (2020), 39% of protected wild bird species in the EU are currently in poor and bad conservation status. [69]

[65] BD, Arts.1 - 2.
[66] HD, Art. 2(1).
[67] BD, Arts.1 - 2.
[68] For further reference, see European Commission website at: https://ec.europa.eu/environment/nature/conservation/wildbirds/eu_species/index_en.htm, assessed 1 May 2025.
[69] European Environment Agency, *State of Nature in the EU: Results from Reporting under the Nature Directives 2013–2018* (2020) [online] [EEA, *State of Nature 2020*]*: Results from reporting under the nature directives 2013-2018*, p.5 [online] This represents an increase of 7% over the last six years, i.e. compared to the last reporting period. According to the rapporteurs, this increase can be attributed to a genuine deterioration as well as to a mixture of changes in survey and analysis methods and data quality. The report describes the size of and trends in bird populations at the national level based on reports from MS under Article 12 of the BD and of EU-level population statuses and trends for 463 bird species that naturally occur in the EU.

The BD provides for a range of different measures. These include **site designation, site protection** and **species protection measures**. The level of protection that a wild bird species is granted and the measures that consequently apply to it depend on its conservation status. The BD's main provisions are laid down in Articles 3 and 4 (site designation and site protection measures) and Articles 5 to 9 (species protection measures). In addition, monitoring and research measures apply.

The BD contains five annexes. **Annexes I – III** specify the level of protection that applies to the different bird species and the measures that apply to them. **Annexes IV-V** concerns hunting methods, which must be prohibited and research topics, that should be prioritized.

Annex I lists the 197 species and sub-species, which are considered to be particularly threatened. A bird species is considered to be particularly threatened if it is "in danger of extinction, vulnerable to specific changes in their habitat, considered rare because of small populations or restricted local distribution or require particular attention for reasons of the specific nature of habitat".[70] For Annex I species and for all migratory bird species, MS are required to designate Special Protection Areas (SPAs).[71]

Annex II lists the 82 bird species that can be hunted. However, a number of restrictions apply. MS must ensure that they are not hunted during the rearing season or during the various stages of reproduction. In the case of migratory species, they must ensure that they are not hunted during their period of reproduction or during their return to their rearing grounds.[72]

Annex III lists the 26 species to which the prohibitions under Article 6 (1) BD, including the sale of live or dead wild birds, do not apply under certain conditions.[73]

Annex IV lists a number of methods for large-scale or non-selective trapping or killing of birds, which MS must especially prohibit under Article 8 (1) BD.[74] These include amongst others

[70] BD, Art. 4(1).
[71]BD, Art. 4 (1)-(2).
[72] BD, Art. 7(4).
[73] BD, Art. 6(2)-(3).
[74] Under Art. 8(1) BD MS must prohibit all forms of non-selective and large scale killing of birds, in particular the methods listed in Annex IV.

snares, limes, hooks, live birds which are blind or mutilated used as decoys, explosives, nets, traps, poisoned or anaesthetic bait.

Finally, **Annex V** lists the topics to which MS should pay particular attention in promoting research on the protection, management and use of bird species protected under the Directive.[75]

4.1.1 Site designation

Site designation under the BD follows a tiered approach. **Article 3 BD** lays down a general requirement for MS to "maintain or re-establish a sufficient diversity and area of habitats" for all wild bird species. Additionally, **Article 4 BD** requires MS to designate "special protection areas" (SPAs) for the 197 species of birds listed in Annex I of the Directive and for regularly occurring migratory species not listed in Annex I of the Directive. MS are required to notify the Commission of any designated areas.[76]

4.1.2 Site protection

Site protection measures required for Special Protection Areas (SPAs) are stated in the first sentence of **Article 4(4) BD**, according to which [**emphasis added**]

> "MS shall take appropriate steps to **avoid pollution or deterioration of habitats** or any **disturbances affecting the birds**, in so far as these would be **significant** having regard to the objectives of this Article".

Notably, the site protection measures under Article 4(4) BD no longer apply. They were replaced by the obligations stated under Article 6(2), (3) and (4) of the Habitats Directive, which was adopted in 1992. As a result, Article 6 HD is now the key protective provision for SPAs designated under the BD. The **management of SPAs** continues to be governed by Article 4(1) and Article 4(2) BD.

4.1.3 Species protection

In addition to the provisions regarding site designation and site protection, the BD states specific requirements for species protection, which are stated in Articles 5 to 8 BD. **Article 5 BD** requires MS to establish a **general system of protection** for all naturally occurring wild bird species present in the EU. This includes the killing and capture of the wild bird species, as

[75] Article 10 BD "encourages" MS to promote research.
[76] BD, Article 4(3).

well as the deliberate destruction of their nests and eggs or the deliberate significant disturbance of these wild bird species, particularly during the period of breeding and rearing, all of which are generally prohibited under Article 5. [77] Additionally, **Article 6 BD** prohibits the **sale of live or dead wild birds**, with certain exceptions applying to the species listed in Annex III of the Directive.[78] **Article 7 BD** allows **hunting** for certain species listed in Annex II, but bans all hunting during the period of reproduction and rearing and during the return of migratory birds to their breeding grounds. Any form of **non-selective and large-scale killing of birds**, especially the methods listed in Annex IV, is prohibited under **Article 8 BD**.[79]

Derogations are available under **Article 9 BD**. Provided that there is no other satisfactory solution, MS may derogate from the protective regime for reasons of public health and safety, air safety as well as for the protection of flora and fauna and to prevent serious damage to crops, livestock, forests, fisheries and water.

4.1.4 Research and reporting

The site protection and species protection measures are complemented by a number of research and reporting measures. **Article 10 BD** encourages MS to undertake research and any work required as a basis for the protection, management and use of the population of the bird species protected under the Directive. A number of topics which MS are encouraged to undertake research on are listed in **Annex V** to the Directive.

Reporting obligations under the BD are stated in **Article 12 (1)**, which requires reports by the MS on the implementation of the Directive every three years. Based on the information received by the MS under Article 12(1), the Commission must produce its own report on the application of the Directive every three years, according to Article 12(2) BD. Moreover, MS must submit annual reports on derogations under Article 9 (3) BD and report on classifications of SPAs under Article 4(3) BD.

[77] BD, Art. 5.
[78] BD, Art. 6.
[79] BD, Art. 8 (1).

4.2 Habitats Directive

The HD, adopted in 1992, aims to **contribute towards ensuring biodiversity** through the conservation of natural habitats and species of wild fauna and flora in the territory of the EU MS.[80] Measures take pursuant to the Directive must be designed to **maintain** or **restore** protected species and habitats at "**favourable conservation status**",[81] while taking into account "**economic, social and cultural requirements and regional and local characteristics**".[82]

The HD protects around **1 200 animal and plant species** considered threatened, endangered, rare or endemic, including mammals, reptiles and amphibians, fish, insects, spiders, molluscs, echinoderms and plants.[83] Additionally, around 230 rare and **characteristic habitat types** are protected in their own right under the HD, including, for instance, raised bogs and fens, rocky habitats and caves.[84] Excluded from the scope of the HD are bird species. They are exclusively protected under the BD.

Specific rules apply to so-called **priority habitats or species**. They are given a higher priority because of their danger of disappearance.

For the 2013-2018 reporting period, about a quarter of the species were found to have a good conservation status at EU level. For natural habitats protected under the HD, only 15% of assessed habitats were reported to have good conservation status, while 81% had poor or bad conservation status.[85] Concerning habitat trends, an average of 6% of the assessed habitats were reported to show improvements in conservation status and/or development, with positive developments being attributed to targeted management and restoration measures or the enlargement of the habitat area.[86]

[80] HD, Art. 2(1).
[81] HD, Art. 2(2).
[82] HD, Art. 2(3).
[83] As listed in Annexes II, IV and V to the HD.
[84] HD, Art. 1(b) defines **natural habitats** as "terrestrial or aquatic areas distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural. Natural habitat types of Community interest are, according to Article 1(c) HD, those which, within the territory of the EU MS: (i) are in danger of disappearance in their natural range; or (ii) have a small natural range following their regression or by reason of their intrinsically restricted area; or (iii) present outstanding examples of typical characteristics of one or more of the nine following biogeographical regions: Alpine, Atlantic, Black Sea, Boreal, Continental, Macaronesian, Mediterranean, Pannonian and Steppic." The habitat types currently protected under the HD are listed in Annex I to the HD.
[85] Another 4% were reported as unknown, see EEA, *State of Nature 2020*.
[86] EEA, *State of Nature 2020*.

Protection under the HD follows a pattern similar to the BD. The HD's main requirements are stated under Articles 3 to 11 (**site designation** and **site protection**) and Articles 12 to 16 (**species protection**). They are complemented by **monitoring** and **research measures**. **Article 2(2)** specifies that measures taken by MS under the HD must aim to maintain or restore protected animal and plant species and natural habitats to a "**favourable conservation status**".

The concept of "**favourable conservation status"** is a key concept under the HD, which is referenced in several provisions. [87] It has its origins in international wildlife conservation. For the purposes of the Directive, the concept is defined in detail in Article 1(e) and (i) of the HD.

According to Article 1(i), the **conservation status of a natural habitat** is deemed "**favourable"**, when, amongst other things, its range is "stable or increasing" and the "structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future."[88]

The **conservation status of a species**, on the other hand, qualifies as "**favourable"** when, *inter alia*, the species "is maintaining itself on a long-term basis as a viable component of its natural habitats and there is, and will continue to be, a sufficiently large habitat to maintain its populations on a long-term basis". [89]

Problems with the application of the concept of FCS, particularly in the context of liability, are discussed in Part II of the dissertation, which deals with the application of the ELD to damage to protected species and habitats.

The HD contains six annexes, which further specify the provisions of the HD and identify as well as classify protected natural habitats, plant and animal species. **Annex I** list the currently around 230 natural habitat types that are protected in their own right. **Annex II** lists about 900 animal and plant species of Community Interest whose conservation requires the designation

[87] See also in this regard C Ramao, *The Added Value of the Habitats Directive*, in: Born, C-H., Cliquet, A., Schoukens, H., Misonne, D., & Van Hoorick, G. (Eds.), *The Habitats Directive in its EU Environmental Law Context: European Nature's Best Hope?* Routledge, Routledge Research in EU Law (2015) [online] [Ramao, *Added Value of the Habitats Directive*], 22.
[88] HD, Art. 1(e)
[89] HD, Art. 1(i)

of Special Areas of Conservation.[90] **Annex III** lists the criteria for selecting sites eligible for identification as sites of Community Interest and designation as Special Conservation Area. A site is defined under the Directive as "a geographically defined area whose extent is clearly delineated".[91] **Annex IV** lists over 400 animal and plant species of Community Interest in need of strict protection, including many Annex II species. For these species, a system of strict protection must be applied across their entire natural range within the EU, both within and outside Natura 2000 sites. **Annex V** lists over 90 animal and plant species of Community Interest whose taking in the wild and exploitation may be subject to management measures. MS are required to ensure that their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status. Finally, **Annex VI** lists prohibited methods and means of capture and killing and modes of transport.

4.2.1 Site designation

The HD establishes **Natura 2000**, a "**coherent European ecological network of special areas of conservation**".[92] The site designation measures are set out under Articles 3 to 5 HD. Each MS must contribute so-called Special Areas of Conservation (SACs) to the Natura 2000 network "in proportion to the representation within its territory of the natural habitat types and the habitats of species" listed in the Annexes of the HD.[93] The network includes the sites designated under the HD[94] as well as the special protection areas classified as Special Protection Areas (SPAs) under the BD.[95]

[90] Species of Community interest are, according to Article 1(g) HD, species which are, within the territory of the EU MS: "(i) endangered, except those species whose natural range is marginal in that territory and which are not endangered or vulnerable in the western Palearctic region; or (ii) vulnerable, i.e. believed likely to move into the endangered category in the near future if the causal factors continue operating; or (iii) rare, i.e. with small populations that are not at present endangered or vulnerable, but are at risk. The species are located within restricted geographical areas or are thinly scattered over a more extensive range; or (iv) endemic and requiring particular attention by reason of the specific nature of their habitat and/or the potential impact of their exploitation on their habitat and/or the potential impact of their exploitation on their conservation status."

[91] HD, Art. 1(j). A "*site of Community importance*" is a site which "contributes significantly to the maintenance or restoration at a favourable conservation status of a natural habitat type in Annex I or of a species in Annex II and may also contribute significantly to the coherence of Natura 2000 referred to in Article 3, and/or contributes significantly to the maintenance of biological diversity within the biogeographic region or regions concerned. For animal species ranging over wide areas, sites of Community importance shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction," according to Article 1(k) HD. A "*special area of conservation*" is "a site of Community importance designated by the MS […] where the necessary conservation measures are applied for the maintenance or restoration, at a favourable conservation status, of the natural habitats and/or the populations of the species for which the site is designated," according to Article 1(l) HD.

[92] HD, Art. 3(1).

[93] HD, Art. 3.

[94] Art. 3(2) HD requires MS to designate sites as Special Areas of Conservation (SACs) in accordance with Article 4 HD.

[95] HD, Art. 3(1), second subpara.

4.2.2 Site protection

The site protection measures required for Special Areas of Conservation (SACs) are laid down in **Article 6 HD**. The provisions define a general regime for the protection of sites (Article 6, paragraphs 1 and 2) as well as a procedure to be followed when planning developments that might affect a protected site (Article 6, paragraphs 3 and 4). Pursuant to Article 2 of the HD, the site protection measures taken under Article 6 of the Directive must be designed "to maintain or restore certain habitats and species at favourable conservation status"[96] and "shall take account of economic, social and cultural requirements and regional and local characteristics". [97] As will become apparent from the subsequent analysis of ECJ case law on the HD (Chapter 5.2), Article 6 is one of the most important but also most controversial Articles of the HD, as it most strongly determines the relationship between nature conservation and other socio-economic activities.[98] In the following, the provisions of Article 6 are presented paragraph by paragraph.

Article 6(1) concerns the **day-to-day management** of protected sites. The provisions lay down a general conservation regime. MS are required to take positive and proactive conservation measures to maintain or restore natural habitats and species at favourable conservation status.[99] This involves, "if need be", management plans specifically drawn up for the site, as well as statutory, administrative and contractual measures.

Article 6(2) concerns the **protection of sites from deterioration and disturbance**. It requires MS to take steps to avoid the deterioration of natural habitats and habitats of species and to avoid any disturbance of species in Natura 2000 sites.

Article 6(3) concerns the **assessment and approval of development plans and projects** in protected sites. It requires that any development plan or project that could have a significant negative environmental impact on the integrity of a Natura 2000 site must be appropriately

[96] HD, Art. 2(2).
[97] HD, Art. 2(3).
[98] See European Commission, Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC. Commission Notice C(2018) 7621 final, Brussels, 21 November 2018, [European Commission, Managing Natura 2000 Sites (C(2018) 7621 final)], §1.1.
[99] European Commission, Managing Natura 2000 Sites (C(2018) 7621 final), § 2.2.

assessed. It may only be approved by national competent authorities if it has been established that it doesn't have a negative impact on the integrity of the site concerned.

Article 6(4) concerns a **derogation** for plans or projects likely to have a damaging impact on a protected site. If a plan or project is assessed negatively under Article 6(3), MS may go ahead with the project and thus derogate from Article 6(3), provided that the following **three cumulative conditions** are met: **Firstly**, there is an "absence of alternative solutions". Secondly, the plan or project responds to "imperative reasons of overriding public interest" (IROPI)**.** And, **thirdly**, the MS takes "all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected". If the site hosts a priority habitat or species, the public interest arguments justifying a derogation from Article 6(3) are restricted to reasons of "human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest".

Importantly, the **site protection measures under Article 6 HD** only apply to the species and habitats that occur **inside Natura 2000 sites** and are confined to the habitats and species listed under Annex I and II HD and to the regularly occurring migratory bird species and the rare and threatened bird species listed under Annex I of the BD.

The provisions under Article 6 are stated in relatively vague terms. Numerous ECJ decisions have helped to further clarify their meaning. The decisions are discussed under Chapter 5 of this dissertation.

4.2.3 Species protection

For the over 400 animal and plant species in need of strict protection listed in **Annex IV** to the HD, MS must "establish a strict system of protection" and take the measures necessary to this end.[100] This system of strict protection and is set out in Articles 12 and 13 of the HD.

Article 12, which applies to **animal species**, requires MS to establish prohibitions on

- the **killing and capturing** of individual animals belonging to these species;

[100] According to Article 14 HD, a more flexible regime applies to species listed in Annex V to the HD.

- the **disturbance** of these species, particularly during the period of breeding, rearing, hibernation and migration;
- the **destruction and taking of eggs** from the wild;
- the **deterioration or destruction of their breeding sites or resting places**;
- the **keeping**, **transport** and **sale or exchange**, and **offering for sale or exchange**, of specimens taken from the wild.

Article 13, which applies to **plant species**, requires MS to prohibit, during all stages of the biological cycle of these plants,

- the deliberate **picking, collecting, cutting, uprooting** or **destruction** of these plants in their natural range in the wild;
- the **keeping, transport and sale or exchange** and offering for sale or exchange of specimens of these species taken in the wild.

Importantly, in contrast to the site protection measures listed under Article 6, the species protection measures listed under Articles 12 and 13 of the HD apply across the entire natural range of Annex IV species within the EU, irrespective of whether they are inside or outside Natura 2000 sites.

Derogations from the prohibitions stated under Articles 12 and 13 HD are available under Article 16 HD and may be granted subject to the conditions set out therein. Provided that no satisfactory alternative is available, and the favourable conservation status of the species is maintained, Article 16 (1) HD allows MS to derogate from the protective regime for reasons of health and safety to prevent serious damage to crops, livestock, forests, fisheries and water and other types of property and for other "imperative reasons of overriding public interest, including those of a social or economic nature".

4.2.4 Research, monitoring and reporting

The HD includes a number of research monitoring and reporting requirements. These oblige MS to monitor and submit information on the conservation status of the habitats and species protected under the Directive as well as on the conservation measures taken under Article 6(1) HD, on compensation measures taken Article 6 (4) HD for projects having a negative impact

on Natura 2000 sites or on derogations they may have applied under Article 16 HD. Article 16(1) HD obliges MS to report about derogations under Article 16(2) HD every two years , on which the Commission shall give its opinion within 12 months. Article 6(4) HD simply requires MS to inform the Commission of the compensatory measures adopted.

Monitoring is mandated under Article 11 HD, which obliges MS to survey the conservation status of all species and habitats protected by the Directive, both inside and outside Natura 2000 sites.

Article 17 HD obliges MS to **report every six years** about the progress made with the implementation of the HD, especially about the conservation measures taken under Article 6(1) HD of the Directive and the impact of their measures on the natural habits and species protected under the Directive.

On the basis of the information provided by the MS under Article 17 HD, the Commission must draw up a composite report on the application of the Directive in the MS with an evaluation of the progress achieved. The report has to be published no later than two years after receipt of the reports from the MS.

Research is "encourage[d]" under Article 18 HD of the Directive, which addresses both the Commission and MS.

4.3 Territorial scope of habitats and species protected under the BHD

Regarding the territorial scope of habitats and species protected under the BHD, it is important to once more emphasize the difference in the territorial scope of protection between site protection measures on the one hand, and species protection measures on the other hand.

The **site protection measures** under Article 6 HDs only apply to the species and habitats that occur inside Natura 2000 sites and are confined to the habitats and species listed under Annex I and II HD and to the regularly occurring migratory bird species and the rare and threatened bird species listed under Annex I of the BD.

The **species protection measures** of the BHD, on the other hand, apply to species in their entire European range, i.e. both inside and outside Natura 2000 sites. However, the species protection measures under Article 12 and 13 of the HD are confined to the species listed in Annex IV of the HD, while the species protection measures under Article 5 of the BD apply to all naturally occurring wild birds. These observations are important with regard to the analysis of ELD and ECD, that follows in Part II and III of this dissertation.

5 Implementation and enforcement of the BHD

This chapter delves into the practical aspects of implementing and enforcing the BHD, examining the effectiveness of the two Directives and investigating difficulties with their implementation and enforcement. The analysis begins with an assessment of the different key actors in the implementation and enforcement of the BHD. Next the focus shifts to the European Court of Justice (ECJ) to examine the Court's extensive and growing jurisprudence on the BHD from infringement procedures and references for preliminary rulings. The aim of this analysis is twofold: Firstly, to improve understanding of the substantive provisions of the BHD and their interpretation in ECJ case law. Secondly, to clarify the problems that have evolved with their implementation and enforcement. Since an understanding of the BHD's main substantive provisions is key for the analysis of the ELD and ECD, which cross-reference to the BHD, the findings on the interpretation of key provisions of the BHD are summarised in a separate section for future reference.

Within the EU system of governance, several actors play an important role in the implementation and enforcement of the BHD. In the following, their role is analysed by extracting experiences with their performance to date (Chapter 5.1). Subsequently the focus shifts to the ECJ and its extensive and growing jurisprudence on the BHD from infringement procedures and references for preliminary rulings (Chapter 5.2). Relevant case law is examined to learn about the Court's interpretation of the main substantive provisions of the BHD and problems with their implementation and enforcement. The focus of the discussion is placed on the provisions relating to site designation and site protection measures, the understanding of which is of particular relevance to the subsequent discussion of the ELD and the ECD and their interplay with the provisions of the BHD.

5.1 Key actors in the implementation and enforcement of the Birds and Habitats Directives

Implementation and enforcement are very much at the "sharp end"[101] of the EU environmental policy process: In order to be effective, EU environmental measures need to be translated into concrete action on the ground. Key actors in this process are the MS and their national authorities, private parties (citizens and NGOs), the European Commission and the Court of Justice of the European Union. The following chapters examine their rights and obligations within the EU system of governance and how they have exercised their role in the implementation and enforcement of the BHD over the last decades. The analysis aims to situate the BHD and the challenges encountered in their implementation and enforcement within the broader framework of EU environmental law and governance. This contextualisation will help clarify the role of the ELD and ECD in enhancing the effectiveness of the BHD throughout the remainder of the dissertation. [102]

5.1.1 The role of EU Member States and national authorities

Implementation and enforcement of EU environmental law primarily takes place at MS level. Directives typically oblige MS and require them to achieve a certain result within the time limits set therein. While a directive is binding, as to the result to be achieved, MS enjoy some discretion in their choice of form and methods to achieve the required result.[103] In most cases, a directive will require MS to make changes to their law, i.e. to transpose the directive into national law.[104] Once transposed, the rules need to be implemented and enforced. The effectiveness of EU environmental law, therefore, depends to a great extent on the MS, notably their national authorities and courts, which must correctly transpose, implement and enforce EU law.[105] The following chapters first explore the rights and obligations of MS in the implementation and enforcement of EU environmental law and examine how these have been exercised in the context of the BHD.

[101] Jordan & Tosun, *Policy Implementation in Environmental Policy in the EU*, 247.
[102] See also more generally on this matter, S Kingston (ed), *European Perspectives on Environmental Law and Governance* (2013, Routledge, London) [Kingston, *European Environmental Law and Governance*], 5.
[103] see TFEU, Art. 288.
[104] Unless the law of a MS is already fully aligned with the requirements set out in the Directive.
[105] The EU has a clear interest in the proper implementation and enforcement of EU environmental legislation at the MS level. This interest is reflected in Article 197(1) TFEU, which provides that the "effective implementation of Union law by the Member States, which is essential for the proper functioning of the Union, shall be regarded as a matter of common interest."

5.1.1.1 Rights and obligations under the Treaties

The autonomy of national authorities in applying and enforcing EU law is not unlimited, as is clearly stated in the Treaties. The **principle of sincere cooperation** enshrined **in Article 4(3) TEU** imposes a general duty on MS and their national competent authorities to comply with their obligations under directives or other EU legal acts. It requires MS

> "to take any appropriate measure, general or particular, to ensure fulfilment of obligations arising out of the Treaties or resulting from the acts of institutions of the Union".

The obligations of MS and their national competent authorities under Article 4(3) TEU have been further clarified by the ECJ. They include:

- a duty to ensure that punishments for breaches of EU law correspond to punishments for breaches of national law, both procedurally and substantively; [106]
- a duty to ensure that national penalties are "effective, dissuasive and proportionate";[107]
- a duty to exercise the same diligence in dealing with breaches of EU law as they do in applying the relevant national legislation;[108]
- a duty to review national decisions in order to ensure conformity with EU law.[109]

Finally, to ensure effective legal protection in the areas covered by EU law, **Article 19 (1) TEU** requires MS to provide **sufficient remedies**.

5.1.1.2 The role of Member States in the implementation and enforcement of the BHD

The rights and obligations granted to MS under the Treaties highlight their crucial role in the implementation and enforcement of EU law. Yet they comply with this role to a limited extent only. Their persistent failure to comply with Treaty obligations to properly implement and enforce EU environmental law is well documented. In the case of the BHD, it is particularly pronounced, as evidenced by the numerous ECJ rulings over the past decades.[110]

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[106] See *Commission v Greece*, C- 68/88; *Nunes and De Matos*, C-186/98, para. 10.
[107] See *Commission v Ireland*, C-354/99, para. 46; *Commission v Greece*, C-68/88, paras. 23–24; *Nunes and De Matos*, Case C-186/98, para. 10. The requirement for "effective, dissuasive and proportionate" sanctions is discussed in more detail in PART III, under the ECD.
[108] See *Commission v Greece*, C- 68/88; *Nunes and De Matos*, Case C-186/98, para. 11.
[109] *Kraaijev eld*, Case C-72/95, paras. 59-60.
[110] For further reference, see Chapter 5.2., *Lessons learnt on the Implementation and Enforcement of the BHD from ECJ Case Law*.

As a result of MS' poor implementation and enforcement, the effectiveness of the two Directives is seriously undermined and EU-protected species and habitats are not receiving the protection they are guaranteed under the BHD. This is confirmed by numerous studies and reports. [111] Despite the adoption of the BHD in 1979 and 1992 respectively, biodiversity loss continues to grow. 60% of species assessments and 77% of habitat assessments continue to be in unfavourable conservation status.[112] The findings of the Fitness Check are further supported by a subsequent report, published by an environmental NGO in 2018. The report found that while the majority (67%) of the assessed MS had by now fully transposed the BHD into national law, they still failed, however, to implement the directives properly. [113]

Whereas initially, i.e. in the years following the adoption of the Directives in 1979 (BD) and 1992 (HD), infringement proceedings for non-transposition or incorrect/incomplete transposition of the two Directives accounted for the majority of infringement proceedings brought before the ECJ,[114] most MS have now fully transposed the BHD into national law[115] and cases of "bad application" are now likely to account for the majority of cases requiring

[111] See BirdLife International et al., *State of BHD Implementation*.Scores were given on 11 implementation criteria of the BHD, namely on their national transposition, designation of sites, the presence and implementation of management plans, funding and resources to put them into practice, species protection, implementation of appropriate assessments, management of invasive alien species and on the connectivity of the national network of protected areas, monitoring of protected habitats and species, research and scientific work on species and habitats, and engagement of stakeholders to ensure public participation in these processes; EEA, *SOER 2020 Report*, 75; European Commission, *Communication from the Commission: Improving the delivery of benefits from EU environment measures: building confidence through better knowledge and responsiveness*, COM(2012) 95 final, Brussels, 7 March 2012. The Commission suggests in its Communication that failure to fully implement environmental legislation costs the EU around €50 billion every year in health costs and direct costs to the environment. See also: COWI & Eunomia, *Costs of Not Implementing EU Environmental Law*, 38 and 166.The study, which was carried out for the European Commission, estimates that the costs of not having fully implemented the BHD amount to EUR 13.1 bn per year. The number is based on the estimates by another study [ten Brink et al (2008)], which calculated that the Natura 2000 network prov ides EUR 200-300 bn per year in benefits, and that around 5% could be seen as the annual rate of loss, i.e. the costs of deterioration of ecosystem from not fully implementing the EU legislation; Milieu, IEEP & ICF (2016) *Evaluation Study to support the Fitness Check.*

[112] EEA, *SOER 2020 Report*, 75-91.

[113] See BirdLife International et al., *State of Implementation*.

[114] See also discussion below, under Chapter 5.1.2., *Role of the Commission and the ECJ*.

[115] See BirdLife International et al., *State of Implementation*. According to the study, 67% of the MS have fully transposed the BHD into national law. Scores were given on 11 implementation criteria of the BHD, namely on their national transposition, designation of sites, the presence and implementation of management plans, funding and resources to put them into practice, species protection, implementation of appropriate assessments, management of invasive alien species and on the connectivity of the national network of protected areas, monitoring of protected habitats and species, research and scientific work on species and habitats, and engagement of stakeholders to ensure public participation in these processes.

referral to the ECJ. As evidenced by recent evaluations of the BHD, problems with transposition and enforcement of the Directives persist.[116]

5.1.2 The role of the European Commission and the European Court of Justice

Next to the MS, another important player in the implementation and enforcement of EU environmental law is the Commission together with the ECJ. The following chapters first address their rights and obligations under the treaties and then examine how they have exercised their role in the context of the BHD.

5.1.2.1 Rights and obligations under the Treaties

The **European Commission** is also referred to as the "**Guardian of Treaties**". Under the control of the ECJ, it oversees the implementation of EU law by the MS.[117] First and foremost, this entails providing information to the MS on its application.[118] This happens through various means, such as publishing guidance documents, organising meetings and conducting studies. The sharpest instrument at the Commission's disposal to ensure MS' compliance with EU law is the procedure laid down in Articles 258 and 260 TFEU. Article 258 allows the Commission, as a last resort, to refer a MS to the ECJ under the so-called infringement procedure (first referral). Where the ECJ agrees with the Commission, it will declare that the MS has infringed EU law. The MS must then take the necessary measures to comply with the Court's ruling, see Article 260 (1) TFEU. If the Commission considers that the MS has not complied with the Court's judgment, the Commission may refer the MS to the ECJ again, this time under Article 260 (2) TFEU, with a recommendation for a financial penalty, that specifies the amount of the lump sum or penalty payment to be paid by the MS (second referral). If the Court then finds that the MS has not complied with its judgement, it may impose the financial penalty (lump sum or penalty payment) on the MS concerned.

The **role of the ECJ** is specified in Article 19 TEU. Article 19(1) charges the Court with the task to "ensure that in the interpretation and application of the Treaties the law is observed". According to Article 19(3), the Court must, amongst other things, rule on actions brought by a MS, an institution or a natural or legal person and, at the request of courts of the MS, give

[116] See BirdLife International et al., *State of Implementation*; European Commission, *Fitness Check of the EU Nature Legislation*; Milieu et al., *Fitness Check Birds and Habitats Directives*, 37.
[117] TEU, Art.17(1).
[118] See also IEEP et al., *Environmental Inspections Study*, 28.

preliminary rulings, on the interpretation of Union law or the validity of acts adopted by EU institutions.[119]

5.1.2.2 The role of the Commission and the ECJ in the implementation and enforcement of the BHD

Through numerous rulings in infringement proceedings and preliminary references, the Court has clarified MS' obligations under the BHD and helped to ensure their correct transposition, implementation, and enforcement.[120] Environmental cases continue to represent one of the largest categories of open infringement proceedings before the ECJ.[121] In its Annual Report on monitoring the application of EU law, the Commission identified the environment as the policy area with the highest number of new infringement cases, with 109 cases opened in 2023 alone.[122]

[119] TEU, Art. 19(3).
[120] For further reference, see the discussion of relevant ECJ case law on the BHD in Chapter 5.2 below.
[121] See European Commission, *Monitoring the Application of EU Law – 2023 Annual Report*. The report again identified the environment as the policy area with the highest number of new infringement cases, with 109 cases opened in 2023 alone. For the period 2011–2023, the environment consistently accounted for the highest number of open infringement cases by year-end. This conclusion is based on data presented in the European Commission's *Annual Reports on the Monitoring of the Application of EU Law*, which—since 2011—have included accessible visual summaries facilitating year-on-year comparison. Earlier reports do not offer comparable formats or datasets, and conducting an independent count of infringement cases across policy areas falls outside the scope of this research. The analysis therefore relies on Commission publications and other secondary sources that have synthesised the underlying primary data. The reports are available at: https://commission.europa.eu/publications/annual-reports-monitoring-application-eu-law_en, accessed 16 May 2025.
[122] See European Commission, 2023 Annual Report EU Law COM(2024) 358 final. In its Annual Report on monitoring the application of EU law, the Commission reported that the environment was the policy area with the highest number of new infringement cases opened in 2023. The Commission opened 109 new cases relating to the environment in 2023, compared to 91 cases relating to Mobility & Transport, 89 to Justice, Fundamental Rights & Citizenship, and 61 to Migration & Home Affairs, the next most common policy areas.

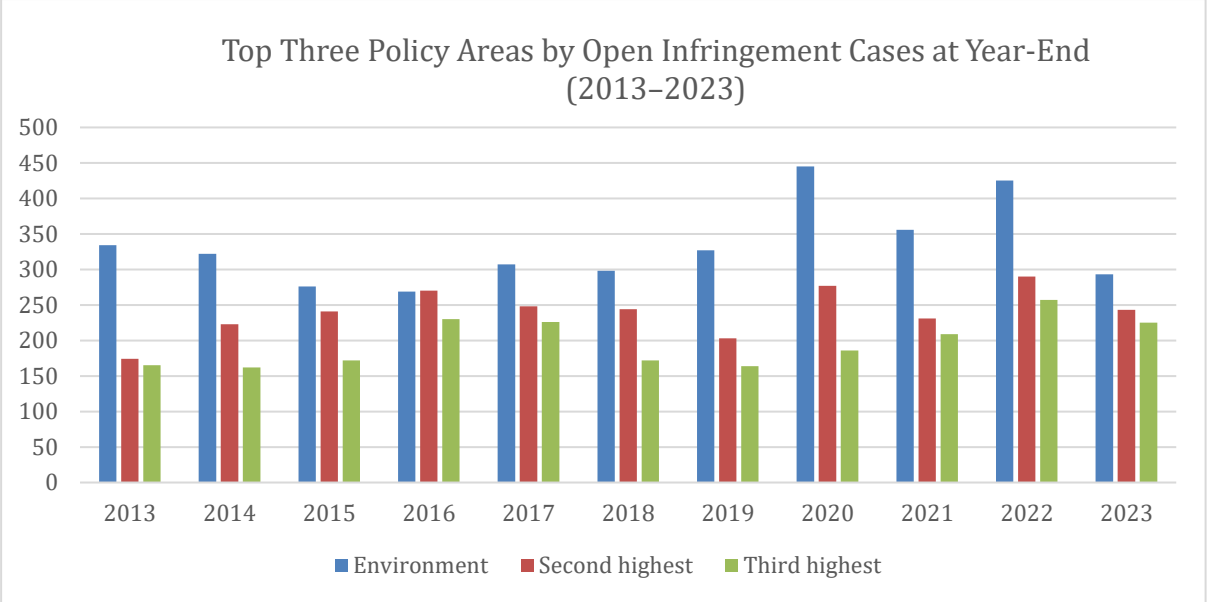

Figure 6: Open infringement cases by policy area at year-end (2013–2023); the environment consistently ranked highest, except in 2016 (270 vs 269).

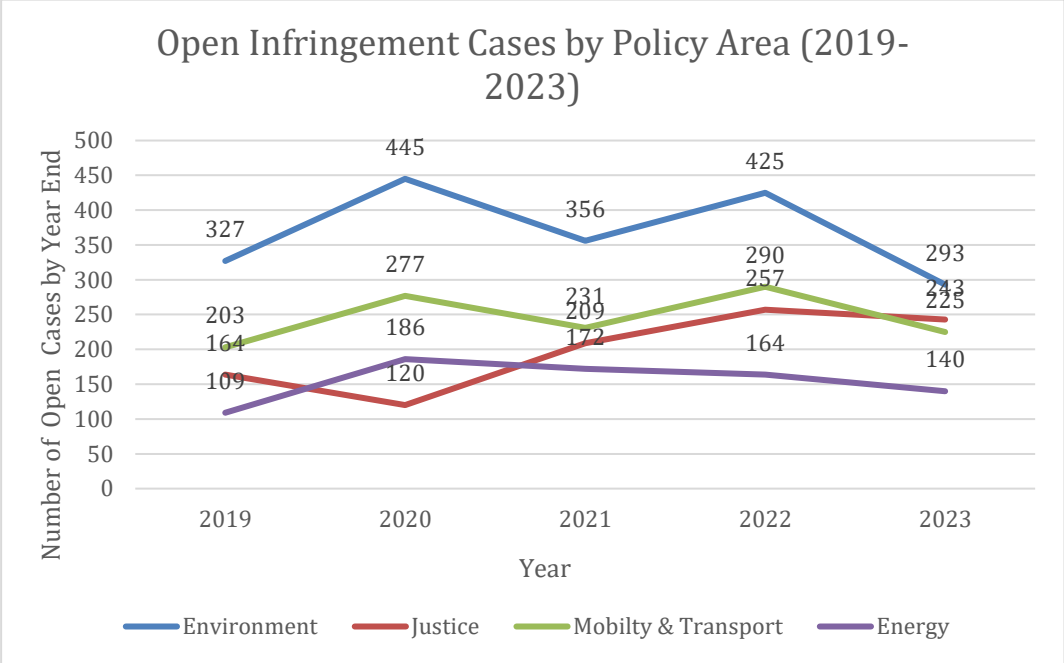

Figure 7: Trends in infringement cases by policy area (2019-2023) [123]

[123] The Commission no longer publishes infringement data by policy area in a Staff Working Document (SWD); this information is now available online at: https://commission.europa.eu/law/application-eu-law/implementing-eu-law/infringement-procedure/2023-annual-report-monitoring-application-eu-law_en#infringements.

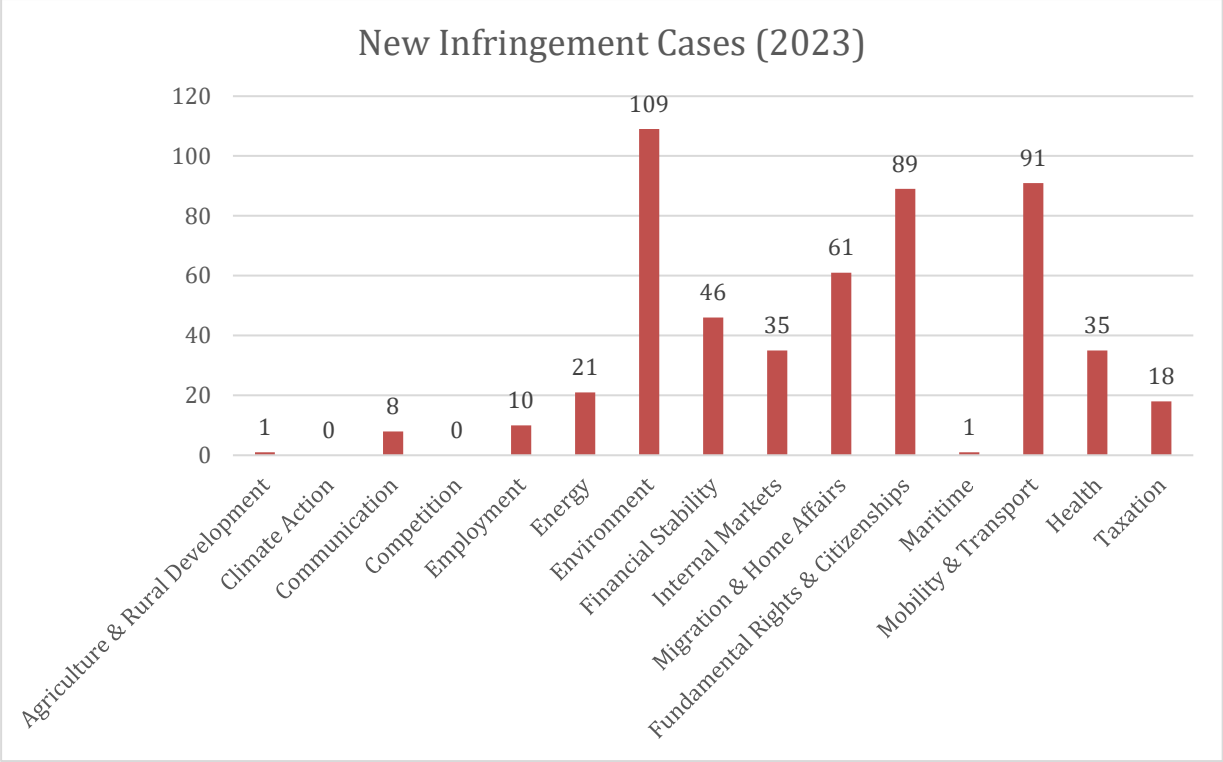

Figure 8: New infringement cases by policy area in 2023, with the environment continuing to lead.

The substantial number of infringement actions brought by the Commission against MS for failures in the transposition, implementation, and enforcement of the Birds and Habitats Directives (BHD), alongside extensive jurisprudence from the European Court of Justice (ECJ), further highlights the scale and persistence of the problem. Since the 1980s, nature-related breaches — including, but not limited to, infringements of the BHD — have accounted for the largest proportion of environmental infringement cases reported, amounting to 2,374 cases (30.2%) out of a total of 7,866.[124]

[124] This number also includes infringements of other nature related directives beyond the BHD. For further reference, see Milieu et al., *Fitness Check Birds and Habitats Directives*, 37.

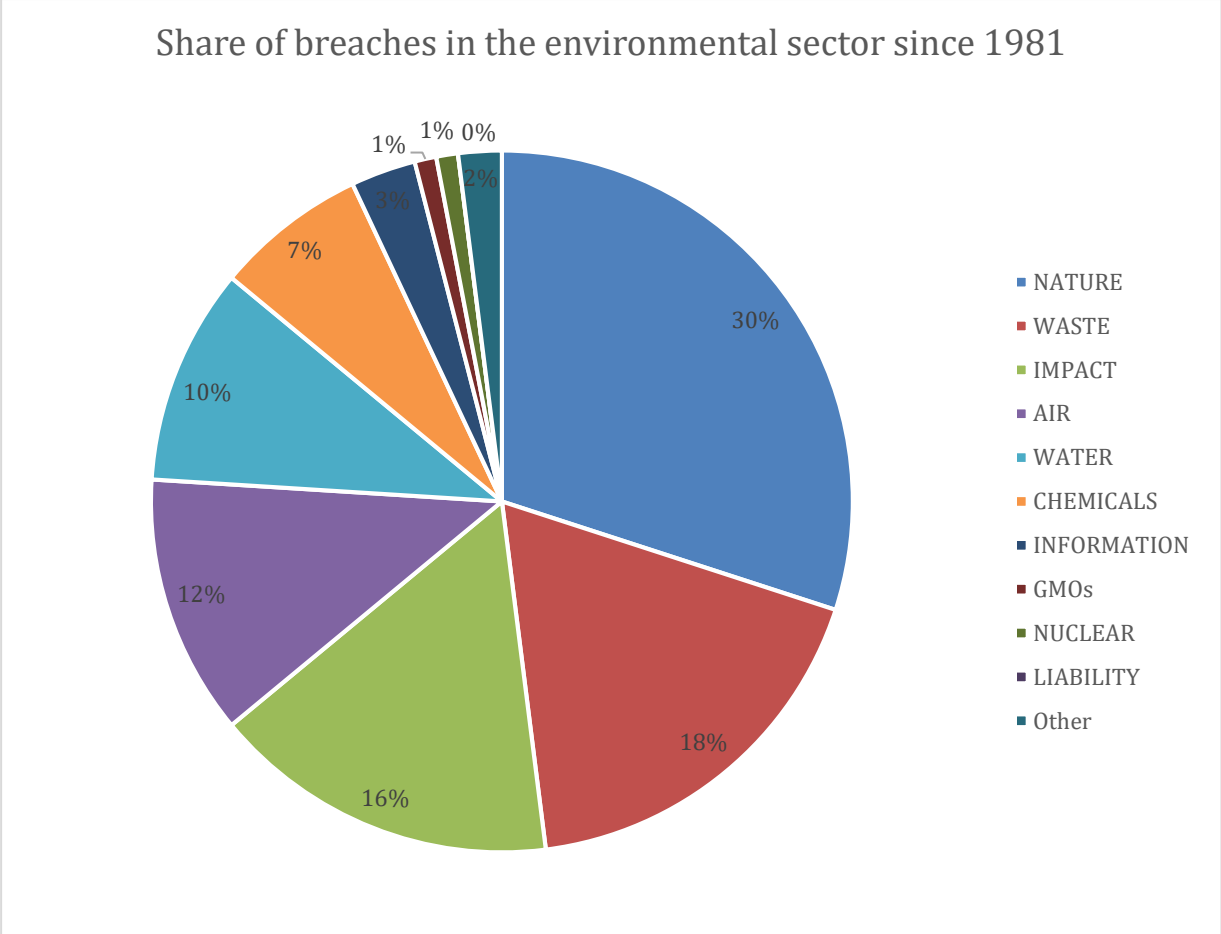

Figure 5: Share of reported breaches in the environmental sector per area (100% = 7866) [125]

Stakeholders consulted for the 2016 Fitness Check of the BHD, including national authorities, NGOs and business associations, confirmed the critical role of the Commission and the ECJ in the implementation and enforcement of the two Nature Directives and emphasised the continued importance of EU enforcement action.[126]

This critical role of the Commission notwithstanding, commentators have observed a decline in the Commission's initiative to enforce MS' obligations [127] and noted changes in the way the

[125] see Milieu et al., *Fitness Check Birds and Habitats Directives*, 37.
[126] Milieu et al., *Fitness Check Birds and Habitats Directives*, 503. The Study cites NGOs in France, Spain, Malta and the UK, in particular with regard to the management of sites and activities or investments that harm "irreplaceable biodiversity". The Study cites, e.g., COPA Latvia, nature authorities in Germany and Spain, and NGOs at both national (Austria, Bulgaria) and EU level (FOEE), with several examples of how EU enforcement improved implementation of the BHD in the MS. EU enforcement measures would also help address shortcomings in national decision-making, which may be subject to short-term interests or constraints. Assessment of cases at EU level was perceived to be more impartial, and NGOs stated to have easier access to relevant institutions such as the Commission and the ECJ than to national institutions.
[127] L Krämer, Implementation and Enforcement of the Habitats Directive, in: C-H Born, A Cliquet, H Schoukens, D Misonne and G Van Hoorick (eds), *The Habitats Directive in its EU Environmental Law Context: European*

Commission performs its role as guardian of the Treaties.[128] As previously stated, by now the majority of MS have fully transposed the BHD.[129] Once a directive is transposed, cases brought before the ECJ on a directive are likely to primarily concern problems with their implementation and enforcement and thus cases where the transposed provisions are not implemented correctly or at all (so-called cases of "bad application").[130] As Krämer (2015) notes, in contrast to cases concerning the transposition of a directive, cases of "bad application", often require a "rather difficult […] clarification of the facts and an assessment of [national]administrative decisions […] which are influenced by numerous local, economic and other factors".[131] According to Krämer (2015) neither the Court nor the Commission are interested in dealing with these "particulars".[132] His observations are consistent with the Commission's Communication "A Europe of Results - Applying Community Law" (2007), in which the Commission stated its intention to prioritise three categories of cases in the future, namely, firstly, non-communication cases, secondly, breaches of EU law raising "issues of principle or having particularly far-reaching negative impact for citizens", and thirdly, failure to respect Court judgments stating the existence of infringements.[133]

Nature's Best Hope? (2015, Routledge, Routledge Research in EU Law) [Krämer, Implementation of the Habitats Directive], 241.

[128] S Kingston, *Mind the Gap: Difficulties in Enforcement and the Continuing Unfulfilled Promise of EU Environmental Law*, in: S Kingston (ed), *European Perspectives on Environmental Law and Governance* (1st ed, 2013, Routledge, London) [Kingston, *Mind the Gap*],152-153; Kingston, S., Heyvaert, V. and Čavoški, A., *European Environmental Law* (2017, Cambridge University Press, Cambridge) [Kingston et al., *European Environmental Law*], 191-192. Kingston observes that the role of the Commission has changed in recent years and stresses inter alia how complaints handling has changed significantly with the institution of the EU Pilot scheme, which has been in operation since 2008. The scheme seeks to establish a dialogue between the Commission and the MS on potential infringements. Complaints are transferred to the relevant MS for "clarification, information or potential solutions to the problem". However, while "the aim in principle is a laudable" (i.e. increase in cooperation between Commission and MS), MS are essentially being asked "to help inform the Commission about matters which may potentially lead to an infringement action against them". As Kingston notes, "[i]t is striking that, in the vast majority of cases, cases opened in EU Pilot are resolved at that stage and do not go any further."

[129] See Chapter 5.1.1., *The role of EU MS and national authorities*

[130] The Commission typically distinguishes between three types of infringement of EU law on the part of MS: (i) non-notification cases, meaning cases where MS have failed to notify the Commission of the requisite national implementing measures by the transposition date set in a Directive; (ii) non-conformity/non-compliance cases, meaning cases where the Commission considers that a MS's legislation is not in line with what EU law requires; and (iii) bad application cases, meaning cases where the Commission considers that EU law is not being applied correctly or at all by the MS. Source: European Commission, *Monitoring the Application of Union Law: 2014 Annual Report* COM(2015) 329, Brussels, 9 July 2015, 6.

[131] Krämer, *Implementation of the Habitats Directive*, 242.

[132] *Ibid.*

[133]The Commission amended its priorities. See: European Commission, *Communication from the Commission, EU law: Better results through better application,* C/2016/8600 (OJ C 18, 19.1.2017, 10–20). The Commission states the revised priorities as (1) cases where MS have failed to communicate transposition measures or where those measures have incorrectly transposed directives; (2) where MS have failed to comply with a judgment of the Court of Justice as referred to in Article 260(2) TFEU; (3) or where they have caused serious damage to EU financial interests or violated EU exclusive powers as referred to in Article 2(1) TFEU read in conjunction with Article 3 TFEU." The outcome of these changes remains to be seen.

Despite these changes in the way the Commission has performed its role as Guardian of Treaties in recent years, environmental cases continue to account for the largest share of open infringement cases compared to all other areas of EU law,[134] a finding that further underlines the "serious enforcement problems endemic in this field". [135]

The critical role of the ECJ in the implementation and enforcement of the BHD is further explored in Chapter 5.2, which discusses seminal ECJ rulings on the two Directives. Firstly, however, the role of another important player is discussed, namely that of citizens and NGOs.

5.1.3 The Role of Private Parties (Citizens and NGOs)

Citizens and NGOs ("private parties") can be powerful agents of EU environmental law enforcement and have played a crucial role in the implementation and enforcement of the BHD. Seminal rulings of the ECJ on the BHD have emerged as a result of preliminary procedures from national court cases initiated by NGOs. [136] NGOs and citizens are also drivers of infringement procedures. According to a study, 85% of the total number of 2,374 reported breaches of the BHD between 1981 and 2015 were based on complaints[137]; only 15% were identified by the Commission or flagged by the European Parliament. [138] Despite these important contributions to EU environmental law enforcement, the role of private parties and NGOs is still limited both at EU as well as MS level.[139] An issue that has perhaps received most attention in recent years is their continuing limited access to justice in the national jurisdictions of EU MS.

[134] See European Commission, *Monitoring the Application of EU Law – 2023 Annual Report*. Statistics on environmental infringements are available at the Commission website at: https://commission.europa.eu/law/application-eu-law/implementing-eu-law/infringement-procedure/2023-annual-report-monitoring-application-eu-law_en#infringements, accessed on 1 May 2025.
[135] Kingston et al, *European Environmental Law*, 187.
[136] See Chapter 5.2. below discussing ECJ rulings on the BHD.
[137] Complaints are directed to the Commission and provide a mechanism for private parties, such as citizens, business, NGOs or other organisations to report potential breaches of EU law that might otherwise go unnoticed. They provide the Commission with information about non-compliance, enabling it to take action to ensure that MS comply with EU law.
[138] Numbers retrieved from Milieu et al., *Fitness Check Birds and Habitats Directives*, 38 and 503. The authors emphasise that these figures do not include the number of complaints submitted by NGOs that did not result in infringement proceedings. No source is given for the numbers.
[139] It is beyond the scope of this dissertation to discuss the many strategies that private parties have pursued to enforce MS obligations under EU environmental law or to discuss the resulting jurisdiction thereof. For a comprehensive overview, see e.g. See Kingston et al, *European Environmental Law*, 218-256.

To improve access to justice in the MS, the EU has taken a number of measures since the early 2000s. EU measures to improve access to justice for private parties are primarily guided by the EU's membership of the Aarhus Convention.[140] The EU ratified its accession to the Convention in 2005,[141] a step that commits both the EU as well as its MS.[142] The Convention establishes a number of rights of citizens and NGOs with regard to the environment that broadly fall into three pillars, namely access to environmental information, public participation in environmental decision-making and access to justice. The third pillar, which concerns accesses to justice rights, requires the parties to the Convention to ensure a public right to challenge a decision made in breach of the first two pillars or other environmental legislation.[143]

So far, EU initiatives to improve access to justice in the MS have only been of limited success.[144] A 2003 Commission proposal for a Directive on access to justice in environmental matters[145] never received sufficient support from the MS; the Commission finally withdrew it in 2014.[146] Over the years, the EU has at least succeeded in adding explicit access to justice requirements to different pieces of EU environmental legislation, such as Article 13 ELD or Article 11 of the Environmental Impact Assessment Directive[147]. This approach, however, has not resulted in comprehensive coverage.[148] Neither the HD nor the BD cover the subject of access to justice at the national level. The ECJ has, nonetheless, addressed access to justice

[140] UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), 25 June 1998, in force 30 October 2001, 2161 UNTS 447 [Aarhus Convention].
[141] Council Decision 2005/370/EC of 17 February 2005 on the conclusion, on behalf of the European Community, of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, OJ 2005 L 124/1 [Aarhus Convention Council Decision 2005/370/EC].
[142] TFEU, Art. 216(2): "Agreements concluded by the Union are binding upon the institutions of the Union and on its Member States."
[143] Aarhus Convention, Art. 9.
[144] For the purposes of this dissertation, the discussion in this section is limited to access to justice at the national level. While private parties also face significant constraints in accessing justice at the EU institutional level, a detailed examination of these issues lies beyond the scope of this analysis. For further discussion, see Kingston, *Mind the Gap*, 159-167*;* Hedemann-Robinson, *Enforcement of EU Environmental Law: Taking Stock*.
[145] European Commission, Proposal for a Directive of the European Parliament and of the Council on Access to Justice in Environmental Matters, COM(2003) 624 final, 2003/0246 (COD), Brussels, 24 October 2003 [European Commission, *Proposal on Access to Justice*, COM(2003) 624 final].
[146] See Official Journal of the European Union**,** C 153, 20 June 2014, p. 3 (Withdrawal of Obsolete Commission Proposals).
[147] Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (EIA Directive), as amended by Directive 2014/52/EU, OJ L 26, 28 January 2012, p. 1–21; OJ L 124, 25 April 2014, p. 1–17.
[148] Jackson, *Conserving Europe's Wildlife*, 239, provides a summary with reference to European Commission, *Commission Notice on Access to Justice in Environmental Matters* C/2017/2616 [2017] OJ C275/1, 18 August 2017, 10, fn. 27.

requirements under the BHD in several ruling. They are discussed in more detail in Chapter 5.2 below.

Another important consideration in strengthening the role of private parties is that exercising access-to-justice rights is often time-consuming and requires substantial human and financial resources. NGOs are often not in a position to make use of these rights, as they lack sufficient capacity and face considerable difficulties in securing funding for legal action.[149] To sustain themselves financially, they increasingly provide their expertise on a contractual basis for the drafting of management plans for protected sites or other tasks required for the implementation of EU law. [150] While this enables them to exert some influence on the application of EU law, it means that rather than exercising a controlling role, they contribute to supporting public authorities in fulfilling their obligations under EU law; this, in turn, may give rise to financial dependencies on government contracts.

An interdisciplinary research project led by Suzanne Kingston (University College Dublin) sheds additional light on the evolving role of private parties in the enforcement of EU nature law.[151] Based on empirical data from Ireland, France and the Netherlands, the project found that while the legal rights of private actors under instruments like the Aarhus Convention have expanded over time, their practical use remains limited.[152] Importantly, the project developed novel indicators to track both the formal governance framework and actual enforcement outcomes.[153] One of its central findings was that even when NGOs and citizens do not frequently invoke access rights directly, the very existence of those rights appears to improve state enforcement - a phenomenon described as the "shadow of heterarchy".[154] This suggests that empowering private parties can indirectly enhance public implementation of the BHD, even when capacity constraints limit active litigation.

[149] COWI, Prospect and Justice and Environment, *Improving ELD Implementation and the Evidence Base for the ELD* (2021, Brussels, study commissioned by the European Commission) [COWI et al., Improving ELD Implementation (2021)] [online], 213.
[150] *Ibid.*
[151] A five-year empirical research project (2016–2021) examining the effectiveness of EU nature governance laws from 1992 through 2015, across three Member States: France, The Netherlands, and Ireland. For further reference, see University College Dublin, Effective Nature Laws Project, available at: https://www.ucd.ie/effectivenaturelaws/
[152] S Kingston, Z Wang, E Alblas et al., *The democratisation of European nature governance 1992–2015: introducing the comparative nature governance index*, Int Environ Agreements 22 (2022), 27–48; S Kingston, Z Wang, E Alblas et al., *Europe's nature governance revolution: harnessing the shadow of heterarchy*, Int Environ Agreements 22 (2022), 793–824.
[153] *Ibid.*
[154] Kingston et al., *Europe's nature governance revolution*, 793 and 810-811.

5.2 Lessons learnt on the Implementation and Enforcement of the BHD from ECJ Case Law

The European Court of Justice (ECJ) has played a pivotal role in the transposition, implementation, and enforcement of the BHD, with its extensive and expanding jurisprudence on the two Directives forming a significant portion of environmental cases brought before the court.[155] Most of the Court's rulings on the BHD concern infringement cases brought forward by the European Commission,[156] including cases on incomplete or incorrect transposition (non-conformity), non-designation of sites and "bad application".[157] Fewer but nonetheless important rulings derive from preliminary references.[158]

The lion's share of ECJ rulings on the BHD concerns the provisions relating to site designation and site protection.[159] These cases vividly illustrate the different interests and forces at play in the implementation and enforcement of the BHD and are particularly well suited for the examination of the interplay of the two directives with the ELD and ECD. In the following, seminal rulings of the ECJ on site designation and site protection and the Court's interpretation of related key provisions are examined. The discussion of MS' obligations under the HD is preceded by an overview of the Court's landmark ruling in *Leybucht Dykes* (C-57/89), which significantly influenced the design of the subsequently adopted HD and illustrates the fundamental conflict between ecological and economic interests under the BHD that underlies many of the cases that have been brought before the ECJ.

5.2.1 The seminal ruling in Leybucht Dykes (C-57/89)

The extent to which MS may take economic considerations into account when implementing the BHD is one of the most significant and at the same time controversial questions the Court had to address in its rulings on the two Directives. A crucial decision in this regard was the Court's judgment of 28 February 1991 in *Leybucht Dykes* (C-57/89), which addressed the BD and preceded the adoption of the HD. The case concerned dyke-building operations carried out

[155] For further analysis, see Chapter 5.1.2.2, *The role of the Commission and the ECJ in the implementation and enforcement of the BHD*.
[156] Based on Article 258 TFEU.
[157] For an analysis of ECJ Case Law on the BHD see Milieu et al., *Fitness Check Birds and Habitats Directives*. Based on a limited sample, the study found that poor application of the Directives accounted for approximately 83% of breaches reported by the Commission or the European Parliament.
[158] Based on Article 267 TFEU.
[159] See Milieu et al., *Fitness Check Birds and Habitats Directives*,42-43.

in the Leybucht (Germany), which led to a reduction in size of a Special Protection Area (SPA). The reduction in size and thus "de-classification" of a protected site is not directly addressed under the BD. The Court, in order to determine under what conditions MS may be authorised to reduce the size of a SPA, considered MS' obligations under Article 4(4) BD.[160] At the time, Article 4(4) BD, which was later replaced by the HD, was the key provision for the protection of sites classified under the BD. It states that inside SPAs, MS must

> "take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside these protection areas, MS shall also strive to avoid pollution or deterioration of habitats."

The Court came to the conclusion that while MS had some discretion in selecting the most suitable sites for designation as SPAs under Article 4(1) of the BD, they did not enjoy the same discretion under Article 4(4) to modify or reduce the extent of such sites and thus to "unilaterally escape" their obligations under Article 4(4) of the Directive.[161] The Court's ruling made it very clear that, given the importance of SPAs for the protection of Annex I bird species, i.e. bird species that are considered to be particularly threatened, economic and recreational considerations could not justify a derogation from the site protection requirements under Article 4(4) BD, stating that, [**emphasis added**]

> "[t]he power of the MS to reduce the extent of special protection areas can be justified only on **exceptional grounds** […] Those grounds must correspond to a general interest which is **superior to the general interest represented by the ecological objective of the directive**. In that context the interests referred to in Article 2 of the directive, namely **economic and recreational requirements, do not enter into consideration**. As the Court pointed out in [previous judgements], [Article 2] does not
> constitute an autonomous derogation from the general system of protection established by the directive".[162]

The Court's strict interpretation of Article 4(4) BD meant that MS were severely restricted in their freedom to use classified areas for economic and social development. Their "retaliation" for the Court's strict interpretation, however, was soon to come.[163] *Various commentators*

[160] *Leybucht Dykes*, *Commission* v *Germany*, para.18.
[161] *Ibid.* para.20.
[162] *Ibid.* paras.21-22.
[163] Cichowski (2007) refers to this as MS' "retaliation" against the Court's "expansive" interpretation of Article 4(4) BD. For further details, see R A Cichowski, *The European Court and Civil Society: Litigation, Mobilization,*

refer to the Court's ruling in Leybucht Dykes (C-57/89) as the decisive reason for the replacement of Article 4(4) BD which followed shortly thereafter with the adoption of the Habitats Directive.[164]

Leybucht Dykes (C-57/89) was decided in February 1991 and pre-dated the adoption of the HD on 21 May 1992. In order to regain control over the use of areas protected under the BD, MS seized on the negotiations of the HD to ensure that the crucial provision in *Leybucht Dykes* (C-57/89), namely Article 4(4) BD, would no longer apply. This was achieved by including Article 7 in the HD, which states that from the date of implementation of the HD

> "Obligations arising under Article 6 (2), (3) and (4) of [the HD] shall replace any obligations arising under the first sentence of Article 4 (4) [BD] in respect of areas classified [as SPAs]".

The site protection rules adopted under the HD thus not only became the key protective provision for the sites designated under the HD, but also for the sites designated under the BD, thus replacing the first sentence under Article 4(4) BD and consequently removing the legal basis for the Court's jurisdiction in *Leybucht Dykes* (C-57/89).[165]

In addition, MS pushed for the inclusion of a provision under Article 6 HD that would allow them in future to use social and economic considerations as justification for plans or projects likely to have a damaging impact on protected Natura 2000 sites: the derogation introduced under Article 6(4) HD. [166] This ensured that MS, under certain conditions, were able to proceed with damaging activities in protected areas for so-called Imperative Reasons of Overriding Public Interest (IROPI), including reasons of a social or economic nature.

Despite MS' strong resistance and clear opposition to a strict application of site protection rules, the Court remained steadfast in its rigorous interpretation and enforcement following the adoption of the Habitats Directive (HD). Notable rulings, such as *Waddenzee* (C-127/02) and *Sweetman* (C-258/11), reinforced the precautionary principle and demonstrated the Court's

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and Governance (2007, Cambridge: Cambridge University Press) [Cichowski, *The European Court and Civil Society*], 157.

[164] Jackson, *Conserving Europe's Wildlife*, 271, referring to D Baldock, *The Status of Special Protection Areas for the Protection of Wild Birds* (1992) 4(1) *Journal of Environmental Law* 139 [online] [Baldock], 141; L Krämer, *The European Commission's Opinions under Article 6(4) of the Habitats Directive*, *Journal of Environmental Law* 21(1) (2009), 59–85 [Krämer, *Article 6(4) Opinions*]; Cichowski, *The European Court and Civil Society*, 157.

[165] See Jackson, *Conserving Europe's Wildlife*, for detailed information about the history of the BHD and their negotiation.

[166] Cichowski, *The European Court and Civil Society*, 157.

steadfast commitment to protecting the Natura 2000 network from "ill-considered and hastily approved development". [167] These decisions also reflect the Court's acute awareness of the typically incremental nature of habitat degradation, [168] which can ultimately result in a "death by a thousand cuts"[169]. In numerous judgments from infringement proceedings and references for preliminary rulings, the ECJ has further clarified MS' obligations under the BHD, taking care to ensure that the interpretation of the provisions is compatible with the Directives" objective of maintaining or restoring protected species and habitats to a FCS. As will be demonstrated next, the resulting legal regime places substantial demands on MS. The following examination of ECJ case law is organised according to the structure and procedure of the BHD, beginning with site designation (Chapter 5.2.2) and progressing to site protection measures (Chapter 5.2.3). In view of the subsequent examination of the ELD and ECD and to facilitate their comparison with the BHD, each chapter will conclude with a summary that highlights key decisions and insights gained from their review.

5.2.2 Site designation and declassification under the BHD

The protection of species and habitats through the designation of Special Protection Areas (SPAs) and Special Conservation Areas (SACs), and the establishment of the Natura 2000 network, is both the most prominent and, as it turned out, the most contentious requirement for MS under the BHD. Designated areas are subject to a rigorous protection regime, which imposes significant obligations on MS, often involving considerable costs and substantial restrictions on their ability to use these areas for economic and social development. This, coupled with initial uncertainties surrounding the interpretation of the BHD provisions, led to a reluctance among MS to designate and protect an adequate number of sites.[170] Over time, the designation of protected areas has become a "hotbed of contention", [171] particularly concerning the use of economic and social criteria in site selection. The resulting case law on "site classification" and "declassification" under the BD (Chapter 5.2.2.1), as well as "site

[167]Kingston et al, European Environmental Law, 439.
[168] M Clément, *Global Objectives and Scope of the Habitats Directive*, in C-H Born, A Cliquet, H Schoukens, D Misonne and G Van Hoorick (eds), *The Habitats Directive in its EU Environmental Law Context: European Nature's Best Hope?* (Routledge 2015) [Clément, *Global Objectives and Scope*],14.
[169] See also H Schoukens, The Ruling of the Court of Justice in *Sweetman*: How to Avoid a Death by a Thousand Cuts?, *ELNI* 2014:1, 2–12 [Schoukens, Sweetman *Ruling and Habitat Assessment*].
[170] See also Jackson, *Conserving Europe's Wildlife*, 227, with reference to L Krämer, *EU Environmental Law* (2011, Sweet & Maxwell, London) [Krämer, *EU Environmental Law*], 191; and C Stuffmann, *The European Community and EECONET*, in: G Bennett (Ed.), *Conserving Europe's Natural Heritage: Towards a European Ecological Network*, London, Graham and Trotman (1994) [Stuffmann, *European Community and EECONET*], 205.
[171] Kingston et al, *European Environmental Law*, 422.

designation" and "site declassification" under the HD (Chapter 5.2.2.2), is reviewed in the following sections and summarised in a concluding chapter (Chapter 5.2.2.3).

5.2.2.1 Site classification and declassification under the Birds Directive

Under the BD, the designation of sites is referred to as "classification".[172] As previously stated, the classification of sites under the BD follows a tiered approach: Article 3 of the Directive states a general requirement for MS to "maintain or re-establish a sufficient diversity and area of habitats" for all wild bird species. Article 4, on the other hand, requires MS to classify Special Protection Areas ("SPA") for the 197 species of birds listed in Annex I of the Directive and for regularly occurring migratory species not listed in Annex I of the Directive.[173] Any designated areas must be notified by the MS to the Commission.[174]

Article 4 BD requires MS to classify "the most suitable territories in number and size as special protection areas" and "send the Commission all relevant information".[175] In principle, under the BD, MS classify SPAs without the Commission's involvement. However, this discretion of MS in the selection of SPAs has proven to be limited. The Commission has frequently become involved in the process, for example, by initiating infringement proceedings where a MS had not classified sufficient SPAs. The selection of sites under the BD became particularly controversial in two ECJ cases, namely the preliminary ruling in *Lappel Bank* (C-44/95) and the decision in an infringement procedure of the Commission against the Netherlands, *Commission v Netherlands* (C-3/96).

In *Lappel Bank* (C-44/95), the UK government, supported by the French government, argued that, in selecting SPAs and their boundaries, MS should be allowed to take economic considerations into account. [176] The ECJ disagreed. Building on its previous decision in *Santoña marshes* (C-355/90) the Court held that, in selecting SPAs and defining their boundaries, **MS must act solely on the basis of the ornithological criteria** set out in Article 4(1) and (2) of the BD, stating that

[172]BD, Article 4 (1)
[173] See also Chapter 4, *The Main Provisions of the BHD*, for a brief overview of the key provisions of the Birds and Habitats Directives.
[174] BD, Article 4(3)
[175] BD, Article 4 (1) – (3)
[176] *Lappel Bank*, C-44/95, paras.20-21.

> "a MS is not authorised to take account of the economic requirements mentioned in Article 2 [of the BD] when designating an SPA and defining its boundaries".[177]

Subsequently, in *Commission v Netherlands* (C-3/96), the ECJ ruled that **ornithological criteria alone** were considered acceptable to guide MS in the designation of SPAs and held that

> "MS are obliged to classify as SPAs all the sites which, applying ornithological criteria, appear to be the most suitable for conservation of the species in question".[178]

The Court's clarifications frustrated MS' earlier efforts to strengthen economic and social considerations in the BHD. While the adoption of Article 6(4) HD now allowed MS to justify certain activities in protected areas with Imperative Reasons of Overriding Public Interest, the Court's subsequent rulings in *Santoña marshes* (C-355/90), *Lappel Bank* (C-44/95) and *Commission v Netherlands* (C-3/96) made it clear that designation of SPAs would, at least in principle, "remain the preserve of ecology" - to the exclusion of socio-economic considerations.[179]

Another illustration of the Court's powerful role in the implementation and enforcement of the BHD is its ruling in *Basses Corbières* (C-374/98), which resulted from an infringement procedure of the Commission against France.[180] The case concerned the failure of France to classify a part of the Basses Corbière site as an SPA. The site is home to several species listed in Annex I of the BD, including a pair of Bonelli's eagles, of which there are around 20 pairs in France. Authorised activities in limestone quarries in this area caused disturbance of the protected bird species and the deterioration of their habitats. Notably, the Court had already established in *Santoña marshes* (C-355/90) that the site protection rules under the BD also applied to areas that a MS had failed to classify as a SPA although they should have been so classified.[181] The question the Court addressed in *Basses Corbières* (C-374/98) was, whether in such cases the prior and thus stricter regime under the first sentence of Article 4(4) applied **or** the provisions under Articles 6(2) to (4) HD, which had replaced Article 4(4) BD. The Court

[177] *Lappel Bank*, C-44/95, paras.26-27, referring to *Santoña marshes, Commission v Spain*, C-355/90, paras.26-27.
[178] *Commission v Netherlands*, C-3/96, paras.61-62.
[179] See Jackson, *Conserving Europe's Wildlife*, 230.
[180] *Basses Corbières, Commission v France*, C-374/98.
[181] In *Santoña marshes*, the Court held that Article 4(4) BD also applied to areas that had not been classified as SPAs but should have been classified so. See *Santoña marshes, Commission* v *Spain*, C 355/90, para.22.

found that a MS should not "derive an advantage from [its] failure to comply with its Community obligations" [182]and held that

> "areas which have not been classified as SPAs but should have been so classified continue to fall under the [prior, stricter] regime governed by the first sentence of Article 4(4) [BD]". [183]

The decision in *Basses Corbières* (C-374/98), which came after the adoption of the HD in 1992, created a powerful incentive for MS to designate sites under the BD, since a failure to do so would subject them to the older, stricter regime under Article 4(4) BD, which, as previously demonstrated, did not allow for a derogation for damaging projects.[184]

As already noted in the discussion of *Leybucht Dykes* (C-57/89) there is no specific provision in the BD that addresses the declassification of an SPA. After *Leybucht Dykes* (C-57/89), subsequent decisions of the Court further clarified the margin of discretion that MS enjoy in the de-classification of SPAs. In *Commission v Portugal* (C-191/05) [2006], the Court held that

> "MS may not reduce the surface area of an SPA or alter its boundaries unless the areas excluded from the SPA are no longer the most suitable territories for the conservation of species of wild birds within the meaning of Article 4(1) of the Directive". [185]

Portugal had argued that the excluded areas were not important habitats for steppe-land birds. The Court, however, found that these areas "provide[d] a habitat for other species of wild birds listed in Annex I to the Directive for whose protection that SPA had been designated". [186]

5.2.2.2 Site designation and declassification under the Habitats Directive

As already noted, the HD takes a more systematic approach to site designation than the BD and establishes the concept of Natura 2000 as a "coherent European ecological network of special areas of conservation". [187] Natura 2000 includes the sites designated under the HD,[188] as well as the SPAs classified under the BD.[189]

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[182] *Basses Corbières, Commission v France*, C-374/98, para. 51.
[183]*Ibid.*, para. 47.
[184] See Jackson, *Conserving Europe's Wildlife*, 231.
[185] *Commission v Portugal*, C-191/05, para.13.
[186] *Ibid.*, para.12.
[187] HD, Art. 3(1). See also summary of HD under Part I, Chapter 4.2.
[188] Art. 3(2) HD requires MS to designate sites as Special Areas of Conservation (SAC) in accordance with Article 4 HD.
[189] HD, Art. 3 (1) subpara.2.

For the establishment of Natura 2000, each MS must contribute Special Areas of Conservation (SACs) in proportion to the natural habitat types and the habitats of species represented within its territory and listed in the Annexes of the HD.[190] The **designation of sites under the HD** involves a considerably greater degree of Commission involvement than under the BD. The process of selecting and designating sites as SACs under the HD takes place in three stages.[191]

During the **first stage**, MS notify the Commission with a list of sites that either host certain natural habitat types or certain endangered species.[192] The natural habitat types and endangered species that require designation of SACs are, as previously noted, listed in Annex I and II of the HD. Annex I lists about 200 habitat types, including 25 different types of grassland communities, and 51 different forest types. Annex II names around 900 endangered animal and plant species. In addition, Annex III specifies criteria for selecting eligible sites.

During the **second stage**, the Commission in agreement with each MS establishes which of the proposed sites will be declared a Site of Community importance (SCI), [193] before in the third and final stage, MS must designate these sites as a SAC[194]. Importantly, a site is protected as soon as it is selected as a Site of Community Interest (SCI).

The Court, in its interpretation of the rules for the designation of sites under the HD, again followed a strict approach, making it clear that economic or social considerations cannot be taken into account in the selection of sites. In *First Corporate Shipping* (C-371/98) [2000] the ECJ held that

> "on a proper construction of Article 4(1) of the HD, a MS may not take account of economic, social and cultural requirements or regional and local characteristics, as mentioned in Article 2(3) of [the HD], when selecting and defining the boundaries of

[190] HD, Art. 3.
[191] The process is detailed in Article 4 of the Directive.
[192] See Art. 4 (1). The HD habitat types that must be proposed as SACs by the MS are specified in Annex I of the HD, which lists a total of about 200 habitat types, including 25 different types of grassland communities, and 51 different forest types. Annex II covers endangered animal and plant species and lists about 700 species, including mammals, reptiles, amphibians, fish, invertebrates, and plants, but no birds.
[193] HD, Art. 4 (2) - (3).
[194] HD, Art. 4 (4).

the sites to be proposed to the Commission as eligible for identification as [Sites of Community Importance]. [195]

In contrast to the BD, the **declassification of an area** is directly addressed under the HD. Article 9 of the Directive states that:

> "The Commission […] shall periodically review the contribution of Natura 2000 towards achievement of the objectives set out in Article 2 and 3 [of the HD]. In this context, a special area of conservation may be considered for declassification where this is warranted by natural developments noted as a result of the surveillance provided for in Article 11."

However, Article 9 can only be invoked if a MS can demonstrate that it has complied with its obligations under Article 6 and that, despite its efforts to protect the site, deterioration has occurred. In *Cascina Tre Pini* (C-301/12) [2014], the ECJ clarified that

> "[t]he failure of a MS to fulfil [the] obligation of protecting a particular site does not necessarily justify the declassification of that site (paragraph 32).[…] [T]he competent national authorities are required to propose the declassification of a site only where, despite compliance with [the] provisions [under Article 6(2) to (4) HD], that site has become irretrievably unsuitable to meet the objectives of the HD, so that its classification as an SCI no longer appears justified.[196]

5.2.2.3 Summary of findings on site designation and declassification under the BHD

In preparation for the review of the ELD and the ECD, the following key decisions and insights regarding site designation and declassification under the BHD are notable:

- **Socio-economic considerations:** Socio-economic considerations cannot be taken into account when selecting Natura 2000 sites and their boundaries. Cases: *Lappel Bank* (C-44/95)*; First Corporate Shipping* (C-371/98).
- **Failure to designate SPAs:** Areas that have not been designated as SPAs**,** although they should have been, continue to fall under the **protection regime of Article 4(4), first sentence BD**, meaning that the Article 6(4) HD derogation is not available in respect of

[195] *First Corporate Shipping*, C-371/98, para. 25. Article 2(3) of the HD provides that "[m]easures taken pursuant to this Directive shall take account of economic, social and cultural requirements and regional and local characteristics".
[196] *Cascina Tre Pini*, C-301/12, para.32-36.

these sites. Case: *Basses Corbières* (C-374/98).

5.2.3 Site Protection Measures under the Birds and Habitats Directives

Sites designated under the BHD must be managed and protected in accordance with Article 4 BD and Article 6 HD. As noted earlier, the provisions of Article 6(2) to (4) HD have replaced Article 4(4) BD, which no longer applies.[197] Instead, Article 6 HD now serves as the key legal framework for the protection of Natura 2000 sites, covering both SPAs and SACs. However, the management of SPAs remains governed by Article 4(1) and (2) of the BD.

The provisions under Article 6 HD define a general regime for the protection of sites (Article 6, paragraphs 1 and 2) as well as a procedure to be followed when planning developments that might affect a protected site (Article 6, paragraphs 3 and 4). Pursuant to Article 2 of the HD, the site protection measures taken under Article 6 of the Directive must be designed "to maintain or restore certain habitats and species at favourable conservation status"[198] while taking into account "economic, social and cultural requirements and regional and local characteristics".[199]

As will become evident from the analysis of ECJ case law on the HD, Article 6 is not only one of the most crucial but also one of the most contentious provisions, as it strongly shapes the interaction between nature conservation and socio-economic activities. According to a limited analysis by Milieu et al. (2016), 48% of examined breaches under the HD were based on Article 6.[200]

The ECJ has been instrumental in clarifying MS' obligations under Article 6 HD. With a view to the subsequent evaluation of the ELD and the ELD in Parts II and III of the dissertation, the following chapters examine the obligations of the MS under Article 6, based on the case law of

[197] HD, Art. 7.
[198] HD, Art. 2(2).
[199] HD, Art. 2(3).
[200] Milieu et al., *Fitness Check Birds and Habitats Directives.* The research was limited to 369 reported breaches - only certain articles were further scrutinised, namely, under the Birds Directive, Articles 3, 4, 5, 7 and 8, as well as under the Habitats Directive, Articles 3, 4, 6, 9, 12 and 16. For comparison: Under the BD, site designation and special conservation measures required under Article 4 of the Directive led to the highest share of reported breaches (58%), followed by the regulation of hunting under Article 7 (25%) and the prohibition of disruptive acts listed in Article 5 (10%). Under the HD, Article 6 was the legal basis for 48% of examined breaches. Site designation under Article 4 comes second (16%), followed by the lack of measures adopted pursuant to Article 12 (16%).

the ECJ, and identify possible reasons for problems with the implementation and enforcement of these obligations. The examination starts with Article 6(1) HD concerning the management of sites, followed by Article 6(2) and 6(3) HD, which both intend to prevent any negative effects on a protected site, albeit with a different focus. Finally, the derogation under Article 6(4) HD is addressed.

5.2.3.1 Necessary Conservation Measures, Article 6(1) HD

Article 6 (1) HD concerns the **day-to-day management of SACs** and lays down a general conservation regime for protected sites.[201] MS are required to take positive and proactive conservation measures to maintain or restore natural habitats and species at favourable conservation status.[202] This involves, "if need be", management plans specifically drawn up for the site, as well as statutory, administrative and contractual measures. More specifically, Article 6(1) requires MS to [**emphasis added**]

> "establish the **necessary conservation measures** [for SACs] involving, **if need be**, appropriate **management plans** specifically designed for the sites or integrated into other development plans, and appropriate **statutory**, **administrative** or **contractual measures** which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites".

Conservation measures are defined in Article 1(a) HD as a series of measures required to maintain or restore protected species and habitats to FCS. In the context of Article 6(1) HD, this general objective of the HD to maintain or restore protected species and habitats to FCS needs to be translated into site-level conservation objectives.[203] **Site-level conservation objectives** are different from **site conservation measures**. The Commission (2018) describes them as a set of specified objectives to be achieved in a site with the aim of maximizing the site's contribution to FCS at the appropriate level.[204] While conservation objectives represent

[201] As previously noted, Article 6(1) HD does not apply to the management of SPAs, which continues to be governed by Article 4(1)–(2) BD. These provisions require that the rare and threatened bird species listed in Annex I as well as regularly occurring migratory species not listed in Annex I of the BD "[must] be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution."
[202] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final.
[203] See European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, 17. The Commission emphasises the importance of differentiating between conservation objectives of individual sites and the overall objective of achieving FCS, and states that site-level conservation objectives should be stipulated not only for SACs but also for SPAs.
[204] See European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, 17.

long-term goals and should remain relatively stable over time, the conservation measures implemented to achieve them are more adaptable and can change in response to evolving threats or as the benefits of earlier actions become evident.[205] This flexibility ensures that site management can respond to new challenges while staying aligned with the overarching conservation objectives.[206]

So far, the Court has not assessed any particular set of national conservation measures for its compatibility with the HD and in contrast to other provisions of Article 6 HD, comparatively few ECJ rulings have addressed MS' obligations for the management of Natura 2000 sites.[207] In *Commission v Austria* (*C-508/04*), a case that concerned the transposition of the Directive into national law, the Court clarified that the necessary conservation measures under paragraph 1 must be adopted ***in all cases*** and not only "**if need be**".[208] In the case concerned, Paragraph 9(5) of the Naturschutzgesetz of Lower Austria used the expression "if need be" ("gegebenenfalls"), relating it to the use of conservation measures *per se* and not just to the choice of conservation methods. As a result, the Court observed, the implementation of conservation measures was not mandatory, but left to the discretion of the MS. This, however, would constitute a breach of Article 6(1) HD, since the Directive required the adoption of necessary conservation measures, a fact which would exclude any discretion in this regard on the part of the MS. As a result the Court found that Paragraph 9(5) of the Naturschutzgesetz of Lower Austria had not adequately transposed the obligation to adopt **in all cases** the necessary conservation measures.

A second case, *Commission v Spain* (C-90/10), dealt with the **commissioning of the implementation of conservation measures** to another entity, which according to the Court was no excuse for non-implementation. Again, the Court ruled, that by not adopting the appropriate conservation measures, Spain had failed to fulfil its obligations under Article 6(1) HD.

In *Orleans* (C-387/15), a case that concerned the disappearance of a body of 20 hectares of tidal mudflats and tidal marshes of a Natura 2000 site, the Court held that **measures aimed at**

[205] *Ibid.*
[206] *Ibid.*
[207] See also Kingston et al, *European Environmental Law*, 432-433.
[208] *Commission v Austria*, C-508/04, paras. 74-76.

compensation for that disappearance do not qualify as appropriate conservation measures under Article 6(1) of the HD.[209] The case concerned the development of a large part of the port of Antwerp (Belgium) on the left bank of the Scheldt and the impact of that project on a Natura 2000 site known as "Scheldt and Durme estuary from the Dutch border to Ghent", which was designated as being a special area of conservation, in particular, for the habitat type "estuary".

Apart from limited ECJ case law, the most authoritative information on this provision comes in the form of (a non-binding) Commission guidance. [210] In its guidance on Article 6 (1) HD, the Commission (2018) emphasizes the principle of subsidiarity and states that the **choice of the necessary conservation measures** is ultimately left to the MS.[211]

As Kingston et al. (2017) observe, this discretion in managing protected areas under the HD contrasts sharply with the numerous supranational conditions governing the designation process. [212] The vague wording of Article 6(1) HD would leave MS with considerable latitude, and unlike other areas of EU environmental legislation, the Directive would not provide further detail in annexes or through delegated or implementing acts.

5.2.3.2 Obligation to avoid deterioration of habitats and disturbance of species, Article 6(2) HD

Under the HD, both, Article 6(2) as well as Article 6(3), intend to prevent any negative effects on a protected site, albeit with a different focus: [213]

- in the case of Article 6(2) HD, the intention is to avoid "deterioration of habitats" and "disturbances of species";
- in the case of Article 6(3) HD, the aim is to avoid the authorisation of any plans or projects that could "adversely affect the integrity of the site".[214]

[209] *Hilde Orleans and Others v Vlaams Gewest* [Orleans], C-387/15, para.41.
[210] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final; European Commission, *Establishing Conservation Measures for Natura 2000 Sites: A Review of the Provisions of Article 6.1 and their Practical Implementation in Different Member States*, 9 April 2013, [online] [European Commission, *Establishing Conservation Measures*].
[211] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, 21.
[212]Kingston et al, *European Environmental Law*, 433.
[213] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, § 3.
[214] For Article 6(3), see discussion below under Chapter 5.2.3.3.

In the following, relevant ECJ rulings on Article 6(2) and 6(3) HD are discussed, starting with a discussion of Article 6(2) HD. Article 6(2) requires MS to [**emphasis added**]

> "take appropriate steps to **avoid**, in [SPAs, SCIs, and SACs], the **deterioration of natural habitats** and the **habitats of species** as well as **disturbance of the species** for which the areas have been designated, in so far as such **disturbance** could be **significant** in relation to the objectives of this Directive".

In contrast to Article 6(1) HD, Article 6 (2) HD has been the subject of numerous ECJ rulings. They have clarified a broad range of issues concerning the correct interpretation of Article 6(2) HD, concerning, *inter alia*, the "general obligation of protection" that arises under Article 6(2) HD and its relationship with the obligations under Article 6(3) HD (see 5.2.3.2.1), the threshold requirements under Article 6(2) HD (see 5.2.3.2.2), the anticipatory nature of Article 6(2) HD (see 5.2.3.2.3), the application of Article 6(2) HD to natural developments or external events with a negative impact on the site (see 5.2.3.2.4), the nature of the required measures (see 5.2.3.2.5) and the requirement for remedial measures under Article 6(2) HD (see 5.2.3.2.6).

5.2.3.2.1 A general obligation of protection: the ongoing nature of Article 6(2) HD

In contrast to Article 6(3) HD, which concern the authorisation of plans and projects in Natura 2000 sites, Article 6(2) HD applies at all times.[215] A number of ECJ rulings have addressed the ongoing nature of Article 6(2) HD and the relationship between Article 6(2) HD and Article 6(3) HD and 6(4) HD.

According to the Court, the provisions under Article 6(2) HD contain a "general obligation of protection" that applies at all times.[216] In *Waddenzee* (C-127/02), a case that concerned the authorisation of mechanical cockle fishing in a Natura 2000 site, the Court addressed the relationship between Article 6(2) and 6(3) HD. The Court clarified, that any plan or project approved in compliance with Article 6(3) HD would necessarily have to be in conformity with Article 6(2) HD, stating that an

> "[a]uthorisation of a plan or a project granted in accordance with Article 6(3) necessarily assumes that it is considered not likely adversely to affect the integrity of the site

[215] See also Milieu & IUCN, *ELD Biodiversity Damage Report*, 58.
[216] See *Sweetman*, C-258/11, para.33; *Stadt Papenburg*, C-226/08, para.49, and the case law cited there.

concerned and, consequently, not likely to give rise to deterioration or significant disturbances within the meaning of Article 6(2)". [217]

In several subsequent rulings, the Court confirmed the ongoing nature [218] of Article 6(2) stating that "taking into account the similar level of protection required by Article 6(2) and 6(3) of the HD", [219] a plan or project would comply with Article 6(2) only if it was "ensured" [220] or "guaranteed" [221] that it would not cause any disturbance likely to significantly affect the objectives of the directive, particularly its conservation objectives.

This broad scope of application of Article 6 (2) means that all **ongoing activities**, that may not necessarily fall within the scope of the impact assessment regime under Article 6(3) HD, such as **agriculture**, **fishing** or **water management**, have to comply with its non-disturbance and non-deterioration requirements.[222] If an already existing activity in a protected site is likely to cause deterioration of natural habitats or disturbance of species for which the area has been designated, this may require, if appropriate, bringing the negative impact to an end by stopping the activity and/or by taking mitigation or restoration measures.[223]

A case in point is the ECJ ruling in *Commission v Ireland* (C-117/00), which concerned the overgrazing by sheep in the Owenduff-Nephin Beg Complex SAP in Ireland. The Commission brought Ireland before the Court for failing to take the necessary measures to prevent the blanket bog of a SPA from being damaged by overgrazing. The Court found that overgrazing by sheep was "in fact causing severe damage in places" and represented the "the greatest single threat to the site". [224] It was therefore "necessary for the Irish authorities not only to take measures to stabilise the problem of overgrazing, but also to ensure that damaged habitats are allowed to recover". [225] By failing to take the necessary measures to prevent the deterioration

[217] *Waddenzee*, C-127/02, paras. 35-37.
[218] *Grüne Liga Sachsen*, C-399/14, para.37. See in particular the Opinion of Advocate General Sharpston in the same case, para 43: "Article 6(2) of the HD imposes an ongoing obligation to ensure the same level of protection as Article 6(3)[…]". The preliminary ruling concerned the construction of a bridge over the river Elbe in an area designated as a Site of Community Importance (SCI) under the HD.
[219] *Commission v France*, C-241/08, para.32.
[220] *Ibid.*
[221] *Commission v Spain*, C-404/09, para.126.
[222] See European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, §3.
[223] *Ibid.*, referring to *Commission v Ireland*, C-117/00, paras. 28-30.
[224] *Ibid.*, para.30.
[225] *Ibid.*, para.31.

of the habitats, Ireland had, according to the Court, failed to fulfil its obligations under Article 6(2) of the HD.[226]

As will be demonstrated further below, the "ongoing nature" of Article 6(2) HD may also result in a requirement to remediate damage caused by unlawfully authorised plans or projects.[227]

5.2.3.2.2 Threshold requirements under Article 6(2) HD

Regarding the **disturbance of species**, Article 6(2) HD specifies that the disturbance needs to be "**significant**" in relation to the conservation objectives of the Directive. Remarkably, the term "significant" is not further defined under the Directive. The Commission suggests that in order to assess whether a disturbance is "significant" in relation to the objectives of the Directive, MS could refer to the definition of favourable conservation status of a species in Article 1(i) of the HD. For example, any event, which would contribute "to the long-term decline of the population of the species on the site" could be considered as a significant disturbance. Similarly, any activity contributing to "the reduction or to the risk of reduction of the range of the species within the site" or to "the reduction of the size of the available habitat of the species" could be considered a significant disturbance.

For the **degradation of habitats**, Article 6(2) does not contain any further specification indicating a threshold. The requirement to be "significant in relation to the Directive's objectives" does not apply in the case of habitats. The Commission concludes from this that a deterioration of conservation parameters of habitats must therefore **"simply be avoided altogether**".[228] Deterioration could be considered to have occurred if, considering all the influences on the habitat, these influences would result in making **conservation parameters** for the habitat **worse than** they were **before**.[229] This indicates a low threshold under Article 6(2) HD.

Concerning the criteria to be applied for the assessment of deterioration or significant disturbance under Article 6(2), the Court has held in *Grüne Liga Sachsen* (C-399/14) that the

[226] *Ibid.*, para.32-33.
[227] See Chapter 5.2.3.2.6. above on *Restoration requirements under Article 6(2) HD.*
[228] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, §3.4.
[229] *Ibid.*, §3

same criteria should be applied as for the assessment of adverse effects of plans and projects on a Natura 2000 site under Article 6(3). [230]

5.2.3.2.3 The anticipatory nature of Article 6(2)

In several rulings, the ECJ has emphasized the anticipatory nature of Article 6(2). In *Commission v Ireland* (C-418/04), the Court held that Article 6(2) obliges MS to prevent any activities that are likely to cause damage[231] and that a MS cannot wait for the deterioration or disturbance to take place before taking measures. [232] Any measures taken under Article 6(2), including the adoption of national provisions implementing the BHD, would have to ensure that harm is prevented. [233] In the present case, this concerned national provisions implementing the HD and addressing the activities of individuals. Such provisions, the Court found, would have to ensure that individuals are "prevented in advance from engaging in potentially harmful activities".[234] Provisions merely responding to harmful activities were not considered enough by the Court.[235]

The anticipatory nature of Article 6(2) was also emphasised in *Commission v Spain* (C-404/09) [2011]. The case concerned open-cast mining operations in an SPA and the related risk for protected bird species. The Court held that under Article 6(2) "the existence of a probability or risk that [an activity] might cause significant disturbances for that species" would be sufficient.[236]

5.2.3.2.4 Natural developments or external events with a negative impact on the site

The question whether the obligation for preventive action under Article 6(2) also includes an obligation to prevent deterioration from natural developments was first addressed in *Commission v United Kingdom* (C-6/04). In the case, the Court confirmed that preventive action under Article 6(2) HD is not limited to human activities, but can also include an obligation "to

[230] *Grüne Liga Sachsen*, C-399/14, paras. 45 and 67; European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, § 3.
[231] *Commission v Ireland*, C-418/04, para.218.
[232] *Ibid.*, para. 208.
[233] *Commission v Ireland*, C-418/04, paras. 207-208.
[234] *Ibid.*, para. 208.
[235] *Ibid.*, para.217.
[236] *Commission v Spain*, C-404/09, EU:C:2011:768, para.142, with reference to *Commission v France*, C-241/08.

prevent natural developments that may cause the conservation status of species and habitats in SACs to deteriorate".[237]

In the same case, the Court found that the obligation to prevent deterioration of habitats and disturbance of species also applies to external events, i.e. **activities outside the designated areas**, "that may cause the conservation status of species and habitats in SACs to deteriorate".[238]

In its guidance on Article 6, the Commission further specifies that in cases of natural succession or impacts of climate change, Article 6(2) requires MS to take measures to halt or counter this process if it is considered to have a negative impact on the species and habitat types for which the site has been designated.[239]

5.2.3.2.5 Nature of required measures

Regarding the nature of the required measures under Article 6(2) HD, the Court decided that these need to be **specific**, assessed on a **case-by-case basis** and ensure that the **substantive protection** is indeed **secured**.

In *Commission v Ireland* (C-418/04) the Court clarified that the required measures under Article 6(2) need to be **specific**. It's not enough to rely on general legal provisions, such as criminal law provisions on trespass on private property

> "that are not specifically linked to the protection of natural habitats and of habitats of species against deterioration or against disturbances affecting species and that they are therefore not designed to avoid damage caused to habitats by the use of SPAs for recreational purposes."[240]

Moreover, activities in protected areas have to be assessed on a **case-by-case basis.** In *Commission v France* (C-241/08) the Court clarified that it is not acceptable that certain activities such as e.g. fishing or hunting are generally classified as activities that do not cause

[237] *Commission v United Kingdom*, C-6/04, para. 34.
[238] *Ibid.*
[239] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, §3.
[240] *Commission v Ireland*, C-418/04, paras. 216-221.

disturbance.[241] In the case, the Commission took France to Court because in its national provisions it excluded certain activities from the scope of Article 6(2). The national provisions stated generally that fishing, aquaculture, hunting and other hunting-related activities practised under the conditions and in the areas authorised by the laws and regulations in force do not constitute activities causing disturbance or having such an effect. The Court found that such provisions failed to meet the obligations under Article 6(2).

Finally, the measures taken by the national authorities need to ensure that the **substantive protection** required by Article 6(2) is indeed **secured**. In certain cases, simply bringing criminal proceedings against or imposing fines on the party responsible for deterioration or disturbance might not be sufficient for a MS to ensure compliance with Article 6(2).[242]

5.2.3.2.6 Restoration and remediation requirements under Article 6(2) HD

The measures required under Article 6(2) appear to be primarily of a preventive nature. Evolving ECJ case law, however, indicates that Article 6 (2) also requires restorative measures, such as measures to remedy a past implementation deficit or to halt an on-going deterioration.[243]

In the ECJ's preliminary ruling *Grüne Liga Sachsen* (C-399/14), the Court addressed the question whether a plan or project that was approved without meeting the requirements under Article 6(3) to 6(4) required remedial action under Article 6(2) HD. The case concerned, a road bridge ("Waldschlößchenbrücke") over the river Elbe in Saxony (Germany), which was approved for construction before the area was included in the list of SCIs in 2004 and subsequently declared a SAC in 2006. By the time the case reached the ECJ, the construction works on the bridge had been completed.

The question referred to the ECJ was whether Article 6(2) is to be interpreted as meaning that a plan or project which did not comply with the requirements of Article 6(3) must be subsequently assessed for its impact on the site by the NCA. And, if this question is answered

[241] *Commission v France*, C-241/08, paras. 30-39.
[242] *Commission v Greece*, C-504/14, paras 55–57.
[243] H Schoukens, *Non-Regression Clauses in Times of Ecological Restoration Law: Article 6(2) of the EU Habitats Directive as an Unusual Ally to Restore Natura 2000?*, Utrecht Law Review 13:1 (2017), 124–154 [online] [Schoukens, Non-Regression and Article 6(2)], 151; A Telesetsky, A Cliquet & A Akhtar-Khavari, *Ecological Restoration in International Environmental Law*, London, Routledge (2017) [Telesetsky et al., *Ecological Restoration in International Environmental Law*], 244-245.

in the affirmative, what the requirements would be for such an ex-post assessment under Article 6(2).

The ECJ answered the question in the affirmative and held that such a subsequent assessment of the plan or project under Article 6(2) would have to be carried out in accordance with Article 6(3). [244] Should the assessment find that the plan or project already caused or risked causing deterioration or disturbance, then, according to the Court, the possibility would remain to apply Article 6(4) by analogy. [245]

The Court also addressed the requirements for such an application of Article 6(4) to the situation and stressed that, as an exception to Article 6(3), Article 6(4) would have to be interpreted strictly. [246] Concerning the assessment of alternatives under Article 6(4), the Court held that the option of closure or even demolition would have to be considered[247] and that the economic costs of the alternatives, such as the costs of the demolition of the already completed project ("Waldschlößchenbrücke"), was not of equal importance to the objectives pursued by the HD.[248] Should the assessment conclude that the demolition of the project was indeed necessary, then **any proposal for demolition**, just as the original proposal for building the structure, would have to be considered as a plan or project, within the meaning of Article 6(3) of the HD.[249]

In *Commission v Ireland* (C-117/00), the Court found Ireland to be in breach of Article 6(2) HD, because it had failed to prevent damage to a Natura 2000 site caused by overgrazing. The overgrazing by sheep was causing "severe damage" and represented "the greatest single threat to the site".[250] According to the Court, the national authorities were therefore obliged under Article 6(2) "not only to take measures to stabilize the problem of overgrazing, but also to ensure that damaged habitats are allowed to recover". [251] The Commission (2018) concludes from the ruling that, if an already existing activity in a protected site, such as sheep grazing, is likely to cause deterioration of protected habitats or disturbance of species, Article 6(2) "may

[244] *Grüne Liga Sachsen*, C-399/14, paras. 46 and 67.
[245] *Ibid.* para.71.
[246] *Ibid.*, para.73, citing judgment in *Solvay and Others*, C-182/10, and the case law cited.
[247] *Grüne Liga Sachsen*, C-399/14, para.74.
[248] *Ibid.*, para.77.
[249] *Ibid.*, para.76.
[250] *Commission v Ireland*, C-117/00,, paras.28-30.
[251] *Ibid.*, para.31.

require[…] bringing the negative impact to an end by […] by taking mitigation or restoration measures".[252]

Another case that appears to indicate a restoration requirement under Article 6(2) is the ruling in *Cascina Tre Pini* (C-301/12).[253] The case concerned a request for declassification of an SCI-listed site in Italy.[254] The Court held that [**emphasis added**]

> "The **failure of a MS to fulfil the obligation of protecting a particular site** does not necessarily justify the declassification of that site. On the contrary, it is for that State to **take the measures necessary to safeguard that site**". [255]

At first glance, the Court seems to merely restate the obligation of MS to protect Natura 2000 sites from further deterioration, particularly in order to avoid declassification of a protected site. Schoukens (2017), however, contends that, while the Court does not explicitly refer to restorative measures, "the implicit rationale of this ruling indirectly underscore[s] the need for restoration measures in the context of Article 6(2) of the HD, albeit more as corrective actions in order to amend earlier shortcomings". [256]

In conclusion, it can be presumed, at least since the ECJ's decision in *Grüne Liga Sachsen* (C-399/14), that Article 6(2) not only obliges MS to prevent but also to remedy any unlawful damage to a protected area. The scope of the necessary remedial measures is, as demonstrated, determined by analogous application of Article 6(4). [257]

This finding is important with a view to the subsequent examination of the ELD, which also contains both prevention as well as remediation requirements for damage to protected species and habitats. Importantly, in the case of the ELD, it is the operator, and not the MS who is obliged to take the necessary measures to this end.[258]

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[252]See European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, §3, referring *Commission v Ireland*, C-117/00, paras. 28-30.
[253] *Cascina Tre Pini*, C-301/12, para. 32.
[254] See discussion on declassification of sites under Chapter 5.2.2.2. above.
[255] *Cascina Tre Pini*, C-301/12, para. 32.
[256] Schoukens, *Non-Regression and Article 6(2)*, 152, also referring to: A. Cliquet, *About Blanket Bogs, Brown Bears, and Oak Forests: Case Law of the European Court of Justice on Article 6, §2 of the Habitats Directive* (2015) in: C H Born & F Jongen (eds.), *D'Urbanisme et d'Environnement: Liber Amicorum Francis Haumont*, 541-542 [Cliquet, *About Blanket Bogs and Brown Bears*], 541-542.
[257] See also in this sense the Commission's interpretation in European Commission, *Commission Notice on Access to Justice in Environmental Matters* C/2017/2616 [2017] OJ C275/1, 18 August 2017 [European Commission, *Access to Justice Notice* C/2017/2616], para. 168 and footnote 176.
[258] For further reference, see PART II of this dissertation.

5.2.3.2.7 Summary of findings on Member States' obligations under Article 6(2) HD

The case law of the ECJ has clarified a broad range of issues concerning the interpretation and application of Article 6(2) HD. These findings, which inform the later analysis of the ELD and ECD, can be summarised as follows:

- **General obligation of protection:** Article 6(2) HD establishes a **general obligation of protection of an ongoing nature** and requires taking appropriate protective measures to avoid deterioration as well as disturbance, which could have significant effects in view of the Directive's objectives. Key cases: *Waddenzee* (C-127/02), *Sweetman* (C-258/11), *Grüne Liga Sachsen* (C-399/14).
- **Threshold for habitat deterioration:** Deterioration can be considered to have occurred if an "assessment of the conservation status of a habitat indicates that the conservation parameters for the habitat have deteriorated". Source: Commission Notice C(2018) 7621 final.
- **Threshold for species disturbance:** The disturbance needs to be "significant" in relation to the objectives of the Directive according to Article 6(2) HD. To assess the significance, MS may refer to the definition of favourable conservation status of a species in Article 1(i) of the HD. Source: Commission Notice C(2018) 7621 final.
- **Anticipatory nature of obligations:** The ECJ has emphasised the **anticipatory nature of Article 6(2)**. One cannot wait until the deterioration or disturbance occurs before taking action: A likelihood or risk of harm is enough. Cases: *Commission v Spain* (C-404/09), *Commission v Ireland* (C-418/04).
- **Case-by-case assessment of activities:** Activities within protected areas must be assessed on a **case-by-case basis.** It is not acceptable that certain activities such as e.g. fishing or hunting are generally classified as activities that do not cause disturbance. Case: *Commission v France* (C-241/08)
- **Effectiveness of measures:** Measures taken under Article 6(2) need to ensure that the substantive protection required by Article 6(2) is indeed secured. Case: *Commission v Greece* (C-504/14).
- **Specificity of measures:** The required measures under Article 6(2) need to be **specific**. It is not enough to rely on general legal provisions, such as criminal law provisions on trespass on private property. Case: *Commission v Ireland* (C-418/04)
- **Obligation Beyond Human Activities:** The duty to prevent deterioration under Article 6(2) HD extends beyond human activities and may also require MS to take action against

natural developments that pose a threat to the site. Case: *Commission v United Kingdom* (C-6/04).

- **Activities outside designated areas:** The obligation to prevent deterioration of habitats and disturbance of species also applies to **activities outside designated areas**, that may cause the conservation status of species and habitats in SACs to deteriorate. Case: *Commission v United Kingdom* (C-6/04).
- **Interplay between Article 6(2) and Article 6(3):** Any plan or project approved in compliance with Article 6(3) will necessarily have to be in conformity with Article 6(2). Article 6(2) can also apply to the implementation of plans or projects, that were authorised before Article 6(3) became applicable. Cases: *Waddenzee (C-127/02), Grüne Liga Sachsen* (C-399/14).
- **Duty to remedy unlawful damage:** Article 6(2) not only imposes a preventive obligation but also requires MS to undertake remedial measures for any unlawful damage to protected areas. The scope of such measures is determined by analogy with Article 6(4). Case: *Grüne Liga Sachsen* (C-399/14).

5.2.3.3 Appropriate assessment of plans and projects, Article 6(3) HD

Article 6(3) HD aims to avoid the authorisation of any plans or projects that could "adversely affect the integrity of the site". MS are required to "agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned".

Article 6(3) contains **two thresholds** for plans or projects in Natura 2000 sites. First, the competent authority needs to establish whether an assessment of the plan or project is required. This is the case when the plan or project is "**likely to have a significant effect**". Once this is answered in the affirmative, a second threshold applies. The plan or project can only be authorised if it will "**not adversely affect the integrity of the site**". In its decisions on the correct interpretation of these threshold requirements, the ECJ has repeatedly emphasized the importance of the precautionary principle.

The first sentence of Article 6(3) establishes the first threshold, which determines whether a plan or project needs an appropriate assessment. It states in full that [**emphasis added**]

> "Any plan or project not directly connected with or necessary to the management of the site but **likely to have a significant effect** thereon, either individually or in

combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives."- **First threshold**– discussed below in 5.2.3.3.1.

The second sentence of Article 6(3) establishes the second threshold, which decides whether a plan or project may go ahead in a Natura 2000 site. It stipulates that [**emphasis added**]

> "In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of [the Article 6(4) derogation], the competent national authorities shall agree to the plan or project only after having ascertained that it will **not adversely affect the integrity of the site** concerned […]". - **Second threshold**, discussed below in 5.2.3.3.2.

5.2.3.3.1 The first threshold: The threshold that triggers an appropriate assessment under the HD

The first step for any plan or project in a protected site for the NCA is to establish whether the plan or project requires an appropriate assessment. This is the case when the plan or project is "**likely to have a significant effect**" on the site. Importantly, the Court asserted in several rulings that Article 6(3) not only applies to plans or projects inside a protected site, but also to **developments located outside the site**, which are likely to have a significant effect on it.[259]

To avoid the need for an appropriate assessment, MS were eager to exclude certain activities from the scope of Article 6(3). Since the wording of Article 6(3) is quite vague, the ECJ played an important role in further clarifying the requirements under Article 6(3). Many of the justifications put forward by MS to exclude activities from the need of an appropriate assessment under Article 6(3) were ruled irrelevant or insufficient.[260] These included the existence of periodically issued permits (for cockle fishing),[261] the limited use of water passing through the site,[262] the location of the project (inside or outside the site),[263] the small size of the project,[264] the low value of the project[265] or the type of work[266].

[259] *Commission v Germany*, C-98/03; *Commission v Ireland*, C-418/04.
[260] Milieu et al., *Fitness Check Birds and Habitats Directives*, 46.
[261] *Waddenzee*, C-127/02.
[262] *Commission v Germany*, C-98/03.
[263] *Ibid*.
[264] *Commission v United Kingdom*, C-6/04.
[265] *Commission v France*, C-256/98.
[266] *Stadt Papenburg*, C-226/08, for requirement of an appropriate assessment for maintenance work; see *Commission* v *France*, C-241/08, for work included in site conservation contracts.

In the seminal ruling *Waddenzee* (C-127/02), the Court clarified the correct interpretation of "**likely to have a significant effect**".[267] The case concerned mechanical cockle fishing in the Dutch Waddenzee, one of the country's most valuable SPAs. The ruling found, that the significant effects of a plan or project have to be assessed in connection with the conservation objectives for the site. For the interpretation of the wording "likely to have a significant effect", the Court invoked the **precautionary principle**, stating in paragraph 44/45 [**emphasis added**] that

> "In the light, in particular, of the precautionary principle, which is one of the foundations of the high level of protection pursued by Community policy on the environment, […] the first sentence of Article 6(3) of the HD must be interpreted as meaning that any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives **if it cannot be excluded,** on the basis of objective information, **that it will have a significant effect on that site**, either individually or in combination with other plans or projects."

In other words, where **significant effects** of a plan or project on a protected site cannot be ruled out, MS must carry out an appropriate assessment. With this interpretation of the provision, the Court confirmed that the **threshold for finding a likely significant effect is a low one**. This means that many plans or projects must undergo an appropriate assessment before they can be authorised.

5.2.3.3.2 Second threshold: The threshold for approval of a plan or project

As soon as it has been established that the plan or project is likely to have a significant effect on the site, the NCA must carry out an **appropriate assessment** and shall agree to the plan or project only after having ascertained that it will not "**adversely affect the integrity of the site".** The content and methodology required for an appropriate assessment is not further specified under the HD.

In *Waddenzee* (C-127/02), the Court specified appropriate assessment as an appraisal of [**emphasis added**]

[267] *Waddenzee*, C-127/02, para.44.

> "**all the aspects** of the plan or project which can, either **individually or in combination** with other plans or projects, affect [the sites" conservation] objectives"

and that these aspects need to be identified

> "in the light of the **best scientific knowledge in the field**".[268]

In *Commission v Italy* (C-304/05), the ECJ confirmed that the HD does not define the method for carrying out an appropriate assessment, but found that it must be organised in such a manner that [**emphasis added**]

> "the competent national authorities can be certain that a plan or project will not have adverse effects on the integrity of the site concerned, given that, **where doubt remains** as to the absence of such effects, the competent authority will have to refuse authorisation". [269]

In short, there is no specific format that an appropriate assessment must follow. This flexibility over the format of the assessment, however, does not mean that the NCA has complete discretion as to their content. In *Sweetman* (C-258/11) the Court clarified, that an appropriate assessment

> "cannot have lacunae and must contain **complete, precise and definite findings** and conclusions capable of removing all reasonable scientific doubt".***[270]***

The question of what constitutes an adverse effect on the integrity of a site, and thus at what threshold a plan or project is considered to affect the integrity of a site, was addressed in *Sweetman* (C-258/11). *[271]* The case concerned a proposed road project in Ireland, which would have led to the permanent loss of 1.47 hectares of limestone pavement, an **Annex I priority habitat.** The affected area, i.e. the 1.47 hectares of limestone pavement, were located within a distinct sub-area of 85 hectares, forming part of a total area of 270 hectares of such limestone pavement in a candidate Natura 2000 site. Ireland's planning appeals board (An Bord Pleanála) decided, that while the project would have a locally significant negative impact on the site, that impact would not "adversely affect the integrity of the site" for the purposes of Article 6(3). The ECJ decided to the contrary stating that if a plan or project leads to [**emphasis added**]

[268] *Waddenzee*, C-127/02, para.54.
[269] *Commission v Italy*, C-304/05, paras.57-58.
[270] *Sweetman*, C-258/11, para.44.
[271] *Ibid.*

> "the **lasting and irreparable loss** of the **whole or part of a natural priority habitat type**, whose conservation […] justified the designation of the site, then such a plan or project will adversely affect the integrity site". [272]

In its findings, the Court engaged in a teleological interpretation of Article 6 HD by referring to Article 2. Article 2, as already mentioned, sets out the aim and objectives of the measures taken under the HD. According to Article 2(2) measures taken under the Directive must be designed to maintain or restore protected species and habitats at favourable conservation status. "[It] is clear from Article 2(2) of the Directive", the Court argued, that the provisions under Article 6 (2) to (4) are designed [**emphasis added**]

> "to maintain, or as the case may be restore, at a favourable conservation status natural habitats and, in particular, special areas of conservation [para.36]. Consequently, it should be inferred that in order for the integrity of a site as a natural habitat not to be adversely affected […] the site needs to be preserved at a favourable conservation status; this entails, […], the **lasting preservation of the constitutive characteristics of the site** concerned that are connected to the presence of a natural habitat type whose preservation was the objective justifying the designation of that site in the list of SCIs […] [para.39]." [273]

The Court concluded that an NCA could therefore not approve of a plan or project where [**emphasis added**]

> "there is a risk of lasting harm to the **ecological characteristics** of sites which host priority natural habitat types"[274],

particularly where there is a risk that it will bring about the

> "**disappearance** or the **partial and irreparable destruction** of a **priority natural habitat** on the site". [275]

Finally, in answering the questions from the referring court, the ECJ concluded that a plan or project will adversely affect the integrity of that site

> "if it is liable to prevent the lasting preservation of the constitutive characteristics of the site that are connected to the presence of a priority natural habitat whose conservation

[272] *Ibid.* para.44.
[273] *Ibid.* paras.36, 39.
[274] *Ibid.*, para.43.
[275] *Ibid.*

was the objective justifying the designation of the site in the list of sites of Community importance".[276]

Notably, the ruling in *Sweetman* (C-258/11) related to a "priority natural habitat type". Priority natural habitat types are "natural habitat types in danger of disappearance" for which there is a particular responsibility to conserve.[277] It is therefore uncertain how the provisions of Article 6(3) would be interpreted in relation to a Natura 2000 site without a priority natural habitat type. The Commission (2018) assumes that the logic of the Court's interpretation in *Sweetman* (C-258/11) would also apply to non-priority habitat types and habitats of species".[278]

Both, the *Waddenzee* (C-127/02) as well as the *Sweetman* (C-258/11) ruling demonstrate the **importance of the precautionary principle** in the Court's interpretation of MS' obligations under the HD as one of the "foundations of the high level of protection pursued by Community policy on the environment". In both cases, the Court based its strict interpretation of the requirements under Article 6(3) on the application of the precautionary principle. While the HD does not expressly mention the precautionary principle, the ECJ rulings have made it clear, that the precautionary principle, which deals with situations of uncertain risks, is of practical relevance at several stages of the application of Article 6(3).

In summary, ECJ case law on Article 6(3) clearly suggests a high threshold, which many plans and projects cannot pass.[279] If in spite of a negative assessment a plan or project is to proceed, the only available option is the derogation in Article 6(4) of the HD.

5.2.3.3.3 Summary of findings on Member States' obligations under Article 6(3) HD

The findings from the review of ECJ case law on Article 6(3) HD can be summarised as follows:

[276] *Ibid.* para.46.
[277] See HD, Article 1(d). Priority natural habitats enjoy a special status under the Habitats Directive. An example is the derogation under Article 6(4), where, in the case of priority habitats, much stricter conditions apply. Priority habitats are indicated by an (*) in Annex I.
[278] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, §4.
[279] See also Jackson, *Conserving Europe's Wildlife*, 236. However, as Kingston (2017) rightly observes, "the parameters drawn by the Court are, themselves, open to a degree of interpretation: national competent authorities and judges may be far more easily satisfied, for example, that 'no reasonable scientific doubt' remains than the ECJ would envisage". See further Kingston et al, *European Environmental Law*, 439.

- **Integration of the precautionary principle:** Article 6(3) of the HD integrates the precautionary principle. Cases: *Waddenzee* (C-127/02), *Briels* (C-521/12), *Sweetman* (C-258/11).
- **Threshold for likely significant effect:** In light of the precautionary principle, a plan or project is likely to have a significant effect, where it cannot be excluded that it will have significant effects on the site. Case: *Waddenzee* (C-127/02).
- **Requirement for scientific certainty:** A plan or project can only be permitted once all the aspects of the plan or project have been identified and where the NCA is certain, "in light of the best scientific knowledge in the field", that it will not adversely affect the site's integrity. Case: *Waddenzee* (C-127/02).
- **Obligation to refuse in case of uncertainty:** Where uncertainty remains as to the absence of adverse effects, authorisation must be refused. An appropriate assessment "cannot have lacunae and must contain complete, precise and definite findings and conclusions capable of **removing all reasonable scientific doubt**". Case: *Sweetman* (C-258/11)
- **Definition of adverse effect on site integrity:** A plan or project will adversely affect the integrity of a site, if it is liable to prevent the lasting preservation of the constitutive characteristics of the site. Case: *Sweetman* (C-258/11).
- **Prohibition of irreparable harm to priority habitats:** Approval must be withheld where there is a risk of lasting harm to the ecological characteristics of sites hosting priority natural habitat types, especially where this may result in the disappearance or partial and irreparable destruction of such habitats on the site. Case: *Sweetman* (C-258/11).

5.2.3.4 Derogation under Article 6 (4) HD

The extent to which MS may take **economic considerations** into account **when implementing the BHD** is, as has been demonstrated, one of the most controversial questions the Court had to address in its rulings on the BHD. The Court's notorious decision in *Leybucht Dykes* (C-57/89) alerted MS to the restrictions for economic and social development resulting from a strict interpretation of site protection rules. Article 6(4) HD, introduced after the Court's 1991 ruling in *Leybucht Dykes* (C-57/89) thus ensures that MS, under certain conditions, may proceed with harmful activities in protected areas for so-called Imperative Reasons of Overriding Public Interest ("IROPI"), including reasons of a social or economic nature.

This is expressed in paragraph 1of Article 6(4), which states that [**emphasis added**]

> "If, in spite of a negative assessment of the implications for the site and in the **absence of alternative solutions**, a plan or project must nevertheless be carried out for **imperative reasons of overriding public interest**, including those of a social or economic nature, the MS shall take all **compensatory measures** necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted."

In short, in order to benefit from a derogation under Article 6(4), **three <u>cumulative</u> conditions** have to be met:

- the "**absence of alternative solutions**";
- the existence of "**imperative reasons of overriding public interest**" (IROPI); and
- the adoption of "**compensatory measures**".

The terms "alternative solutions", "imperative reasons of overriding public interest" and "compensatory measures" are not further defined under the Directive.

Special conditions apply to sites that host a **priority natural habitat** and/or **priority species**, which, due to their danger of disappearance, enjoy a higher level of protection.[280] Where a site hosts priority habitats and/or species, the imperative reasons of overriding public interest that may be raised are generally restricted to **human health** or **public safety** or **beneficial consequences of primary importance for the environment**. Other imperative reasons of overriding public interest may only be raised after an opinion of the Commission.[281]

This is stipulated in paragraph 2 of Article 6(4), which states that [**emphasis added**]

> "[w]here the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to **human health** or **public safety**, to **beneficial consequences of primary importance for the environment <u>or</u>**, further to an **opinion from the Commission**, to other imperative reasons of overriding public interest."

In contrast to the extensive case law developed under Article 6(3), relatively few cases have addressed the derogation provisions under Article 6(4) HD. The following sections will examine the resulting case law. The discussion begins by considering the three conditions

[280] Priority natural habitat types and priority species are defined in Article 1(d) and 1(h) HD. There is a particular responsibility to conserve priority natural habitat types and species. They are indicated by an (*) in Annexes I and II of the HD.

[281] While in the case of priority sites, the Commission's opinions are mandatory, they have no binding force. This follows from Article 288 (5) TFEU.

outlined in Article 6(4)(1) HD: the "absence of alternative solutions" (Chapter 5.2.3.4.1), "imperative reasons of overriding public interest" (IROPI) (Chapter 5.2.3.4.2), and the requirement to adopt "compensatory measures" (Chapter 5.2.3.4.3). The subsequent section explores challenges related to the implementation and enforcement of the Article 6(4) requirements (Chapter 5.2.3.4.4). Finally, the key findings are summarised (Chapter 5.2.3.4.5).

5.2.3.4.1 Assessment of alternative solutions

The first obligation under Article 6(4) is to examine whether there are **alternative solutions** to the plan or project that received a negative assessment under Article 6(3) and to demonstrate an absence of solutions. The HD does not further specify how such an "absence of alternative solutions" is to be determined.

This lacuna was addressed by the Court, which addressed the requirement of "absence of alternative solutions" in *Commission v Portugal* (C-239/04). The case concerned the routing of a motorway through an SPA in Portugal. The Portuguese authorities had examined and rejected a number of alternative solutions to the proposed project. All of the alternatives that were assessed crossed a part of the SPA. The Commission was of the opinion that the Portuguese authorities should have also examined alternatives outside the SPA, of which, in its view, there was at least one. Portugal maintained that the alternative proposed by the Commission would cause severe social, economic and environmental damage and argued that it was the Commission's responsibility to demonstrate in detail that it was indeed a less environmentally harmful alternative.

The Court ruled that, contrary to Portugal's submission, it was not for the Commission to demonstrate that an alternative solution existed but for the national authority to demonstrate an "absence of alternative solutions" to the proposed plan or project.[282] On the basis of the information supplied by the Commission, the Court concluded that it could not be "ruled out immediately" that the solutions proposed by the Commission "were capable of amounting to alternative solutions […], even if they were, as asserted by the Portuguese Republic, liable to present certain difficulties".[283] By failing to consider solutions outside the SPA, Portugal had thus breached its obligations under Article 6(4).[284]

[282] *Commission v Portugal*, C-239/04, para.40.
[283] *Ibid.*, para.38.
[284] *Ibid.*, para.39.

In *Grüne Liga Sachsen* (C-399/14), the Court made a number of further clarifications on the determination of the "absence of alternative solutions".[285] The case concerned a road bridge over the river Elbe in Sachsen (Germany), which was approved for construction before the area was declared a Special Area of Conservation. By the time the case reached the ECJ, the construction works on the bridge had been completed. The Court first clarified that an option cannot be considered an alternative solution within the meaning of Article 6(4) if it entails risks of possible deterioration or significant disturbance within the meaning of Article 6(2).[286] Secondly, the Court clarified that in the assessment of alternatives, the costs of implementing the alternative are "not of equal importance to the objective of conserving natural habitats and wild fauna and flora pursued by the HD" and stated that [**emphasis added**]

> "account being taken of the strict interpretation of Article 6(4) […] it cannot be accepted that the economic cost of such measures alone may be a determining factor in the choice of alternative solutions under that provision". [287]

5.2.3.4.2 Nature of Imperative Reasons of Overriding Public Interest

The second test for a derogation under Article 6(4) is that there must be imperative reasons of overriding public interest (IROPI). These may be of an economic or social nature. As previously noted, where the site hosts priority habitats or species the reasons are restricted to human health or public safety or beneficial consequences of primary importance for the environment. Other imperative reasons of overriding public interest may only be raised further to an opinion from the Commission.[288]

The concept of "imperative reasons of overriding public interest" is not defined in the Directive. The question of what qualifies as IROPI was addressed by the ECJ in *Solvay* (C-182/10), a case that concerned the construction of infrastructure designed to accommodate a management centre for a private company and a large number of employees. The Court found that [**emphasis added**]

[285] *Grüne Liga Sachsen*, C-399/14, para.75.
[286] *Ibid.*
[287] *Ibid.*, para.77.
[288] Second subparagraph of Article 6(4) HD.

> "the implementation of a plan or project must be **both "public" and "overriding"**, which means that it must be of such importance that it can be weighed up against the Directive's objective of the conservation of natural habitats and wild fauna and flora".[289]

The Court did not rule out that a project, although of private character, can satisfy the IROPI test where "in fact by its very nature and by its economic and social context [it] presents an overriding public interest." In the present case, however, the ECJ decided that the "mere construction of infrastructure designed to accommodate a management centre for a private company cannot constitute an IROPI."[290] The evaluation of IROPI is in other words not connected to the private or public nature of the project proponent. However, a project –private or public- can only meet the IROPI test if the public and overriding interests are served and demonstrated.

The Court gave a positive example of what are considered IROPI in *Nomarchiaki* (C-43/10). The case concerned the diversion of the river Acheloos in the north-west of Greece. In its preliminary ruling, the Court held that

> "Irrigation and the supply of drinking water meet, in principle, those conditions [the IROPI test] and are therefore capable of justifying the implementation of a project for the diversion of water in the absence of alternative solutions". [291]

5.2.3.4.3 Compensatory measures

To benefit from the Article 6(4) derogation, MS are required to "take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected".[292] The term "compensatory measures" is not further explained in the Directive. The obligation to ensure that the "overall coherence of Natura 2000 is protected" links to Article 3(1) HD, which states that Natura 2000 is

> "a coherent European ecological network […] that shall enable the natural habitats types and species" habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range".

[289] *Solvay*, C-182/10, EU:C:2012:82., paras.75-78.
[290] *Ibid.*
[291] *Commission v Greece*, *Nomarchiaki*, para.122.
[292] HD, Art. 6(4), first sentence.

According to the Commission, two aspects must therefore be taken into account in the design and implementation of compensatory measures: **proportionality** and **ecological functionality**.[293] Compensatory measures must be both proportionate to the habitat and species losses they seek to remedy and capable of reproducing the ecological functions that underpinned the site's original designation, including its spatial distribution. In practice, this means that compensation cannot simply be located somewhere within the same biogeographical region or MS; it must restore the specific ecological characteristics and geographic balance that justified the protected status in the first place.[294]

In addressing **proportionality**, the NCA must therefore assess the relative importance of the affected Natura 2000 features and the extent of the negative impacts using both quantitative and qualitative criteria. [295] This assessment serves as the baseline for determining appropriate compensatory measures.[296] The compensation ratio should generally be well above 1:1. [297] Ratios of 1:1 or lower should only be considered if it can be clearly demonstrated that such measures will fully reinstate the structure and functionality of the affected site within a short timeframe, without undermining the preservation of habitats, the populations of key species likely to be impacted, or their conservation objectives.

With regard to **ecological functionality** and **location**, compensatory measures must be tailored to restore the specific ecological functions and structures likely to be lost or degraded due to the implementation of a given plan or project.[298] Particular consideration must be given to habitat types or species habitats that require extended periods to regain full ecological functionality. [299] In identifying suitable locations for compensation, a prioritised approach is advised:

First, compensation should occur **within the affected Natura 2000 site**, provided that ecological coherence and network functionality can be maintained. **Where this is not feasible**,

[293] European Commission, Commission Notice: Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, C/2021/6913, [2021] OJ C 437, 28 October 2021, p. 1–107 [European Commission, Natura 2000 Guidance Notice C/2021/6913], § 3.3.3.b
[294] *Ibid.*
[295] *Ibid.*
[296] *Ibid.*
[297] *Ibid.*
[298] *Ibid.*
[299] *Ibid.*

compensation may take place outside the site but **within the same topographical or landscape** unit, as long as it ensures equivalent ecological contribution. This may involve either an existing Natura 2000 site or a new site, which must then be designated and brought under the full scope of the Nature Directives. **As a last resort**, compensation may be undertaken in a **different topographical or landscape unit**, subject to the same requirements regarding designation and compliance.

Article 6(3) and (4) follow a sequential approach. Compensatory measures must only be taken into consideration after the assessment of the adverse effects of a proposed plan or project under Article 6(3) as well as a search for less damaging alternatives and an assessment of IROPI under Article 6(4).[300]

On the **nature of the necessary compensatory measures**, the ECJ ruled in *Nomarchiaki* (C-43/10) that the extent and scale of the works involved in the planned project are factors that must be taken into account in order to identify with precision not only the adverse effects of the project, but also to determine the nature of the necessary compensatory measures. [301]

Compensatory measures must be clearly distinguished from mitigating measures. **Mitigating measures** are generally understood as measures to lessen or avoid a negative effect on the site under Article 6(3), whereas **compensatory measures** are measures to off-set damage caused by a plan or project.[302] In its preliminary ruling in *Briels* (C-521/12), the Court has made it clear, that a developer cannot present "compensatory measures" as "mitigating measures" to avoid a negative assessment under Article 6(3) and thus escape the Article 6(4) tests for a derogation. The case concerned the planned widening of a motorway in the Netherlands which, according to the NCA, was liable to have - possibly permanent - adverse effects on the protected Molinia habitats within a Natura 2000 site.[303] In order to reduce the negative impact caused by the project, it was proposed that new molinia meadows would be created elsewhere within the SAC. The question before the ECJ was whether the creation of a new habitat within the SAC could be regarded as a "mitigation measure", which would avoid an "adverse effect" on the

[300] *Grüne Liga Sachsen*, C-399/14, para.57; *Solvay*, C-182/10, para.74.
[301] *Commission v Greece*, *Nomarchiaki*, C-43/10, paras.130-132.
[302] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, § 4.6.6.
[303] *Briels*, C-521/12, para.30.

integrity of the SAC within the meaning of Article 6(3) HD; or whether it was in fact a "compensatory measure" within the meaning of Article6(4) HD.

In answering these questions, the Court clearly distinguished between mitigation and compensation measures and ruled that

> "protective measures provided for in a project which are aimed at compensating for the negative effects of the project on a Natura 2000 site cannot be taken into account in the assessment of the implications of the project provided for in Article 6(3).[304]

Regarding MS' discretion in this regard, the Court further clarified that

> "the effectiveness of the protective measures provided for in Article 6 of the Habitats Directive is intended to avoid a situation where competent national authorities allow so-called "mitigating" measures – which are in reality compensatory measures – in order to circumvent the specific procedures provided for in Article 6(3) and authorise projects which adversely affect the integrity of the site concerned". [305]

In its findings, the Court also stressed the uncertainties connected with compensatory measures, which "come after the fact" (i.e. after the adverse effect of a plan or project on the site) and

> "do not guarantee that the project will not adversely affect the integrity of the site within the meaning of Article 6(3) of the Habitats Directive[…][since] as a rule, any positive effects of a future creation of a new habitat […]are highly difficult to forecast with any degree of certainty and, in any event, will be visible only several years into the future [...] Consequently, they cannot be taken into account at the procedural stage provided for in [A]rticle 6(3) of the Habitats Directive."[306]

Where Article 6(4) HD applies, MS must inform the Commission of the compensatory measures adopted.[307] Form or content of the requested information are not further specified under the Directive. In its 2008 Report on Article 6(4), the Commission stated that the information MS submitted on compensatory measures was often "partial, vague and

[304] *Ibid*. para.29.
[305] *Ibid*.
[306] *Ibid*. paras.31-32.
[307] HD Article 6(4), first subparagraph, second sentence

insufficient".[308] To address the situation, the Commission issued a guidance document on Article 6(4), that included a standard form for submitting information.[309] The subsequently released 2012 Commission Report noted improvements in the quality of the information, but still identified several serious shortcomings in the information provided by MS.[310] In most cases, MS had neither described the techniques and methods for the implementation of the proposed compensatory measures nor the conditions existing in the areas where the compensatory measures were carried out. An assessment of the actual effectiveness of the compensatory measures has thus remained difficult.[311]

The **costs for the compensatory measures** and who is to bear these costs is not addressed in the Directive. The Commissions Guidance Document on Article 6 simply states that "in line with the "polluter pays principle", it appears logical that the promoter of a plan or project bears the cost of the compensatory measures".[312]

5.2.3.4.4 Implementation and enforcement of Article 6(4) requirements

Several studies have critically discussed and questioned the correct application of Article 6(4).[313] There is evidence that MS are not properly implementing the requirements for a derogation under Article 6(4) and that the Commission has only taken "a soft glance at the adequacy of compensation".[314]

[308] European Commission, *Implementation of Article 6(4), First Subparagraph, of Council Directive 92/43/EEC during the Period 2004–2006: Summary Report* (European Commission DG Environment), Brussels, 30 June 2008 [European Commission, *Article 6(4) Summary Report*].
[309] *Ibid*. The Guidance includes a clarification of the concepts of alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence.
[310] European Commission, *Article 6(4) Summary Report*, 8-9.
[311] Milieu et al., *Fitness Check Birds and Habitats Directives*, 79.
[312] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, § 5.
[313] A Nollkaemper, *Habitat protection in European Community law: evolving conceptions of balance of interests*, Journal of Environmental Law 9:2 (1997), 271–286, [Nollkaemper, *Habitat Protection in EC Law*].; Krämer, *Article 6(4) Opinions*; D McGillivray, *Compensating Biodiversity Loss: The EU Commission's Approach to Compensation under Article 6 of the Habitats Directive*, *Journal of Environmental Law* 24:3 (2012), 417–450 [McGillivray, *Compensating Biodiversity Loss*]; D McGillivray, *Compensatory Measures under Article 6(4) of the Habitats Directive: No Net Loss for Natura 2000?*, in C-H Born, A Cliquet, H Schoukens, D Misonne and G Van Hoorick (eds), *The Habitats Directive in Its EU Environmental Law Context* (2015, Routledge) [McGillivray, *No Net Loss for Natura 2000*].
[314] Nollkaemper, *Habitat Protection in EC Law*, 272.

In 2009, Krämer (2009) published an evaluation of the 11 opinions the Commission had given by then under Article 6(4) HD. [315] From his evaluation, he concluded that hardly any of the opinions complied with the requirements of Article 6(4) or with the Commission's own guidance documents, and that "not one of the positive Commission Opinions would, with the reasoning made, successfully survive scrutiny by the Court of Justice". [316]

Krämer (2009) also observed that while the Commission had made its positive opinion in a considerable number of cases conditional on the timely and effective implementation of the announced compensatory measures, it would not monitor their actual implementation or take any action when MS failed to do so. [317]

Another of Krämer (2009)'s main points of criticism concerns the lack of transparency in the process. [318] This lack of transparency would concern the information submitted by MS, the availability of the opinions by the Commission, as well as information on the implementation of the compensatory measures announced by the MS. [319] According to Krämer (2009), projects covered by Article 6(4) HD are often challenged at local, regional or even national level,[320] Keeping discussions "non-public" would only favour "lobbyism, mental corruption and decisions which are, in the long term, neither good for the environment nor for society as such".[321] Instead MS' requests for an opinion as well as the opinions given by the Commission should be made publicly available. [322]

In order to improve the situation, Krämer (2009) considers that alternative solutions would have to be examined far more seriously, compensation measures publicly discussed and their implementation monitored closely to secure that the adverse effects of a plan or project are effectively compensated for.[323]

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[315] Krämer, *Article 6(4) Opinions*, 60. The author remarks that because the opinions are not published systematically (some in the *Official Journal*, others only on the internet), the exact number of opinions published by the Commission cannot be known.
[316] Krämer, *Article 6(4) Opinions*, 72.
[317] *Ibid.*, 83-84.
[318] *Ibid.* 76-77.
[319] *Ibid.* 84.
[320] *Ibid.* 83.
[321] *Ibid.*, 85.
[322] *Ibid.* 76.
[323] *Ibid.* 84.

In 2012, another commentator, McGillivray (2012), published an analysis of the 15 opinions issued by the Commission on Article 6(4) derogations from 1996 to July 2011.[324] McGillivray (2012) based his analysis of the opinions on the criteria of functionality, proponent bias, monitoring, enforceability and economic influence. He comes to the conclusion that the Commission's opinions "fare poorly against all these criteria" and notes, as Krämer (2009) before, that "a common and important thread [was] a lack of transparency". [325]

In a subsequent contribution, McGillivray (2015) reviewed the broader aspects of implementing compensatory measures under Article 6(4) and found that, **firstly**, in practice, compensatory measures tend to be inadequate in delivering comparable ecological functionality; **secondly**, pro-development interests often prevail in compensation decisions; **thirdly**, the follow-up tends to be poor, particularly in terms of monitoring, auditing, and enforcement; and **finally**, economic considerations are improperly or unduly taken into account.[326]

In 2013, Regnery, Denis & Kerbiriou (2013) published a study on the enforcement of offsetting measures in France.[327] The study investigated how many development projects in France included compensation measures and complied with species-equality principles. For this matter, 85 development projects to which Article 6(4) HD applied, were examined. The projects included amongst others the development of roads, sandpits and commercial centres.[328] The authors came to the conclusion that offsets that ensured "no net loss" of species were only "moderately enforced" in practice. For many affected species no compensatory measures were

[324] For further reference on period and number of published opinions, see McGillivray, *Compensating Biodiversity Loss*, 418 and 439.
[325] McGillivray, *Compensating Biodiversity Loss*, 417.
[326] McGillivray, *No Net Loss for Natura 2000;* See also, R Ambrose and S Lee, *Guidance Document for Compensatory Mitigation Projects Permitted Under Clean Water Act Section 401 by the Los Angeles Regional Water Quality Control Board* (2004), https://www.researchgate.net/publication/237587967_Guidance_Document_for_Compensatory_Mitigation_Projects_Permitted_Under_Clean_Water_Act_Section_401_by_the_Los_Angeles_Regional_Quality_Control_Board, accessed 30 April 2025. This guidance document was developed for the Los Angeles Regional Water Quality Control Board to improve compensatory wetland mitigation under Clean Water Act Section 401, highlighting shortcomings in functional replacement and recommending clearer permit integration and stronger regulatory oversight. The report found that compensation was "good on acreage but poor on function". Notably, the report found that only 17% of the projects could be considered "adequate functional replacements" for the damaged wetlands; See further C Reid, *Between Priceless and Worthless: Challenges in Using Market Mechanisms for Conserving Biodiversity*, *Transnational Environmental Law* 2:2 (2012), 217-233 [Reid, *Market Mechanisms for Conserving Biodiversity*].
[327] B Regnery, C Denis & C Kerbiriou, *Offsets and Conservation of the Species of the EU Habitats and Birds Directives*, *Conservation Biology: The Journal of the Society for Conservation Biology* 27:6 (2013), 1335-1343 [online] [Regnery et al., *Offsets and Conservation of Species*].
[328] *Ibid.*, 1340.

taken. That said, threatened species were more often considered for compensatory measures than non-threatened species or species of least concern.[329] In 11 projects, no compensatory measures were provided at all.[330] In 8 other projects, compensation measures were confused with mitigation, on-site restoration or complementary measures that were not consistent with project impacts (e.g. financial support for research programmes).[331] The authors also noted that only 16% of the projects they had studied provided for legal protection of compensation sites.[332] This low proportion of legally protected compensation sites would be a significant difference from other offset schemes, such as the U.S. conservation-banking policy, where offsets are systematically protected by conservation banks.[333] To summarise, the results on the enforcement of compensation measures in France are in line with the results of the previously mentioned studies and the overall picture is one of poor implementation and enforcement of Article 6(4) in the MS.

As early as 1997, Nollkaemper (1997) concluded from an assessment of the first two (positive) opinions by the Commission, that Article 6(4) was "a poor piece of legislation" that contained "big loopholes for major infrastructural projects in vulnerable areas".[334] Nollkaemper (1997) considered that if the objectives of the HD were not to be jeopardised, Article 6(4) needed strict interpretation and the review procedure on the application of Article 6(4) considerable strengthening and elaboration.[335] Twenty-five years later, McGillivray (2012), referring to the findings of Nollkaemper (1997), notes that "looking at the record, and despite the enlargement of the [Commission] Guidance little seems to have changed".[336]

In conclusion, it appears that MS enjoy a considerable amount of freedom in the implementation and enforcement of compensatory measures, with little control of whether the announced measures are indeed implemented and/or effective. The consequences of such inadequate implementation and enforcement of the requirements for a derogation under Article 6(4) are further discussed in the conclusions to Part I under Chapter 6.

[329] *Ibid.*
[330] *Ibid.*
[331] *Ibid.*
[332] *Ibid.*, 1341-1342
[333] *Ibid.*
[334] Nollkaemper, *Habitat Protection in EC Law*, 286.
[335] *Ibid.*
[336] McGillivray, *Compensating Biodiversity Loss*.

5.2.3.4.5 Summary of findings on Member States' obligations under Article 6(4) HD

From the examination of Article 6(4) HD, the following findings are worth highlighting:
The findings from the review of ECJ case law on Article 6(4) of the Habitats Directive (HD) can be summarised as follows:

- **Absence of alternative solutions:** It is not for the Commission to demonstrate that an alternative solution exists, but for the NCA to demonstrate an "absence of alternative solutions" to the proposed plan or project. Case: *Commission v Portugal* (C-239/04).
- **Risk of deterioration or significant disturbance disqualifies option as alternative solution:** An option cannot be considered an alternative solution within the meaning of Article 6(4) if it entails risks of possible deterioration or significant disturbance within the meaning of Article 6(2). Case: *Grüne Liga Sachsen* (C-399/14).
- **Importance of conservation objectives versus cost:** In the assessment of alternatives, the costs of implementing the alternative are "not of equal importance to the objective of conserving natural habitats and wild fauna and flora pursued by the HD". Case: *Grüne Liga Sachsen* (C-399/14).
- **Definition of overriding public interest:** A "plan or project must be both 'public' and 'overriding', which means that it must be of such importance that it can be weighed up against the Directive's objective of the conservation of natural habitats and wild fauna and flora". Case: *Solvay* (C-182/10).
- **IROPI for public and private projects:** A project—whether private or public—can only meet the IROPI test if the public and overriding interests are served and demonstrated. Case: *Solvay* (C-182/10).
- **Sequential application of articles 6(3) and 6(4):** Article 6(3) and (4) follow a sequential approach. Compensatory measures must only be taken into consideration after the assessment of the adverse effects of a proposed plan or project under Article 6(3), a search for less damaging alternatives, and an assessment of IROPI under Article 6(4). Cases: *Solvay (C-182/10)*, *Grüne Liga Sachsen* (C-399/14).
- **Nature of compensatory measures:** In order to determine the nature of the necessary compensatory measures, the extent and scale of the works involved in a planned plan or project are factors that must be taken into account. Case: *Nomarchiaki* (C-43/10).
- **Mitigating vs. compensatory measures:** Mitigating measures are generally understood as measures to lessen or avoid a negative effect on the site under Article 6(3), whereas

compensatory measures are measures to offset damage caused by a plan or project. Source: European Commission, Managing Natura 2000 Sites C(2018) 7621 final.

- **Presentation of measures:** A developer cannot escape the Article 6(4) tests by presenting compensatory measures as "mitigating measures". Case: *Briels* (C-521/12).
- **Commission involvement:** MS must seek an opinion from the Commission when the site hosts a priority natural habitat type and/or species. In all other cases, a notification of the Commission is sufficient. Source: Article 6(4) HD, last sentence and second sentence.
- **Responsibility for costs:** The costs for the compensatory measures and who is to bear these costs is not addressed in the Directive. The Commission is of the opinion that, according to the polluter-pays principle, the costs are to be borne by the promoter of a plan or project. Source: European Commission, Managing Natura 2000 Sites C(2018) 7621 final

5.2.3.5 Access to justice under the BHD

Neither the HD nor the BD provide for access to justice rights at national level, i.e. rights that allow citizens and NGOs to challenge the legality of decisions, acts or omissions of NCAs before a national judge. However, the ECJ has addressed access to justice rights under the BHD in a number of rulings, namely in *Waddenzee* (C-127/02) and in *Brown Bears I* (C-240/09) [2011] *and Brown Bears II* (C-243/15) [2016], and confirmed that citizens or NGOs seeking to challenge a decision under Article 6(3) must have access to justice at the national level.

In *Brown Bears I* (C-240/09*)*, the Court held that in order to ensure effective judicial protection in the fields covered by EU environmental law, it is for the national court to interpret its national law in a way which, to the fullest extent possible is consistent with the objectives laid down in the Aarhus Convention. [337]

In *Waddenzee* (C-127/02) the ECJ clarified that individuals must have access to justice to challenge decisions related to plans and projects approved under Article 6(3) HD. [338] The Court based its decision on the **doctrine of direct effect** and stressed that [**emphasis added**]

> "In particular, where the Community authorities have, by directive, imposed on MS the obligation to pursue a particular course of conduct, the **useful effect of such an act would be weakened if individuals were prevented from relying on it before their**

[337] *LZ I*, C-240/09, para.50.
[338] *Waddenzee*, C-127/02, paras. 35-37.

> **national courts**, and if the latter were prevented from taking it into consideration as an element of Community law in order to rule whether the national legislature, in exercising the choice open to it as to the form and methods for implementation, has kept within the limits of its discretion set out in the directive."[339]

Finally, the ECJ 2016 ruling in *Brown Bears II* (C-243/15) confirmed both participation as well as access to justice rights under the BHD. *Brown Bears II* (C-243/15) concerned the authorisation of a project for the construction of an enclosure that would extend a deer reserve in an area in the Strážov Mountains in Slovakia, designated as a Natura 2000 site under the HD. LZ, an environmental NGO, was concerned about the negative implications this would have for wild brown bears in the area and objected to the authorisation. The national court referred the case to the ECJ for a preliminary ruling. The question concerned the right of LZ to challenge decisions falling under Article 6(3) HD.

According to Article 6(3) HD, the NCA, before agreeing to a plan or project, must, "if appropriate", obtain the opinion of the general public. The Court held, that Article 6(1)(b) of the Aarhus Convention applies to Article 6(3) HD and that it provides the NGO LZ with a right to participate in the appropriate assessment procedure. [340]

Because the public participation requirements of Article 6(1)(b) of the Aarhus Convention apply, the Court found that the access to justice requirements of Article 9(2)[341] and Article 9(4)[342] of the Convention apply too[343] and gave LZ the right to challenge decisions falling under Article 6(3) HD, stating that such a decision may concern

> "a request to participate in the authorisation procedure, the assessment of the need for an environmental assessment of the implications of a plan or project for a protected site,

[339] *Waddenzee*, C-127/02, para. 66., referring to *Kraaijeveld*, C-72/95, para. 56; Importantly, the case was decided prior to ratification of the Aarhus Convention by the EU.
[340] *LZ II or Brown Bears II*, C-243/15, para. 45. Article 6 of the Aarhus Convention gives the public the opportunity to participate in a decision-making procedure of an activity that is potentially harmful to the environment.
[341] Article 9(2) Aarhus Convention specifies that members of the public concerned have the right to "challenge the substantive or procedural legality" of decisions, acts or omissions.
[342] Article 9(4) of the Aarhus Convention requires that the review procedures under Article 9 AC, "provide adequate and effective remedies, including injunctive relief as appropriate and that the remedies be adequate and effective".
[343] *LZ II or Brown Bears II*, C-243/15, paras. 57, 62.

or the appropriateness of the conclusions drawn from such an assessment as regards the risks of that plan or project for the integrity of the site". [344]

5.2.4 Rulings on general and structural breaches of the Habitats Directive

Three recent rulings by the Court have addressed the issue of general and structural breaches of the Habitats Directive.[345] Whereas in the two earlier cases - *Commission v Ireland* (C - 444/21) and *Commission v Germany* (C-116/22) - the Court denied that the evidence was sufficient to establish a systemic failure, the Court, in its most recent judgment, *Commission v Germany* (C-47/23), found a **general and structural failure** by Germany to **protect specific habitat types** adequately.

The case concerned two natural habitat types protected under the HD: Habitat type 6510 (Lowland hay meadows) and Habitat type 6520 (Mountain hay meadows). The Commission had brought proceedings before the ECJ claiming that Germany had failed "**in a general and structural manner**" to take appropriate steps to avoid the deterioration of these two natural habitat types in the sites designated for them, citing 596 sites for lowland hay meadows and 88 for mountain hay meadows, thus infringing Article 6(2) HD. It based its allegation on three main points: the **loss of area** covered by those habitat types in the sites designated for them, **insufficient monitoring** of those sites, and the **absence of legally binding measures** to prevent overfertilisation and early mowing. The Commission also contended that Germany had failed "in a general and structural manner" to regularly update the data relating to the sites hosting those habitat types, thus failing to comply with its obligations under Article 4(1) HD. Of the two allegations, only the first was upheld, with the Court finding that there is no ongoing obligation to regularly transmit updated site information. The following discussion will therefore focus on the Article 6(2) aspect of the case.

The Court, in its findings on Article 6(2) of the Habitats Directive, makes a number of preliminary observations. Those considered most pertinent to understanding the Court's subsequent reasoning are outlined below.

[344] *Ibid*. para 5.6
[345] *Commission v Ireland*, C-444/21; *Commission v Germany*, C-116/22; *Commission v Germany*, C-47/23.

First, it recalls that to prove a breach of Article 6(2) HD, the Commission is not required to show a direct **cause-and-effect relationship** between a MS's actions (or inaction) and deterioration or significant disturbance to habitats or species. It is enough to demonstrate that there is a probability or risk that action or inaction could cause harm.[346]

Second, it notes that the Commission can pursue both specific and general violations of a Directive at the same time. This means it may argue that a Member State failed to comply with a Directive due to **specific actions**, as well as a **general unlawful practice by national authorities**—particularly when individual cases help illustrate that general pattern.[347] If the Commission provides enough evidence of a **repeated and persistent practice by a MS** that violates a Directive, the MS must respond with detailed and substantive arguments to contest that evidence and its implications. [348]

That said, the Commission must still provide concrete evidence when alleging that a MS has failed to meet its obligations. It cannot rely solely on "simple presumptions or schematic causations" to prove a persistent or general failure to comply with specific provisions of EU law. [349]

Thirdly, the Commission can ask the Court to rule that a MS has failed to fulfil its obligations simply by not achieving the **result required by a Directive**, regardless of the specific measures taken.[350]

Finally, the Court notes that **Article 6(2) applies at site level**, requiring MS to prevent deterioration of significant habitats in each site. Thus, damage in one site **cannot be offset** by improvements in other sites. [351]

Following these observations, the Court sets out the criteria for establishing a general and structural infringement of Article 6(2) HD, thereby clarifying the evidentiary threshold required

[346] *Commission v Germany*, C-47/23, para.87, with reference to *Commission v Spain*, C-559/19, para.155 and case-law cited there. See also Chapter 5.2.3.2.3, *The anticipatory nature of Article 6(2).*
[347] *Ibid.*, para.88 with reference to *Commission v Ireland*, C-444/21, para. 165 and the case-law cited there.
[348] *Ibid.*, para.89 with reference to *Commission v Ireland*, C-444/21, para. 166 and the case-law cited there.
[349] *Ibid.*, para.90 with reference to *Commission v Ireland*, C-444/21, para. 167 and the case-law cited there.
[350] *Ibid.*, para. 91 with reference to *Commission v Germany*, C-20/01 and C-28/01, para. 30 and *Commission v Italy* (*Bacterium Xylella fastidiosa*), C-443/18, para. 77.
[351] *Commission v Germany*, C-47/23, para.96.

to demonstrate systemic non-compliance with a MS's conservation obligations under the Directive. It states that to determine whether such an infringement has occurred, it is necessary to examine whether the Commission has demonstrated s**ignificant losses of habitat types 6510 and 6520 in a considerable number of representative sites** within the MS. Furthermore, it must be probable that these losses were caused by the MS **failure to take appropriate steps**.[352]

5.2.4.1 Significant loss of habitat area

Concerning a significant loss of habitat area, the Court concluded that the Commission had adequately demonstrated significant losses in habitat types 6510 and 6520 across Germany.[353] Drawing on a comparison between the Standard Data Forms (SDFs) submitted by Germany in 2006 and the most recent available data, including site management plans, the Commission identified a marked reduction in habitat coverage: 596 out of 2,027 sites for habitat 6510 and 88 out of 295 sites for habitat 6520. These losses represented a 49.52% and 51.07% decrease in the respective habitat areas within the affected sites.

The Court held that the losses were both significant and geographically representative, occurring in 10 Länder for habitat 6510 and 5 Länder for habitat 6520. Finally, it found that the Commission had established, to the requisite legal standard, the probability that the deterioration was due to Germany's failure to adopt appropriate preventive measures. Germany did not produce sufficient evidence to rebut this conclusion.

5.2.4.2 Lack of site-specific surveillance

The Court also addressed the Commission's argument that the deterioration of habitat types 6510 and 6520 was partly due to a lack of site-specific surveillance in Germany's designated conservation areas. [354] While acknowledging that Article 6(2) HD grants MS a margin of discretion in implementation, the Court affirmed that, once the Commission establishes a likely link between insufficient action and habitat deterioration, the burden of proof shifts to the MS.

Although Germany outlined general surveillance frameworks at both federal and Länder levels, it failed to convincingly rebut the Commission's claims regarding inadequate site-specific measures—such as outdated mapping, irregular monitoring, and reliance on sample-based

[352] *Ibid.*, para. 97.
[353] *Ibid.*, paras. 98-105.
[354] *Ibid.*, paras. 106-110.

assessments. As a result, the Court held that the surveillance measures in place were not sufficiently site-specific, consistent, or regular to satisfy the obligations under Article 6(2) HD.

5.2.4.3 Lack of legally binding measures

The Court also examined the Commission's argument that the deterioration of habitat types 6510 and 6520 was exacerbated by the MS's failure to adopt legally binding measures to prevent over-fertilisation and early mowing.[355] Instead of enforceable rules, Germany relied primarily on voluntary agreements, recommendations, and non-binding management plans. While it is undisputed that such practices contribute to habitat degradation, Article 6(2) HD requires MSs to take effective measures to avoid deterioration.

Although Germany cited previous case law to argue that binding prohibitions are not strictly necessary, the Court reaffirmed that the adequacy of protection must be assessed against the specific conservation objectives of each site.[356] Given the lack of legally binding prohibitions specifically targeting the harmful practices in question, and the failure to demonstrate that the existing agreements have equivalent legal force, the Court concluded that Germany had not met its obligations under Article 6(2) HD.

On the basis of the above findings, the Court concluded that Germany had failed, in a general and structural manner, to take appropriate steps to avoid the deterioration of habitat types 6510 and 6520, protected under the Natura 2000 network and listed in Annex I to the Habitats Directive, within their designated sites. As a result, Germany was found to have breached its obligations under Article 6(2) of the Directive.

5.2.4.4 Possible implications

The ruling in *Commission v Germany* (C-47/23) marks a significant shift from the Court's more cautious approach adopted in the 2023 cases of *Commission v Ireland* (C - 444/21) and *Commission v Germany* (C-116/22). By recognising the existence of a systemic and structural failure to protect certain habitat types under the HD, the Court has established a critical precedent. This decision is likely to have far-reaching implications for future litigation and enforcement under EU environmental law.

[355] *Ibid.*, paras. 111-116.
[356] *Ibid.*, para. 11, with further reference to *Elliniki Ornithologiki Etaireia and Others*, C-66/23.

First, as has been highlighted by Maletto (2024) the ruling is likely to encourage a more assertive enforcement strategy by the Commission.[357] By explicitly recognising the potential for systemic failures, the Court has strengthened the Commission's position when pursuing infringement procedures. The Commission may now feel emboldened to initiate actions against MS based on broader patterns of non-compliance, rather than focusing only on specific, isolated instances of non-compliance. This shift could lead to more comprehensive actions aimed at addressing national governance failures, ultimately fostering stronger enforcement of EU environmental law.

Second, as has been observed by Hildt (2024), the judgment provides a legal framework that could facilitate future national legal challenges by environmental NGOs, focusing not only on isolated breaches but also on more comprehensive, structural failures in environmental governance at the MS level.[358] The Court's ruling underlines the importance of addressing systemic shortcomings that hinder effective compliance with EU environmental obligations, rather than merely focusing on individual instances of non-compliance. This could lead to a greater emphasis on long-term, persistent failures in environmental protection rather than one-off breaches, creating new opportunities for litigation and legal action.

Finally, the Court's recognition of the obligation on MS to take proactive and binding measures to prevent deterioration - rather than relying on voluntary agreements or non-legally binding plans - highlights the need for enforceable protective measures for Natura 2000 sites, ensuring that national authorities cannot rely on less effective mechanisms to meet their legal obligations.

In sum, the *Commission v Germany* (C-47/23) ruling represents a critical development in EU environmental law enforcement. By clarifying the thresholds for proving systemic non-compliance and reinforcing the need for legally binding measures, the case sends a clear signal that the Court will not hesitate to address systemic environmental governance issues. This could serve as a powerful tool in future efforts to strengthen biodiversity protection under the BHD.

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[357] See F Maletto, *Renewed Hopes for the European Commission in Enforcing General and Structural Violations of the Habitats Directive? (Case C-47/23, European Commission v Federal Republic of Germany)* (5 December 2024), [online] [Maletto, Renewed Hopes for Habitats Directive Enforcement].

[358] See L Hildt, *Prohibiting Drivers of Biodiversity Loss: How the Court of Justice of the European Union Provides Further Teeth to the Habitats Directive*, VerfBlog, 19 December 2024 [online] [Hildt, Prohibiting Drivers of Biodiversity Loss].

6 Discussion of findings and conclusions on the implementation and enforcement of the Birds and Habitats Directives

In this first part, the dissertation has established the groundwork for the subsequent examination of the ELD and the ECD, exploring key provisions under the BHD and problems that have occurred with their implementation and enforcement. This final chapter summarises the findings and draws conclusions on the main substantive provisions of the BHD, key issues in their implementation and enforcement and the role of different players in this process.

The BHD are currently the EU's two principal legal instruments for the protection of biodiversity, thus assuming a pivotal role for the protection of nature. The Birds Directive is dedicated exclusively to the conservation of all wild bird species in the EU, designating Special Protection Areas (SPAs) for endangered and migratory birds, regulating hunting, and protecting bird habitats. The Habitats Directive seeks to conserve rare, threatened, or endemic species and their habitats, establishing the Natura 2000 network of Special Areas of Conservation (SACs). MS must maintain or restore these habitats and species to a favourable conservation status, implement necessary conservation measures, and assess the impact of any plans or projects that could significantly affect these sites. Both Directives require reporting on the conservation status of protected species and habitats, ensuring effective management and protection to protect biodiversity across the EU.

Concerning the **territorial scope** of species and habitats protected under the BHD and with regard to the subsequent analysis of ELD and ECD, it is important to emphasize the difference in the territorial scope of protection between site protection measures on the one hand, and species protection measures on the other hand. The site protection measures under Article 6 HDs only apply to the species and habitats that occur inside Natura 2000 sites. The species protection measures of the BHD, on the other hand, apply to species in their entire European range, i.e. both inside and outside Natura 2000 sites.

The critical analysis of BHD case law has revealed both initial difficulties in interpreting its obligations, which, as shown, are stated in relatively vague terms in some cases as well as a reluctance of MS to fully commit to the stringent requirements of the BHD. As demonstrated, this has led to numerous legal challenges, with MS states failing to comply adequately. The resulting wealth of ECJ rulings not only exposes the difficulties in achieving harmonised

interpretation and implementation of the BHD but also the Court's role as a crucial enforcer of the BHD, ensuring that the ambitious aims of the two Nature Directives are upheld amidst competing pressures. Agricultural practices, infrastructure development and urban expansion often conflict with the nature conservation goals established under the BHD, creating significant tensions between biodiversity protection and economic development goals.

Particularly notable in this regard are the dynamics that developed around the Court's 1991 decision on the Birds Directive in the *Leybucht Dykes* (C-57/89) case. With this decision, which preceded the adoption of the Habitats Directive in 1992, the Court appears to have caught the MS off guard. It demonstrated a firm commitment to safeguarding Special Protection Areas from any activities that might compromise the ecological objectives of the Birds Directive. The resulting case law established thresholds for plans and projects in protected areas that were obviously higher than the MS had anticipated.

The subsequent developments offer valuable background information and help contextualising the issues related to the implementation and enforcement of the BHD, as well as the observations regarding the weak control in the application of Article 6(4). Alerted by the strict interpretation of the rules under the BD, MS leveraged the adoption of the HD in 1992 to remove the legal basis for the Court's 1991 judgment in the *Leybucht Dykes* (C-57/89) case, specifically targeting Article 4(4) of the Birds Directive.[359] To strengthen their position, MS included a provision in the HD that would allow them to use social and economic considerations as justification for activities likely to have a damaging impact on protected sites. This provision, included in Article 6(4) HD, introduced a derogation mechanism that would also become available under the BD and that ensured that MS, under certain conditions, could proceed with harmful activities in protected areas for so-called Imperative Reasons of Overriding Public Interest (IROPI), including reasons of a social or economic nature.

Two remarkable aspects can be derived from the study of the developments following *Leybucht Dykes* (C-57/89) and subsequent events. On the one hand, the lengths MS were willing to go to in order to regain control over the use of protected areas. On the other hand, the determination of the ECJ to protect the Natura 2000 network. Despite MS' apparent opposition, the Court maintained a strict interpretation of the BHD, particularly evident in decisions such as

[359] For further reference, see Chapter 5.2.1., *The seminal ruling in Leybucht Dykes*.

Waddenzee (C-127/02) and *Sweetman* (C-258/11). These cases, which concerned authorisations for plans and projects within Natura 2000 sites, underscored the Court's commitment to upholding the conservation objectives of the two Nature Directives amidst competing pressures.

However, the fact remained that with the adoption of the HD, MS now had a new tool at their disposal: the derogation available under Article 6(4) HD. Provided certain conditions were met, projects with adverse effects on a protected site could go forward, including large infrastructure projects, such as road and railway construction. While the ECJ made it clear that the conditions for an application of the derogation must be interpreted strictly,[360] MS appear to have considerable freedom in their implementation of Article 6(4). There is evidence that the requirements for a derogation are not being properly enforced by MS and that the Commission has so far taken only a cursory look at their adequacy.[361] It remains questionable whether the compensatory measures carried out under Article 6(4) HD indeed comply with the requirements of the HD.

The consequences of inadequate compensation under Article 6(4) of the Habitats Directive (HD) are potentially severe, particularly due to the vulnerability of endangered species protected under the BHD.[362] Notably, the Commission has clarified that it is not its role to propose compensatory measures or to validate them scientifically.[363] The Commission's reluctance to monitor compensation measures is remarkable, given the contrasting ECJ's firm stance on MS' discretion concerning site designation and site protection measures. In the words of Kingston et al. (2017): the ECJ follows more of an "iron fist" approach, while the Commission obviously prefers, at least for the time being, a "velvet glove approach".[364] Noteworthy in this context is also a more general observation about a decline in the Commission's initiative to enforce MS' obligations, especially concerning cases of "bad application", which, at present, are likely to represent the majority of cases requiring referral to the ECJ, considering that the majority of MS have by now fully transposed the BHD into national law.

[360] *Commission v Italy*, C-304/05, para.82.
[361] See Chapter 5.2.3.4.4., *Implementation and enforcement of Article 6(4) requirements*
[362] Regnery et al., *Offsets and Conservation of Species*, 1341.
[363] European Commission, Managing Natura 2000 Sites C(2018) 7621 final, § 5.
[364] Kingston et al, *European Environmental Law*, 446.

Another important actor in the implementation and enforcement of the BHD, identified through this study, are private parties and NGOs. As demonstrated, 85% of the total number of 2,374 reported infringements of the BHD between 1981 and 2015 were based on complaints; only 15% were initiated by the Commission.[365] In addition, the research has shown that ECJ landmark rulings on the BHD are often the result of preliminary references from national courts in cases initiated by NGOs. Access to justice therefore appears essential for the effective implementation and enforcement of the BHD. However, despite their significant contributions to the enforcement of EU environmental law, the role of private parties and NGOs appears to remain limited both at EU and Member State level. [366] This limitation is closely linked to the still inadequate implementation of the Aarhus Convention and thus the possibility of access to justice at MS level. Another important factor for access to justice that is often overlooked is the availability of financial and human resources for the often lengthy and costly environmental proceedings. As shown, insufficient capacity and funding often prevent NGOs from fulfilling their important role as "watchdogs".[367] This aspect must be taken into account when developing a general policy framework for access to justice laws and policies and improving environmental protection.

A particularly noteworthy development has been the ECJ's recent judgment in *Commission v Germany (2024)*, which for the first time recognised a general and structural breach of Article 6(2) HD. This judgment may have far-reaching implications. **First**, it indicates that the Court is now more willing to recognise and rule on systemic or structural failures, rather than limiting its findings to isolated infringements. **Second**, it suggests that the Commission, as the EU's enforcement authority, may feel more empowered to initiate broader infringement proceedings targeting patterns of non-compliance. **Third**, it signals a shift towards stricter and more comprehensive enforcement, whereby MS could be held to more rigorous standards in fulfilling their environmental obligations under EU law. **Last**, the judgment provides a legal framework that could facilitate future national legal challenges by environmental NGOs, focusing not only on isolated breaches but also on more comprehensive, structural failures in environmental governance at the MS level

[365] Milieu et al., *Fitness Check Birds and Habitats Directives*, 503 and 36.
[366] It is beyond the scope of this dissertation to discuss the many strategies that private parties have pursued to enforce MS obligations under EU environmental law or to discuss the resulting jurisdiction thereof. For a comprehensive overview, see e.g. See Kingston et al., *European Environmental Law*, 218-256.
[367] COWI et al., *Improving ELD Implementation*, 26.

Overall, the findings of this study on the roles of key actors and their contributions to the implementation and enforcement of the BHD over the last decades highlight the crucial role played by the ECJ. Serving as a final point of reference, the Court has supported both the Commission and private parties, including NGOs, in their efforts to ensure proper implementation and enforcement of the BHD, ensuring that the objectives of the BHD are consistently upheld and adopting a thoroughly proactive role. However, referral to the ECJ is not particularly efficient.[368] Infringement proceedings are lengthy: on average, thirty-three months pass between the Commission's decision to send a letter of formal notice to the MS and the actual referral to the ECJ. [369] Added to this is the time it takes for parties to file briefs and for the ECJ to hear arguments and make a decision.[370] Moreover, while the ECJ's supranational powers are unparalleled globally, its ability to enforce judgments is limited to imposing fines.

In conclusion, neither the Court, nor the Commission or private parties have the power or the resources to compensate for MS' failure to ensure that the BHD are properly implemented and enforced on the ground. From the significant number of reported breaches under the two Directives it is evident, that a compliance deficit remains. Pushing MS towards better implementation and enforcement thus remains a critical task. In this regard, the use of protected areas for economic or social activities has emerged as a particularly critical issue from the present study. The conflict over the use of protected areas for economic or social activities continues to dominate many of the cases that the Court has to adjudicate. In addition, the possibility of derogating from the BHD protection regime for social or economic reasons means that there is no "absolute" protection for protected species and habitats under the BHD. Given the history of the BHD, it is clear that MS have little interest in introducing such a regime. Instead, the level of protection guaranteed under the BHD is likely to remain a subject of constant negotiation between MS and EU institutions, weighing ecological needs against social and economic considerations and with the ECJ aiming to ensure that MS' pursuit of social and economic goals does not compromise the objectives of the Directives. As will be demonstrated, this relative standard of protection under the BHD is, however, difficult to reconcile with liability rules.

[368] For further reference, see M.E. Hall, *Environmental Law in the European Union: New Approach for Enforcement* (2007) 20 Tulane Environmental Law Journal 277–304, [Hall, *Environmental Law EU Enforcement*], 291.
[369] *Ibid.*
[370] *Ibid.*

Against the background of these observations, the following Parts II and III of this dissertation examine the extent to which the ELD and ECD, in their design and wording, have the potential to enhance the implementation and enforcement of the BHD. [371] Both Directives, the ELD and the ECD, have further reinforced the role and responsibilities of NCAs in the implementation and enforcement of the BHD. Given MS' apparent interest in retaining flexibility regarding the standard of protection afforded to biodiversity, the question arises as to whether MS' NCAs—already demonstrating a degree of reluctance in fully implementing the BHD—are likely to be sufficiently motivated to achieve this objective through the introduction of additional duties under the ELD and EC, or whether such reliance is, conversely, akin to 'letting the fox guard the henhouse' - that is, assigning expanded enforcement duties to actors whose past performance raises concerns about their commitment to effective implementation.

[371] HD, Article 2(1).

PART II The Environmental Administrative Liability Directive (ELD)

On 21 April 2004, after a development period of more than 30 years and more than 2 years of "heated discussions", the European Parliament and Council adopted the "Directive (2004/35/EC) on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage". The overall aim of the Directive is to prevent and remedy environmental damage.[1] To this end, the Directive creates "**operator liability**" and establishes an EU system of environmental administrative liability for the prevention and remediation of environmental damage.[2] In direct application of the **polluter pays principle**, the Directive requires national competent authorities (NCA) to hold any operator whose activities have caused environmental damage or an imminent threat of such damage financially liable for preventing or remedying the damage. Through the incentives generated by liability, the Directive aims to induce operators to adopt measures and develop practices to minimise the risks of environmental damage.[3] The ELD applies to three types of environmental damage: water damage, land damage and biodiversity damage.

Against the background of the findings in Part I of this dissertation, Part II of the dissertation examines the role and contribution of the **Environmental Administrative Liability Directive** towards better implementation and enforcement of the BHD and thus better protection of biodiversity, in other words exploring

> to what extent the ELD, in in its current design and wording, has been able to deliver on its stated aims, thereby improving the implementation and enforcement of the BHD and thus strengthening the effectiveness of the BHD in achieving their aim "to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora" in the EU[4].

[1] ELD, Recitals 3, 11.
[2] ELD, Recital 3.
[3] ELD, Recital 2.
[4] HD, Art. 2(1).

Chapters 7 to 10 set the stage for an in-depth analysis of the Directive in its current design and wording. **Chapter 7** provides the reader with an initial overview, elucidating its primary objectives and key provisions. By examining the Directive's main elements, including the scope of environmental damage and liable persons, this chapter lays the groundwork for a comprehensive understanding of the ELD's legal framework. The evolution of the ELD is traced in **Chapter 8**, unravelling its journey from early discussions at the international level, to the Directive's inception and its current design and wording. By contextualizing the Directive within its historical framework, we gain insights into the forces that have shaped its development and trajectory. Central to the ELD is the Polluter-Pays Principle, explored in **Chapter 9**. The PPP embodies the concept that those responsible for environmental damage should bear the associated costs. This chapter examines the theoretical underpinnings of the polluter-pays Principle, its incorporation into the ELD, and its practical implications within the context of the ELD. The national transposition of EU Directives is a crucial step in ensuring the effectiveness of EU law at MS level. The transposition process of the ELD was particularly lengthy. **Chapter 10** sheds light on the national transposition of the ELD, highlighting challenges and variations in the transposition process across the EU. Lastly, and before moving to a more detailed examination of the ELD, recent developments in the assessment and discussion of the ELD are recalled.

Chapter 11 is dedicated to the detailed examination of the ELD in its current design and wording. From the evaluation of damage to the determination of liability and the determination of prevention and remediation measures, this chapter dissects the intricacies of the ELD's application. By unpacking the different steps in the application of the ELD, this chapter sheds light on the practical challenges faced in applying the Directive to a case of biodiversity damage. It explores problems associated with the implementation and enforcement of the ELD and highlights key issues that need to be resolved in order to build up a more coherent and harmonised liability system for biodiversity damage without the criticized conceptual fragmentation of the past.

Finally, **Chapter 12** synthesises the findings from preceding chapters, offering a critical analysis and drawing conclusions on the effectiveness of the ELD in its current design and wording.

7 Aim and main provisions of the Environmental Administrative Liability Directive

7.1 Aim of ELD

On 21 April 2004, the European Parliament and Council adopted the "Directive (2004/35/EC) on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage" [5] ("Environmental Administrative Liability Directive" or "ELD"). The ELD aims at preventing and remedying environmental damage [6] and to this end establishes a common framework of environmental liability in the MS.[7] In application of the polluter pays principle, MS must hold any "operator", whose activities cause an imminent threat of environmental damage or an actual environmental damage, financially liable for the prevention and remediation of the damage: instead of the public at large, the "polluter" shall bear the costs of the measures necessary to prevent and remediate environmental damage caused by its activities.[8] Through the incentives generated by financial liability, the Directive also aims to "induce operators to adopt measures and develop practices to minimise the risks of environmental damage, so that their exposure to financial liabilities is reduced". [9] Another motivation for the adoption of the ELD has been to improve compliance by MS with their obligations under the EU Treaties to properly implement and enforce EU environmental legislation. While this is not directly stated in the Directive itself, this can be inferred from the history of the Directive.[10]

Protection of biodiversity as an important objective of the Directive is mentioned in several parts of the Directive.[11]

[5] Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143/56, 30 April 2004.
[6] ELD, Recital 11.
[7] ELD, Recital 3.
[8] ELD, Art. 8(1).
[9] ELD, Recital 2.
[10] For further discussion, see Chapter 8, *History, evolution and aim of the ELD.*
[11] See especially ELD Recital 1, which states that "the loss of biodiversity has dramatically accelerated over the last decades. Failure to act could result in [...] greater loss of biodiversity in the future. Preventing and remedying, insofar as is possible, environmental damage contributes to implementing the objectives and principles of the Community's environment policy as set out in the Treaty. [...]"

7.2 Main provisions of the ELD

For the purposes of the Directive, the liability regime established under the ELD aims to ensure that an operator that causes environmental damage or an imminent threat of such damage pays for the costs of the necessary **preventive** and **remedial measures**.[12] To this end, the ELD applies the polluter pays principle, basically an economic rule of cost allocation, and creates "direct operator liability".[13]

The person liable under the ELD is thus the "operator", which the ELD defines as

> "any natural or legal, private or public person who operates or controls the occupational activity or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of such an activity has been delegated, including the holder of a permit […]".

Generally, the scope of activities covered under the ELD is confined to activities that are considered dangerous or potentially dangerous (exhaustively listed in Annex III to the ELD) and of an "occupational" nature.[14] "Occupational" is according to the ELD

> any activity carried out in the course of an economic activity, a business, or an undertaking, irrespectively of its private or public, profit, or non-profit character.[15]

Application of the ELD is confined to three types of environmental damage: damage to protected species and natural habitats (hereinafter also referred to as "biodiversity damage"), damage to water and damage to land. The species and natural habitats that fall within the scope of the ELD are defined by explicit reference to the BHD. [16] In addition, a MS may decide to designate further habitats and species for the purposes of the ELD under national law.[17]

In order to trigger application of the ELD regime, the damage needs to meet certain threshold criteria. In the case of damage to species and natural habitats, it must be demonstrated that the

[12] ELD, Recital 18.
[13] See G Betlem, *Scope and Defences of the 2004 Environmental Liability Directive: Who is Liable for What?* (2005) 6 *ERA Forum* 376 [Betlem, *ELD Scope and Defences*], 378. The polluter-pays principle is discussed in detail in Chapter 9 below.
[14] For further discussion, see Chapter 11.2., *Activities covered under the ELD*.
[15] ELD, Art. 2(7).
[16] ELD, Art. 2(3)(a)-(b).
[17] ELD, Art. 2(3)(c).

damage has "**significant** adverse effects on **reaching or maintaining the favourable conservation status** of [protected] habitats or species".[18]

Next to remediation, prevention of environmental damage is one of the central objectives of the ELD. Where environmental damage has not yet occurred but there is an imminent threat of such damage, the ELD obliges the operator to take the necessary preventive measures.[19]

Examples of activities that may result in damage to protected species and habitats covered by the ELD have been published by the European Commission:[20]

- Direct removal or destruction of protected habitats and species
- Physical damage, or chemical spills, releases or similar pollution
- Significant disturbance (including noise and vibration)
- Microbial pollution to protected habitats and species from, for example, poor agricultural practices
- Conscious pursuit and killing of protected species (for example through illegal hunting of birds)

As will be demonstrated, environmental damage as defined under the ELD may not only result from one-off incidents but also from "chronic" long-term damage caused by authorised activities, such as the operation of a hydroelectric plant.[21] A key question that consequently arises under the ELD is to what extent the authorisation of an activity under Article 6(3) and (4) of the BHD actually exempts the operator from liability. [22]

Two different standards of liability apply under the ELD: Strict liability[23] and fault-based liability. **Strict liability** applies to the occupational activities listed in Annex III of the Directive.[24] These activities are considered to be **dangerous or potentially dangerous** and include, inter alia, industrial and agricultural activities requiring permits under the 1996

[18] ELD, Art. 2 (1)(a) subpara (1), first sentence.
[19] ELD, Art. 5(1).
[20] See European Commission: Directorate-General for Environment, Environmental Liability Directive – Protecting Europe's Natural Resources, Publications Office of the European Union (2013) [European Commission, ELD Brochure], 12.
[21] For further discussion, see Chapter 11.3.2.4 of this dissertation, which addresses the exceptions to liability and the implications of the Court's ruling in *Naturschutzbund Deutschland* (C-297/19).
[22] *Ibid.*
[23] Strict liability means that there is no need to proof that the operator has been at fault or negligent.
[24] ELD, Art. 3(a).

Integrated Pollution Prevention and Control Directive,[25] waste management operations, the release of pollutants into water or into the air, the production, storage, use and release of dangerous chemicals, and the transport, use and release of genetically modified organisms (GMOs).

Fault-based liability applies to all other occupational activities than those listed in Annex III. Notably, the application of the fault-based liability regime is **restricted to biodiversity damage, i.e. damage to protected species or natural habitats**.[26]

There are a few cases in which the operator can be exempted from liability .**Exceptions to liability** apply inter alia to environmental damage (or any imminent threat of such damage) caused by armed conflict, natural disaster, liability for types of environmental damage covered by international conventions (e.g. maritime pollution), and nuclear risks, which are covered by the Euratom Treaty.[27] The Directive also excludes liability for damage (or any imminent threat of such damage) caused by **pollution of a widespread, diffuse character** "where it is impossible to link the negative environmental effects with acts or failure to act of certain individual actors", for which liability is not considered to be a suitable instrument.[28]

The **causal link** between the activity and the damage always needs to be established. [29]

Basically, two types of measures are required under the ELD: preventive and remedial measures. Where there is an imminent threat of damage occurring, operators are required to take, without delay, the necessary **preventive measures**. [30] Where damage has already occurred, the operator must, without delay, inform the competent authority and take the necessary **remedial measures**. [31] Broadly speaking, preventive measures under the ELD include all measures "taken in response to an imminent threat of environmental damage, with a view to preventing or minimising that damage",[32] while remedial measures are taken to restore the damaged natural resources or impaired services or replace them by identical, similar

[25] Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control, [1996] OJ L 257, 10 October 1996, pp. 26–40.
[26] ELD, Art. 3 (b).
[27] ELD, Art. 4 (1)-(3).
[28] ELD, Art. 4 (4).
[29] ELD, Art. 4(5).
[30] ELD, Art. 5.
[31] ELD, Arts. 6 - 7.
[32] Art., 2(10) ELD.

or equivalent natural resources or services either at the site of the incident or, if necessary, at an alternative site.[33] The framework to be followed in order to choose the most appropriate measures to ensure the remediation of environmental damage is set out in detail in Annex II of the Directive.

In line with the **polluter pays principle,** the operator must bear the costs for the preventive and remedial measures.[34]

While the Directive does not require operators to take out **financial security**, MS are obliged to take measures to encourage the development of financial security instruments and markets with the aim of enabling operators to use financial guarantees to cover their responsibilities under the Directive.[35]

Financial liability, under the Directive, is subject to a number of **defences** that are available to the operator under Article 8 of the Directive. There are in total four defences, two of which are mandatory and two are optional. Mandatory defences include the third party defence and xxx defence, optional defences include the state-of-the-art defence and the permit defence. MS must adopt the **mandatory defences**[36] but have discretion whether to adopt the **optional defences**.[37]

The regime under the ELD is established as an administrative law regime under which national authorities are required to ensure that the provisions of the Directive are applied and enforced. For that matter, MS are obliged to designate an NCA.[38] It is the duty of the NCA to identify the liable operator, to assess the significance of the damage and to determine which remedial measures should be taken.[39] To that effect, the NCA must have the right to require the relevant operator to carry out his own assessment and to supply any information and data necessary.[40]

[33] see ELD, Annex II.
[34] ELD, Art. 8(1).
[35] ELD, Art. 14(1.)
[36] ELD, Art. 8(3).
[37] ELD, Art. 8(4).
[38] ELD, Art. 11(1).
[39] ELD, Art. 11(2), first sentence.
[40] ELD, Art. 11(2), second sentence.

The Directive does not provide for private law compensation ("traditional damage"): personal injury, damage to private property or economic loss are expressly excluded from the scope of the Directive.[41]

An important feature of the Directive is, that it includes a specific access to justice provision for individuals and environmental organizations. NGOs and individuals are entitled to request authorities to take action against operators[42] and to challenge the decision as well as inaction of the authority before a court or tribunal.[43]

The provisions and procedure under the ELD are discussed in detail in Chapter 10 below. Before, the following Chapter addresses the **history** of the ELD, starting with early discussions on environmental liability and their **evolution** over several decades, which finally led to the ELD's current design.

8 History and evolution of the Environmental Administrative Liability Directive

Discussions on the need for effective rules on (financial) liability for environmental damage can be traced back to the 1970s and have generated intense debates within and between the different legal systems of the world.[44] At the international level, the question of liability for environmental damage appeared on the environmental agenda as early as 1972, when the Stockholm Declaration called on states to

> "cooperate to develop further the international law regarding liability and compensation for victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such states to areas beyond their jurisdiction".[45]

[41] ELD, Recital 14, Art. 3(3).
[42] ELD, Art. 12.
[43] ELD, Art. 13.
[44] For further reference, see E Orlando, *From Domestic to Global? Recent Trends in Environmental Liability from a Multi-level and Comparative Law Perspective*, *Review of European, Comparative & International Environmental Law* 2015:24:3, pp. 289–303, [online] [Orlando, Environmental Liability Trends], 289.
[45] Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972), UN Doc. A/CONF.48/14/REV.1 (1972), Principle 22.

In the EU, informal debates on liability rules for environmental damage also started in the 1970s,[46] gaining momentum in the 1980s. Incidents, like the disaster of Seveso in July 1976[47] and the fire in the Sandoz factory in Basel in 1986[48] agitated the public and underscored the need for policy action. Obviously, the EU legislative framework for environmental protection that existed at the time had not been able to prevent these incidents, which had wide-ranging, lasting, catastrophic consequences for the environment. Following the Basel accident, the Council for the first time asked the Commission to examine the possibility of adopting **general legislation on environmental liability**.[49] However, there was little agreement on the right way forward. At the time, the prevailing opinion was that preventive measures, such as accident prevention systems for industrial plants or restrictions on the use, emission and discharge of substances, would be more effective than a "system of payment" for environmental damage, which would make polluters financially liable for environmental damage. [50]

A specific regime of (financial) liability for environmental damage was first proposed by the European Commission in 1989. The Commission's ***Proposal for a Council Directive on Civil Liability for Damage Caused by Waste*** was drafted as a sectoral directive confined to liability for damage caused by waste.[51] This was the first time that a proposal for a legislative instrument treated "harm to the environment" as a separate category from the traditional concepts of harm

[46] L Krämer, *Discussions on Directive 2004/35 Concerning Environmental Liability*, *Journal for European Environmental Law & Planning* 5 (2005), 250–256 [Krämer, Directive 2004/35 and Environmental Liability], 250. The initial debate centred on liability for damage caused by waste, beginning in 1976 and continuing until 1991. During this period, the Commission proposed several directives on toxic and hazardous waste, the transboundary shipment of waste, and landfills. These proposals were never adopted by the Council. For further detail, see Krämer, *Directive 2004/35 and Environmental Liability*, 250, fn 3.

[47] On 10 July 1976, a valve ruptured at a pesticide plant operated by Hoffmann-La Roche in Meda, north of Milan, Italy. A chemical cloud containing the highly toxic dioxin TCDD was released, contaminating land and vegetation in the municipality of Seveso and surrounding areas. More than 600 people had to be evacuated, and up to 2,000 were treated for dioxin poisoning. Hoffmann-La Roche did not acknowledge the incident until nearly a week later. By that time, much of the surrounding vegetation had withered, thousands of animals had died, and the first cases of severe dioxin poisoning had already been reported. For further background on the incident and its long-term impacts, see, for example: B Eskenazi, M Warner, P Brambilla, S Signorini, J Ames and P Mocarelli, *The Seveso Accident: A Look at 40 Years of Health Research and Beyond* (2018) 121(Part 1) Environment International [online] [Eskenazi et al., Seveso Accident], 75.

[48] On 1 November 1986, a fire broke out at Sandoz's chemical warehouse in Schweizerhalle, an industrial area near Basel. The blaze destroyed the entire facility, releasing over a thousand tonnes of chemicals into the environment. Water used to extinguish the fire flushed thousands of litres of highly toxic pesticides and mercury into the Rhine, causing the death of nearly all plant and animal life along a 180-kilometre stretch downstream. For a discussion of the incident, see, for example: A Schwabach, *The Sandoz Spill: The Failure of International Law to Protect the Rhine from Pollution*, Ecology Law Quarterly 16:2 (1989), 443–480 [Schwabach, *Sandoz Spill and International Law*].

[49] Krämer, *Directive 2004/35 and Environmental Liability*, 251.

[50] *Ibid.*

[51] European Commission, *Proposal for a Council Directive on Civil Liability for Damage Caused by Waste* COM(89) 282, amended by COM(91) 219, Brussels, 15 September 1989.

to health or property.[52] The Commission's proposal pursued a dual approach, whereby it addressed both traditional and environmental damage.. In the case of traditional damage, the proposal assigned the right to institute proceedings to the victim (or its heirs). In the case of "damage or injury to the environment", because such damage affects society as a whole, the right was conferred on public authorities and, under certain circumstances, on "special interest groups".[53]

The Council of Ministers did not even discuss the proposal and the Commission abandoned it to instead suggest a more comprehensive regime. In 1993 the Commission published its **Green Paper on Remedying Environmental Damage** on a Community-wide liability regime. [54] The Green Paper followed a horizontal approach and primarily discussed a civil liability regime, which provided for private law compensation. In the following years, the Commission engaged in Community-wide consultations with various stakeholders, including MS, industry and non-governmental organisations. Various drafts and studies were produced, [55] which eventually resulted in the Commission's publication of a **White Paper** in 2000.[56]

The **White Paper on Environmental Liability** was no longer confined to civil liability. Instead the Commission included damage to the ecological components of the environment as a separate category of recoverable damage. This changed the approach and, resulted in a legal instrument, that create a common legal framework for both civil **and** administrative liability: traditional damage to health and property fell under civil liability whereas purely ecological damage, such as damage to biodiversity, was to be covered under administrative liability.[57]

The White Paper also considered Community accession to the ***Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (Lugano Convention)***,

[52] *Ibid.*, Explanatory Memorandum, para.6.
[53] *Ibid.*, Explanatory Memorandum, para.7.
[54] European Commission, *Green Paper on Remedying Environmental Damage* COM(93) 47 final, Brussels, 14 May 1993.
[55] See, e.g., Brans & Uilhoorn, *Liability for Damage to Natural Resources.*
[56] European Commission, *Environmental Liability White Paper (COM(2000) 66 final)*.
[57] See, e.g., Brans & Uilhoorn, *Liability for Damage to Natural Resources*, §1. In their background paper for the EU White Paper, Brans and Uilhoorn observed that in most MS, environmental damage could not be compensated in the absence of personal injury or property damage. They argued that, in order to "remedy some of the gaps in the environmental protection regimes of the Member States", an environmental liability regime at the EC level would need to address this issue.

which had been adopted by the Council of Europe in 1993. [58] Its far-reaching and broad scope, however, led to strong opposition from some MS as well as industry, and accession to the Lugano Convention was quickly ruled out. [59]

From the very beginning and throughout the following years, the Commission's proposals for a regime of liability for environmental damage encountered substantial opposition. The Commission's ***Green Paper on Remedying Environmental Damage (1993)*** allegedly "sent shock waves" through all sectors of business[60] and provoked "a storm of hostile responses" from industry groups and some of the MS.[61] By this time, as *Krämer (1995)* notes, the initial draft of the Green Paper had already lost substantial content and had been stripped down by internal negotiations to such an extent that it was barely comprehensible. [62] Industry opposition nonetheless continued unabated and intensified with the explicit inclusion of liability for "ecological damage" [63] postulated in the White Paper. [64] The Confederation of European Business UNICE[65] claimed that in the absence of clear criteria to evaluate and quantify damage to biodiversity [ecological damage], it was impossible to assess the impact that a regime of liability for biodiversity damage [ecological damage] would have; without a cap on liability companies would be exposed to "unlimited liability" and to the risk of "disproportionate and

[58] Council of Europe Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (Lugano, 1993). The convention was signed by nine states, six of which are EU Member States (Greece, Italy, Luxembourg, the Netherlands, Portugal, and Finland), none of which had ratified it as of May 2025.

[59] R Micchiché, *Environmental Liability – First Step Towards "Making the Polluters Pay"*, in: S Scheuer (ed.), *EU Environmental Policy Handbook: A Critical Analysis of EU Environmental Legislation – Making It Accessible to Environmentalists and Decision Makers* (2005, European Environmental Bureau), 197–204, [online] [Micchiché, *Environmental Liability in EU Policy Handbook*], 198.

[60] J Rose, *Europe's Pollution Liability Debate Heats Up*, Environmental Science & Technology 28:5 (1994), 215A [Rose, *Pollution Liability Debate*].

[61] C Clarke, *The Proposed EC Liability Directive: Half-Way through Co-Decision* (2003) 12(3) Review of European Community and International Environmental Law (RECIEL) 261 [Clarke, *The Proposed EC Liability Directive*], 256.

[62] Krämer, *Directive 2004/35 and Environmental Liability*, 251.

[63] There is no uniform definition of the term "*ecological damage*". In the context of the current discussion, and more broadly within the framework of the Environmental Liability Directive (ELD) discussions, the term is used to refer to "*damage to unowned natural resources and natural resources subject to property rights, but only insofar as these resources—whether owned or unowned—are of particular value to the public. Therefore, damage to individuals, purely private property, and pure economic loss is not included, although such damage may result from environmental harm"* This definition was developed by Brans and Uilhoorn for the purpose of the EU White Paper on Environmental Liability.See e.g. Brans & Uilhoorn, *Liability for Damage to Natural Resources*.

[64] See Fogleman, *Threshold for Liability in the EU*, 196, for a detailed account of the discussions and opposition surrounding the introduction of ecological damage.

[65] The Union of Industrial and Employers Confederations of Europe (UNICE) changed its name to BusinessEurope in 2007.

ruinous claims".[66] Industry opposition was supported by insurers who considered liability for the remediation of ecological damage uninsurable, stating a lack of experience in the sector and claiming that it was therefore and for other reasons impossible to quantify the risks –which would eventually leave businesses without appropriate insurance coverage.[67]

The criticism propelled the Commission to further investigate the concerns on the quantification of ecological damage and its insurability. Additional studies were commissioned, the results of which led the Commission to conclude that such fears were by and large misplaced.[68]

Background information on the initial draft of the Green paper provided by Clarke (2003) sheds light on the confusing use of key terms like "civil" or "liability" in the ELD.[69] According to Clarke (2003), the draft for the Green Paper, had been largely written by a lawyer with a U.S. common law background. His use of key terms under the ELD like "liability" and "civil" differed from the interpretation given to it by many of the people who later discussed the paper and who had an understanding based on their background in the civil law countries of continental Europe. Notably, in the US common law system the term "civil" covers everything that is not criminal, including both civil actions brought by private parties and administrative actions brought by public authorities whereas in the civil law countries of continental Europe, the term is only used for private legal actions. Administrative proceedings are classified as part of "public law". Similarly, the term "liability" in common law countries can be used in a civil and in a public law context, whereas in civil law countries it is often confined to private claims. The different interpretation of these key terms, according to Clarke, contributed to "thousands of hours of muddled communication within the EU debate".

On 23 January 2002, the Commission finally published its **"Proposal for a Directive on environmental liability with regard to the prevention and remedying of environmental**

[66] See Fogleman, *Threshold for Liability in the EU*,196, referring to UNICE, Proposal for a Directive on Environmental Liability with regard to the prevention and restoration of environmental damage; UNICE Comments (No 22.3/28/1, 22 March 2002) and various other sources.
[67] See Fogleman, *Threshold for Liability in the EU*, 197 referring to CEA, Environmental Damage Insurance (press release, 10 February 2003) and additional sources.
[68] Additional information about the studies and the conclusions drawn by the Commission is *inter alia* available in the Explanatory Memorandum to the European Commission, *Proposal for a Directive on Environmental Liability with regard to the prevention and remedying of environmental damage* COM(2002) 17 final, Brussels, 21 February 2002.
[69] Clarke, *The Proposed EC Liability Directive*, 256.

damage". [70] The proposal completely departed from the initial idea of a civil law regime and no longer included physical injury and economic loss. In the explanatory memorandum to the proposed directive, the Commission argued that traditional damage (personal injury and damage to goods) needed no coverage because national legal systems were already quite developed in this respect.[71] Moreover, the Commission stated difficulties to provide for a common legal framework that would cover both, civil and public/administrative law liability.[72]

Eventually, on 21 April 2004, after a development period of more than 30 years and more than 2 years of "heated discussions", [73] the European Parliament and Council adopted the "Directive (2004/35/EC) on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage" [74] with the stated aim

> "to establish a **common framework for the prevention and remedying of environmental damage** at a reasonable cost to society".[75]

The "**fundamental principle**" of the Directive is that, "**in furtherance of the polluter pays principle**" an

> "**operator**, whose activity has **caused the environmental damage, or imminent** threat of such damage, is to be held **financially liable**" […]

This should

> "[…] induce operators to adopt measures and develop practices to **minimise the risks of environmental damage**".[76]

In more general terms, the Directive aims to prevent environmental damage and where environmental damage has taken place, to ensure that environmental damage is restored and that the costs arising from the remediation of the environment are paid for by the polluter and not with public money. Through the incentives generated by potential liability, the Directive

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[70] European Commission, *Proposal for a Directive on Environmental Liability with regard to the prevention and remedying of environmental damage* COM(2002) 17 final, Brussels, 21 February 2002.
[71] European Commission, *Explanatory Memorandum to the Proposal for a Directive on Environmental Liability with regard to the prevention and remedying of environmental damage* COM(2002) 17 final, Brussels, 21 February 2002, §5, para.35.
[72] *Ibid.*
[73] Micchiché, *Environmental Liability in EU Policy Handbook*, 198.
[74] Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143/56, 30 April 2004.
[75] ELD, Recital 3.
[76] ELD, Recital 2.

aims to induce operators to adopt measures and develop practices to minimise the risks of environmental damage. [77]

To realise these objectives, the ELD establishes a regime for the prevention and remediation of environmental damage, the characteristics of which are discussed in detail in the following chapters.

The Directive is based on Article 192 of the TFEU and sets minimum standards for environmental administrative liability. According to Article 193 TFEU and Article 16 of the Directive, MS are allowed to adopt or maintain more stringent provisions. MS in many cases opted to keep or adopt more stringent provisions.[78]

While the Directive no longer covers traditional damage, it still uses terms and legal constructs characteristic of a civil law regime, such as fault and strict liability, exceptions to liability and defences to liability. In this regard, the Directive can be seen as a legislative construct in its own right, bringing together concepts and ideas from the areas of both civil and public law.

Ultimately, the application of the ELD regime is expected to result in a reduction of the number of future contaminated sites and in a slowdown of biodiversity loss in the EU.[79]

The Commission also pursued broader EU policy objectives with an EU-wide environmental liability regime.[80] From the beginning, the Commission expected liability to boost compliance with environmental norms and in this way help enforce existing environmental standards. [81] In this respect, environmental liability was brought in as a tool to address wider concerns about

[77] ELD, Recital 2. In this regard, the Commission's White Paper observed that, although operators generally considered themselves responsible for harm to health or property—given that liability for such damage already existed in various forms across the Member States—there remained a notable absence of liability rules specifically addressing environmental harm. Consequently, operators tended to regard the environment as a 'public good' for which society at large bore responsibility, rather than acknowledging their own accountability for the environmental damage they caused. The White Paper argued that a liability regime would serve to ensure that operators recognised and internalised responsibility for the potential consequences of their activities on nature. See Commission, *Environmental Liability White Paper* (*COM(2000) 66 final)*, 2 (Introduction).
[78] V Fogleman, *Study on Analysis of Integrating the ELD into 11 National Legal Frameworks* – Final Report, study commissioned by the European Commission (2013), [online] [Fogleman, *Study on Integrating the ELD*].
[79] ELD, Recital 1.
[80] M Lee, *The Changing Aims of Environmental Liability*, *Environmental Law and Management* 14 (2002), 189–196 [Lee, Changing Aims of Environmental Liability],189.
[81] See considerations in Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, §3.3.; European Commission, *Explanatory Memorandum to the Proposal for a Directive on Environmental Liability (COM(2002) 17 final)*, §4.

the poor implementation and enforcement of EU environmental law. Moreover, the adoption of minimum standards of environmental liability was considered as a way of creating conditions, which would bar economic operators from exploiting differences between MS" in the hope of avoiding environmental liability.[82]

The following Chapter discusses the polluter pays principle, which is the main environmental principle implemented by the provisions of the ELD (Chapter 9). Next, key findings on the transposition, implementation and enforcement of the Directive in the MS are highlighted, based on various studies and reports on the ELD (Chapter 10).

9 The Polluter-Pays Principle

The polluter-pays principle is one of the four principles on which the Union's environmental policy must be based. The four principles are set out under Article 191(2) TFEU and include:

- the precautionary principle;
- the principle that preventive action should be taken (the "preventive principle");
- the principle that environmental damage should as a priority be rectified at source (the "rectification at source principle"); and
- the principle that the polluter should pay (the "polluter-pays principle").[83]

The ELD implements all four principles, although only one principle, namely the **polluter-pays principle**, is expressly invoked in (several parts of) the Directive.[84] Most notably Article 1 ELD states the purpose of the Directive as

> "to establish a framework of environmental liability based on the "polluter-pays" principle, to prevent and remedy environmental damage".

To implement the polluter-pays principle, the ELD has created a new form of liability: "direct operator liability", [85] which obliges an operator (= polluter) causing environmental damage or

[82] European Commission, *Explanatory Memorandum to the Proposal for a Directive on Environmental Liability (COM(2002) 17 final)*, §4.
[83] For an extensive analysis of these principles, their interpretation and scope of application in EU law, see N De Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (2002, Oxford University Press, Oxford) [De Sadeleer, *Environmental Principles*].
[84] ELD, Recital 2, states that "the prevention and remedying of environmental damage should be implemented through the furtherance of the 'polluter-pays' principle." ELD, Recital 18, further clarifies that "according to the polluter-pays principle, an operator causing environmental damage or creating an imminent threat of such damage should, in principle, bear the cost of the necessary preventive or remedial measures."
[85] See Betlem, *ELD Scope and Defences*, 378.

creating an imminent threat of such damage, to cover the costs for the preventive and remedial.[86]

The polluter-pays principle has been included in what is now Article 191 TFEU since the 1986 Single European Act added the title "Environment" to the EU Treaties. Before that, the polluter-pays principle already featured in the EU's first Environment Action Programmes of 1973 and subsequent programmes, and served as a basis for several instruments of EU secondary legislation, mostly in the waste management sector. [87]

A Commission Communication, defined the polluter-pays principle as meaning that [**emphasis added**]

> "natural or legal persons governed by public or private law who are responsible for pollution must **pay the costs** of such measures as are necessary **to eliminate that pollution <u>or</u>** to **reduce it so as to comply with the standards or equivalent measures** which enable quality objectives to be met or, where there are no such objectives, so as to comply with the standards or equivalent measures laid down by the public authorities. Consequently, environmental protection should **<u>not</u>** in principle depend on policies which rely on grants of aid and **place the burden of combating pollution on the Community**."[88]

With the insertion of the principle into the EU treaties, the polluter-pays principle became a cornerstone of EU environmental policy. Over the years, it has been successfully invoked to justify a wide range of measures, including measures to address distortion of competition or prevention of chronic pollution or the introduction of strict liability regimes.[89]

The polluter-pays principle also features in international environmental law. **Principle 16 of the Rio Declaration** states that [**emphasis added**]:

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[86] ELD, Recital 18.

[87] See G Van Calster and L Reins, The ELD's background, in B Goldsmith and L Bergkamp (eds), The EU Environmental Liability Directive: A Commentary (2013, Oxford University Press) Oxford, 9–30 [Van Calster & Reins, *The ELD's Background*], 26, including further references.

[88] The communication was subsequently endorsed by the Council in a 1975 Recommendation, see Annex to Council Recommendation 75/436/Euratom, ECSC, EEC regarding cost allocation and action by public authorities on environmental matters, OJ 1975 L 194/1, point 2.

[89] See N De Sadeleer, 'The Polluter-Pays Principle in EU Law – Bold Case Law and Poor Harmonisation' in IL Backer, OK Fauchald and C Voigt (eds), *Pro Natura: Festskrift til Hans Christian Bugge på 70-årsdagen 2. mars 2012* (2012, Universitetsforlaget) [De Sadeleer, Polluter-Pays Principle], 406.

> "National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the **polluter should, on principle, bear the costs of pollution**, with due regard to the public interests and without distorting international trade and investment".

The **polluter-pays principle** is at its most basic an economic rule of cost allocation. Its roots lie in the theory of externalities. Externalities in an economy arise when the production or consumption of a particular good or service affects a third party not directly involved in the production or consumption of that good or service.[90] Externalities can be both positive and negative. An example of a negative externality is a factory that causes air pollution that adversely affects property values or the health of people in the area. An example of a positive externality is a beekeeper who keeps bees for the production of honey. A positive side effect of this activity is the pollination of the surrounding trees and crops by the bees.

External effects can affect an individual or society as a whole. In the case of negative external effects, one speaks of internalisation of costs when the polluter pays for the external costs resulting from its activities.[91] Such an internalization of costs can be achieved through different policy instruments. Polluters for example can be required to internalise environmental costs through the payment of pollution taxes. Other policy instrument that can achieve internalization of environmental costs are the setting of environmental standards ("command-and control"),

[90] De Sadeleer, *Environmental Principles*, Chapter 1.1. De Sadeleer illustrates externalities as follows: "The use of environmental goods typically gives rise to what economists call externalities, which may be either positive or negative. Farmers living near a well-maintained forest benefit from reduced erosion and flooding and from wells that do not run dry. Yet the owner of the forest cannot charge for these benefits. The farmers are thus enjoying positive externalities. On the other hand, negative externalities arise when the production or consumption of goods and services damages environmental goods without that damage being reflected in their price. For example, excessive use of fertilisers or pesticides, run-off of these into water, and over-abstraction of groundwater are not reflected in the price of agricultural produce. In this case, consumers benefit from market prices that do not reflect the true cost of their economic activity, becoming free riders at the expense of the environment".
[91] De Sadeleer, *Environmental Principles*, Chapter 1.1.

charges or liability regimes [92] ("market-based instruments") or voluntary labelling and certification tools developed by industry ("voluntary approaches").[93]

In order to implement the polluter-pays principle in practice, several questions need to be addressed, [94] such as:

- who is the polluter (problems may arise in cases of diffuse pollution and damage);
- what is the concrete damage, how should it be evaluated;
- how and to what extent should the damage be compensated;
- and who shall bear the costs[95] (under the ELD, for example, only "operators" of an "occupational activity" qualify as polluters and must thus bear the costs)?

These questions relate to both substantive law, such as definitions of the liable person or the type of damage covered as well as procedural law, such as who bears the burden of proof. [96]

While the text of the ELD makes no specific reference to the other environmental principles, it also implements the **precautionary principle**,[97] the **preventive principle** (Article 5 ELD) and the **principle that environmental damage should as a priority be rectified at source** (Article 6 ELD - primary remediation).[98]

[92] See European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, Annex 4. The Commission considers a system of liability for environmental damage to constitute a "market-based instrument", referring to EEA (2006) Using the Market for Cost-Effective Environmental Policy: Market-Based Instruments in Europe, EEA Report No. 1/2006, pp. 38 et seq. This interpretation is, however, arguably not supported by Faure & Partain, *Environmental Law and Economics* Chapter 7.1., who observe that "liability rules are traditionally not included in 'economic instruments' [since] with this concept one usually refers to instruments whereby only the environmental targets are defined, but whereby it is largely left to the polluters to find the optimal instruments to reach the particular targets".

[93] See European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, Annex 4; Faure & Partain, *Environmental Law and Economics*, Chapter 2.4. Faure identifies a fourth regulatory mechanism, referred to as a "suasive mechanism" or "nudging", whereby the government does not impose binding obligations on operators, but rather seeks to influence their behaviour indirectly—for example, through educational initiatives or informational campaigns.

[94] See Van Calster & Reins, *The ELD's Background*, 26-27; European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, Annex 4.

[95] According to the ELD the „person" liable is the „operator" of an „occupational activity". The Commission notes in this regard, that the „incentive function" of the PPP requires that the costs are borne by the persons that can actually „influence the impacts on the environment by changing their behaviour." See European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, Annex 4.

[96] See Van Calster & Reins, *The ELD's Background*, 27.

[97] See *Naturschutzbund Deutschland*, C-297/19, para. 31. The Court refers to *Túrkevei Tejtermelő Kft*., C-129/16, paras. 47 and 53, and the case law cited therein.

[98] See European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 11.

The principles are interrelated. De Sadeleer (2012) describes the polluter-pays principle and the preventive principles as "two complementary aspects of a single reality".[99] At the service of prevention, the polluter-pays principle would encourage potential polluters to take preventive measures instead of being content to be paying the costs of environmental damage.[100] This is mirrored in Recital 2 of the ELD, which states that the ELD's "fundamental principle" is that [**emphasis added**]

> "an operator whose activity has caused the environmental damage or the imminent threat of such damage is to be held financially liable, in order to **induce operators** to adopt measures and develop practices **to minimise the risks of environmental damage** so that their exposure to financial liabilities is reduced."

In the case *ERG and others and ENI* (C-379/08 and C-380/08), the ECJ further connected the different principles. The Court held that the operator must [**emphasis added**]

> "in particular **in accordance with the precautionary principle** and as is apparent from recital 2 in the preamble to the [ELD], […] **first**, take **the preventive measures** necessary to ensure that environmental damage does not occur". [101]

In summary, in order to implement the polluter-pays principle, a range of questions need to be addressed and resolved, such as who is the polluter/injurer, what constitutes damage, how should the damage be assessed, how should the damage be compensated and who qualifies as a polluter? With these questions in mind, the scope, substance and procedure of the ELD and the issues that have emerged with its implementation are further addressed in Chapter 11. Beforehand, the following Chapter 10 summarises the most important experiences with the transposition and implementation of the Directive so far.

10 National Transposition and Implementation of the ELD

The transposition process of the ELD was particularly lengthy. Only four MS - Italy, Lithuania, Latvia and Hungary - met the transposition deadline of 30 April 2007.[102] Infringement

[99] See De Sadeleer, *Polluter-Pays Principle*, 406.
[100] *Ibid*.
[101] *ERG and others and ENI*, Joined cases C-379/08 and C-380/08, para. 75: "operators are under a duty both to prevent and remedy environmental damage. Accordingly, in particular in accordance with the precautionary principle and as is apparent from recital 2 in the preamble to the [ELD], those operators must, first, take the preventive measures necessary to ensure that environmental damage does not occur".
[102] See European Commission, *Report on Article 14(2) of Directive 2004/35/EC on Environmental Liability*, COM (2010) 581 final, 3.

procedures against 23 MS [103] reduced the number of non-compliant countries, but the Commission still had to refer several cases to the ECJ, , which subsequently delivered judgments against seven MS—namely France, Finland, Slovenia, Luxembourg, Greece, Austria, and the United Kingdom—in 2008 and 2009. [104]

When the ELD was transposed, all MS already had some form of existing administrative liability legislation for preventing and remediating environmental damage. [105] Its status, however, varied greatly, from "embryonic legislation" in some MS to "highly developed systems" in others. [106] Especially for land and water damage, the law was already highly developed in some MS due to its evolution over a large number of years.[107] The Directive therefore often supplements and in some cases considerably overlaps with already existing liability systems for water and land damage in the MS.

Pre-existing administrative liability legislation on environmental damage often continued to exist after the transposition of the ELD and still sometimes overlaps considerably with provisions of the ELD regime. Legislation that already existed in MS prior to the implementation of the ELD is in this dissertation referred to as "pre-existing legislation".

Reports prepared by the MS and the European Commission as part of their reporting requirements under the ELD shed light on the implementation of the Directive in the MS:

- Article 14 (2) of the Directive required the Commission to report on the effectiveness of the Directive in terms of remediation of the environment and on the availability of financial security (First Commission Report from 2010, short: ELD Commission Report (2014))[108]
- Article 18 (1) ELD required MS to report on the experience gained in the application of the Directive by 30 April 2013 at the latest.[109]
- Article 18 (2) ELD obliged the Commission to report on the experience gained in the application of the Directive between 30 April 2007 and 30 April 2013, based on the reports

[103] *Ibid.*
[104] *Ibid.*
[105] Fogleman, *Study on Integrating the ELD,* 19.
[106] *Ibid.,* 7.
[107] *Ibid.,* 19.
[108] European Commission, *Report on Article 14(2) of Directive 2004/35/EC on Environmental Liability*, COM (2010) 581 final.
[109] The information and data required in the reports are set out in Annex VI of the ELD. According to the Commission, national reports were received with a delay. European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final),* 3.

submitted by the MS under Article 18(1) (Second Commission Report from 2016 short: ELD Commission Report (2016))[110]

The **Second Commission Report** was due before 30 April 2014. The national reports were received with a delay. The report was finally published in **2016,** accompanied by a Commission Staff Working Document – REFIT Evaluation of the Environmental Liability Directive.[111]

According to the Commission's second report of 2016, MS reported around 1,245 cases of environmental damage leading to the application of the ELD for the period between 30 April 2007 and 30 April 2013.[112] **Damage to protected species and habitats** concerned 20% of the reported cases.[113]

The number of ELD cases reported by MS varied considerably. [114] Two MS, namely Hungary (563) and Poland (506) accounted for more than 86% of all reported cases. The remaining cases were mostly reported by Germany (60),[115] Greece (40), Italy (17), Latvia, Spain and the United Kingdom. [116] Eleven MS reported no ELD incidents between 2007 and 2013.

The **European Parliament**, in its **2017 resolution on the implementation of the Directive**, stated that the findings of the ELD Commission Report (2016) would "give an alarming picture of the actual implementation of the ELD" and noted that in many MS the Directive has been transposed "in a patchy and superficial way".[117]

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[110] European Commission, *Report from the Commission to the Council and the European Parliament under Article 18(2) of Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage*, COM (2016) 204 final, Brussels, 14 April 2016.
[111] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*.
[112] *Ibid*., 3.
[113] European Commission, *Report under Article 18(2) Environmental Liability Directive*, COM (2016) 204, 3. Damage to land concerned around 50 %, damage to water concerned 30%.
[114] European Commission, *Report under Article 18(2) Environmental Liability Directive*, COM (2016) 204, 3.
[115] Among EU MS, Germany had the most advanced legislation on liability for biodiversity damage prior to the adoption of the ELD. See A Eberlein and G Roller, *Application of the Environmental Liability Directive (ELD) in Practice: The German Experience* (Study commissioned by the European Environmental Bureau 2012) [Eberlein & Roller, German Experience of the ELD]; G Winter, J H Jans, R Macrory and L Krämer, *Weighing Up the EG Environmental Liability Directive* (2008) 20(2) Journal of Environmental Law 163–191 [Winter et al, *Weighing Up the ELD*], 175-177.
[116] European Commission, *Report under Article 18(2) Environmental Liability Directive*, COM (2016) 204, 3.
[117] European Parliament, *European Parliament Resolution of 26 October 2017 on the Application of Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage (the 'ELD')* (2016/2251(INI)) [2018] OJ C 346/184 [European Parliament, 2017 ELD Resolution], para. 1.

In 2017, the European Commission, in response to the REFIT Evaluation of the Environmental Liability Directive (2016) [118], published a Multi-Annual ELD Work Programme (MAWP).[119] The MAWP (2017) covered the period from 2017-2020 and described as its "final goal" "the reduction if not prevention of future environmental damage". More particularly, "with regard to accidents, incidents and events causing environmental damage" the desired outcome was "to boost the ELD application, to support the national administrations as well as business, and to carry out research on the relevant issues via practical tools.[120] On the basis of the MAWP (2017), the so-called Multi-Annual Rolling Work Programme (MARWP) was developed, scheduled to run from 2021-2024.[121] The final goal is described as "the reduction, and ultimately the prevention of environmental damage, based on the polluter pays principle." The desired outcome "with regard to accidents, incidents and events causing environmental damage" is stated as "to extend the ELD application, to support the national administrations as well as operators, and to carry out research on the relevant issues. [122]

The ELD Directive requires the Commission to carry out the next evaluation before 30 April 2023 and every five years thereafter.[123]

To date, the **ECJ** has dealt with the ELD in only a handful of cases, providing interpretation of some relevant ELD terms and concepts.[124]

The following chapter examines and discusses the main substantive provisions of the ELD and how they relate to the BHD. Based on the findings of the above listed studies and a comprehensive literature review, it explores some of the issues associated with the implementation of the ELD and highlights key issues that need to be resolved in order to build up a more coherent and harmonised liability system for biodiversity damage without the criticized conceptual fragmentation of the past.

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[118] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*.
[119] European Commission, *ELD MAWP 2017–2020*, 3.
[120] *Ibid.*
[121] European Commission, *MAWP 2021–2024*.
[122] *Ibid.*, 3.
[123] This follows an amendment of the ELD in 2019 through Regulation (EU) 2019/10105, amending Articles 14 and18 and Annex VI of the Directive, see Regulation (EU) 2019/1010 (Environmental Reporting Alignment), OJ L 170/115.
[124] *ERG and others*, C-378/08; *ERG and others and ENI*, C-379/08 and C-380/08; FIPA group and others, C-534/13; *Gert Folk*, C-529/15; *Túrkevei Tejtermelő Kf*, C-129/16; *Naturschutzbund Deutschland*, C-297/19.

11 The procedure under the Directive and its intricacies

The provisions and procedure under the ELD are designed to implement the polluter-pays principle, as expressly stated in Article 1 ELD.[125] As demonstrated in Chapter 9, in order to apply the polluter-pays principle, a series of questions need to be addressed, such as what constitutes damage, how the damage is to be assessed, who is the polluter/injurer, and how the damage is to be compensated. With these issues in mind, this Chapter addresses the scope, substance and procedure of the ELD and the issues that have emerged with its implementation.

11.1 Evaluation of damage to protected species and habitats under the ELD

The concept of "environmental damage" is a key concept under the ELD, which determines its application. In the pre-existing legislation of EU MS, the notion of what constitutes "environmental damage" varied widely.[126] Considering the wide spread use of the term and the fact that many activities that cause harm to the environment are– within certain limits- permitted,[127] a definition of what constitutes damage and how it is to be assessed was therefore essential.[128] This included defining the natural resources protected under the Directive and thresholds, that clearly demarcate when the harm done to the protected resource is moving beyond the tolerated limit.

In the final version of the Directive, the definition of what constitutes environmental damage and the criteria for its assessment were included in Article 2 and Annex I of the Directive. The provisions establish the scope of natural resources covered under the Directive as well as the threshold criteria that triggers application of the ELD regime.

[125] According to Article 1 ELD, the purpose of the Directive is to establish a framework of environmental liability based on the polluter-pays principle; See also ELD, Recitals 2, 18; For further reference on the polluter-pays principle, see discussion in Chapter 9.
[126] European Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, § 4.2.1; Brans & Uilhoorn, *Liability for Damage to Natural Resources*, § 2.1. For a discussion of the term "environmental damage" and the terms "ecological damage" and "natural resource", see J Liu, *Compensating Ecological Damage: Comparative and Economic Observations* (2013, Intersentia, Cambridge–Antwerp–Portland), [online] [Liu, *Compensating Ecological Damage*], Chapter 2.
[127] See also related discussion on the optimal level of pollution and the role of permits in environmental criminal law in Part III, Chapter 15, *Theoretical foundations and underlying rationale of environmental criminal law*, with further reference to S F Mandiberg and M G Faure, *A Graduated Punishment Approach to Environmental Crimes: Beyond Vindication of Administrative Authority in the United States and Europe*, *Columbia Journal of Environmental Law* 34:2 (2009), 447–511, [online] [Mandiberg & Faure, *Graduated Punishment Approach*], 2.
[128] European Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, § 4.2.1; Brans & Uilhoorn, *Liability for & Damage to Natural Resources*, § 2.1.

As previously noted, the assessment of "environmental damage" under the ELD has been identified as one of its main problems.[129] In the case of damage to protected species and habitats ("biodiversity"), they are mainly related the use of the terms "**favourable conservation status**" and "**significant**", which are both part of the criteria to determine the threshold for damage. As will be demonstrated, the problems are partly rooted in the link that has been created between the ELD and the BHD. They are further investigated next. The following Chapters first examine the scope of biodiversity protected under the ELD (Chapter 11.1.1.) and then the threshold criteria, which is critical for the assessment of damage under the ELD (Chapter 11.1.2.).

11.1.1 Scope of biodiversity protected under the ELD

The ELD confines itself to the protection of three types of environmental damage: damage to protected species and natural habitats, damage to water and damage to land. Protected species and natural habitats, water and land are jointly referred to as "natural resources", see Article 2(12) ELD.[130]

Air as a natural resource or the pollution of air does not fall within the scope of the ELD. However, under certain conditions, it is nevertheless covered. Namely, when air pollution causes damage to one of the natural resources protected under the ELD, namely protected species and habitats, water or land. This was confirmed in the ECJ ruling *Túrkevei Tejtermelő Kf* (C-129/16).[131]

Damage to "protected species and natural habitats" ("biodiversity damage") is explicitly linked to the species and the natural habitats protected under the BHD - unless a MS decides to designate additional habitats and species for the same purposes under national law. This is specified in Article 2(3) of the Directive, which defines "protected species and natural habitats" as [**emphasis added**]

> "(a) the **species** mentioned in Article 4(2) of the BD or listed in Annex I thereto or listed in Annexes II and IV to the HD;

[129] See Chapter 10, *National Transposition and Implementation of the ELD*.
[130] Article 2 (1)(a)-(c) ELD defines the term "environmental damage". Article 2(12) ELD defines the term „natural resource" as "protected species and natural habitats, water and land".
[131] *Túrkevei Tejtermelő Kf*, C-129/16, paras 40-44. The Court argues his findings with Recital 4 of the ELD, which states that environmental damage also includes damage caused by airborne elements as far as they cause damage to water, land or protected species or natural habitats, para. 42.

(b) the **habitats of species** mentioned in Article 4(2) of BD or listed in Annex I thereto or listed in Annex II to the HD, and the **natural habitats** listed in Annex I to the HD and **the breeding sites or resting places of the species** listed in Annex IV to the HD;
(c) where a MS so determines, **any habitat or species**, not listed in the Annexes of the BHD but **which the MS designates for equivalent purposes** as those laid down in the two Directives;"

Half of the MS have decided to make use of the option under paragraph 3 (c) and have included within the scope of their national liability regime, species and natural habitats not covered under the BHD.[132]

While the definition of "protected species and habitats" in Article 2(3) basically limits the scope of the ELD to the species and habitats protected under the BHD, it should be noted that in two aspects it also differs from the BHD, both **restricting** as well as **expanding** it – and this irrespective of the option available to MS under paragraph 3 (c).

The **restriction** is that the ELD does not cover all bird species protected under the BD. Unlike the BD, which applies to all species of naturally occurring wild birds in the EU,[133] the ELD only applies to species and habitats of species mentioned in Article 4(2) of the BD or listed in Annex I thereto and thus to migratory birds and birds considered particularly threatened.[134]

The **expansion** is that the ELD also covers protected species, habitats of species and natural habitats, which occur **outside Natura 2000 sites**, whereas under the HD, the protective regime under Article 6 only applies to species, habitats of species and natural habitats **inside Natura 2000 sites**. [135]In other words, whereas under the HD, MS obligations to prevent and restore damage are confined to damage within designated areas,[136] under the ELD MS must also

[132] European Commission, *Fitness Check of the EU Nature Legislation*.
[133] The BD protects all of the 500 wild birds species naturally occurring in the European Union. See Article 1 (1) BD, which states that the Directive „relates to the conservation of all naturally occurring birds in the wild state in the European territory of the MS".
[134] See Article 2(3)(a) ELD. Annex I of the BD lists 197 species and sub-species of birds that are particularly threatened, Article 4(2) relates to regulatory occurring migratory species that are not listed in Annex I.
[135] The 2002 Commission Proposal underwent several revisions before the ELD was finally adopted in 2004, including changes to the scope of biodiversity covered. Notably, the inclusion of protected species and habitats located outside Natura 2000 was introduced through an amendment by the European Parliament, which was subsequently accepted by the Council. For further reference, see Fogleman, *Threshold for Liability in the EU*, 185.
[136] See Article 6 HD. For a discussion of Article 6 HD, see Part I of the dissertation.

respond to damage outside protected areas – provided the damage falls within the scope of the ELD.[137] The problems that may arise from this difference in coverage of species and habitats between the HD, on the one hand, and the ELD, on the other, are further discussed under Chapter 11.7. of this dissertation, which addresses the issue of "orphan damage" under the ELD.

In summary, apart from the expansion discussed above and the option of MS to designate additional habitats and species for national protection, the scope of biodiversity covered under the ELD corresponds with and is thus **restricted** to the natural habitats and species protected under the BHD. Draft versions of the ELD, including the White Paper (2002) and the Proposal for the Directive (2002), still used the term "biodiversity" to describe the natural resources covered by the Directive.[138] The interpretation of the term, however, differed from other interpretations of the term, such as the one provided by the definition of biodiversity under the international Convention on Biological Diversity (1992).[139] This was perceived to provoke confusion. In order to clearly demarcate the scope of biodiversity protected under the ELD, the BHD were increasingly used to specify the scope of biodiversity protected under the ELD.[140] Eventually the term "biodiversity damage" was entirely replaced by "damage to protected species and natural habitats.[141]

As previously noted, currently half of the MS make use of the option provided under Article 2(3)(c) ELD.[142] A study examined the possibility of further "harmonising" the scope of protected species and habitats under the ELD across MS, by requiring **all** MS to extend the scope of the ELD to nationally protected species and habitats.[143] The Commission, however, concluded that, due to national competences, a mandatory inclusion of nationally protected species and habitats was likely to encounter legal problems.[144] Moreover, such a measure would not necessarily lead to better harmonisation since the scope of nationally protected species and habitats in some cases differed widely.

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[137] See also Van Den Broek, *Environmental Liability and Nature Protection Areas*, 119, with further references.
[138] European Commission, *Explanatory Memorandum to the Proposal for a Directive on Environmental Liability*, COM(2002) 17 final; E Brans, *Fundamentals of Liability for Environmental Harm under the ELD*, in: B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (Oxford University Press 2013) (Brans, Fundamentals), 34.
[139] Brans, *Fundamentals of Liability*, 34.
[140]See Fogleman, *Threshold for Liability in the EU*, 183.
[141]For a detailed account of the discussions that led to the adoption of the present definition of biodiversity damage under the ELD, see Fogleman, *Threshold for Liability in the EU*, 186.
[142] See Chapter 11.1.1., *Scope of biodiversity protected under the ELD.*
[143] Milieu & IUCN, *ELD Biodiversity Damage Report*.
[144] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 53.

11.1.2 The significance threshold under the ELD

In order to trigger the application of the ELD regime, damage to the natural resources covered under the ELD needs to meet certain threshold criteria. As previously noted, the definition of damage to protected species and natural habitats under the ELD is closely linked to the provisions of the BHD. In the case of damage to species and natural habitats, the Directive only applies if the damage

> "has **significant** adverse effects on **reaching or maintaining the favourable conservation status** of [protected] habitats or species".[145]

The requirement of a significant adverse effect on **reaching or maintaining the favourable conservation status** of [protected] habitats or species directly connects the **question of liability under the ELD** with the **objective of the HD to reach or maintain the favourable conservation status** of protected species and habitats (see Article 2 (2) HD).[146] The implications of this close linkage are discussed below.

The damage to protected species and natural habitats also needs to be "significant".

The term "**damage**" is defined in Article 2(2) ELD as

> "a measurable adverse change in a natural resource or measurable impairment of a natural resource service which may occur directly or indirectly".

The "**significance**" of the damage is established by comparing the **condition after the damage** with the "**baseline condition**" of the protected species and habitats.[147] The term "**baseline condition**" is defined in Article 2(14) ELD as

> "the condition at the time of damage of the natural resources and services that would have existed had the damage not occurred estimated on the best information available."

The threshold of "significance" set by the ELD is often seen as a major obstacle to its application.[148] This is mainly attributed to firstly, problems in assessing the **favourable**

[145] ELD Article 2 (1)(a) subpara (1), first sentence.
[146] According to Article 2(2) HD „measures taken pursuant to the Directive shall be designed to maintain or restore, at favourable conservation status [...]"
[147] ELD Article 2 (1)(a) subpara (1) second sentence
[148] BIO Intelligence Service, *Implementation Challenges and Obstacles of the Environmental Liability Directive. Final Report Prepared for European Commission, DG Environment, May 2013* [BIO Intelligence Service, *ELD Implementation Report*] in collaboration with Stevens & Bolton LLP (2013), 121.

conservation status of a species or habitat under the ELD, and secondly, problems in interpreting and applying the term **"significant"** under the ELD. To further illustrate these issues, the following Chapters go through the assessment process for damage to protected species and natural habitats.

11.1.2.1 Assessing the damage under the ELD

The starting point of any assessment of damage under the ELD is the baseline condition, described as "a hypothetical situation" by Van Den Broek (2009). [149] In order to determine the significance of the damage, the condition after the damage needs to be compared with the baseline condition and by reference to the **favourable conservation status (FCS)** of the affected species or habitat. The accurate assessment of the baseline in a damage assessment is critical: firstly, it is the standard against which the "significance" of the damage is evaluated, and secondly, it is the basis for the determination of the remediation measures.[150]

11.1.2.1.1 Assessing the baseline condition and availability of data

Assessing the baseline condition is a complex process. Two main challenges have been mentioned by commentators in establishing baseline data: First, the availability of data on the *status ante*. [151] Secondly, a baseline is not necessarily static and natural fluctuations must be taken into account. [152]

A possible source of information on the conservation status and likely the baseline condition of the affected species and habitats is the data gathered under the information and reporting obligations of MS under the BHD. These require MS to assess and monitor the conservation status of their protected habitats and species and to collect data both **inside** and **outside** Natura

[149] See Van Den Broek, *Environmental Liability and Nature Protection Areas,* 119, who notes that the comparison with a "hypothetical situation", as required under the ELD, is generally considered to be inherent of any definition of damage (including further references).
[150] For further reference, see Chapter 11.1.2.2, *The interpretation of the term "significant"*, and Chapter 11.5, *The remediation of damage to protected species and habitats*.
[151] N Gard and W.H. Desvousges, *Technical and Economic Issues and Practices in ELD Application* in B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (2013, Oxford University Press) [Gard & Desvousges, *Technical and Economic Issues and Practices*], 225*;* Van Den Broek, *Environmental Liability and Nature Protection Areas,* 120.
[152] *Ibid.*

2000 sites (see Part I of the dissertation). [153] This data is thus not limited to Natura 2000 sites.[154] However, the data provided through the information and reporting obligations under the BHD are reportedly far from complete. [155] Another issue that has been highlighted is that the information required under the BHD does not include data on the conservation status of species and habitats protected under national legislation, i.e. pursuant to Article 2(3)(c) ELD.[156] In such cases, the availability of data for the determination of the baseline will depend on the existence of national monitoring requirements.

Problems with the availability of baseline data have also been acknowledged by recent studies and reports. The 2016 ELD REFIT assessment states a "great further potential for the development of […] data bases for the determination of the baseline condition".[157] *Milieu et al. (2017)* suggest a more extensive and regular monitoring for this purpose.[158] Such monitoring could be based on regulatory requirements (e.g. monitoring as an obligation under an environmental permit) or carried out on "voluntary basis". The study cites an example from the Walloon Region in Belgium, where operators are encouraged to ensure the collection of data on the site. [159] This would be in their own interest so that in case an incident occurs, the information is available.

11.1.2.1.2 Assessing the impact of the damage

To qualify as damage under the ELD, the changes to the baseline condition must have a significant adverse effect on reaching or maintaining the **"favourable conservations status"**

[153] See Milieu et al., *Fitness Check Birds and Habitats Directives*, 47. For site designation under the HD, MS must submit proposals with information including maps of the sites and detailed data relating to the habitats and species in such sites (e.g. data on size and density of species populations or on functions and possibilities of restoration of the natural habitat. Under Article 11 HD, MS are required to monitor the conservation status of all habitats (as listed in Annex I) and species (as listed in Annex II, IV and V) of Community interest. Article 17 HD requires MS to report the "main results" of the surveillance referred to under Article 11 every six years. The reporting procedure and requirements under the BD were revised in 2001 to streamline reporting under Article 12 BD with the reporting requirements under Article 17 HD. The reporting requirements under the BD focus on data about the status and trend of birds populations.
[154] This follows from Article 11 HD, which requires MS to monitor the conservation status of all habitats and species of Community interest.
[155] See Fogleman, *Threshold for Liability in the EU*, 206.
[156] See Milieu & IUCN, *ELD Biodiversity Damage Report*, 48.
[157] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 43.
[158] Milieu, Bilbomatica & Deloitte, *Support in the Implementation of REFIT Actions for the ELD – Phase 1: Annex II-Task 2 Common Understanding Document – ELD Key Terms and Concepts*, study commissioned by the European Commission (2017), [online] [Milieu et al., *REFIT ELD Key Terms and Concepts*], 15-16.
[159] *Ibid*., 16.

("FCS") of the affected habitat or species. It is the impact on the favourable conservation status, therefore, that determines the limit of an acceptable adverse effect on a habitat or species.[160]

The ELD defines the FCS for both natural habitats as well as species[161] and uses a wording that is (almost) identical with the wording of the definitions used under the HD.[162] As a result, the ELD threshold criteria for biodiversity damage is directly linked to the HD's core concept: the **favourable conservation status.**[163] It also means that both Directives, the ELD and the HD, use the concept of FCS as their main point of reference, albeit for different purposes. While the ELD requires significant adverse changes to the FCS to trigger the application of its liability regime, the HD uses the concept of FCS to "guide pro-active actions" towards protecting natural habitats and species from deterioration and disturbance.[164]

However, the application of the concept of FCS under the ELD raises several problems. Some problems are of a generic nature and also arise when applying the concept under the HD.[165] Other problems relate, on the one hand, to a difference in the otherwise almost identical **wording of the definition under the ELD** and, on the other hand, to the **application of the concept of FCS in a liability regime**. They are discussed in the following.

11.1.2.1.2.1 Relevant territorial scope of the assessment

[160] See also Milieu & IUCN, *ELD Biodiversity Damage Report*, 61.
[161] See Article 2(3)(a)-(b) ELD
[162] See definitions in Article 1 (e) and 1(e) HD.
[163] Fogleman, *Duty to Prevent Environmental Damage*, 710; Y Epstein, *Population Based Species Management across Legal Boundaries: The Bern Convention, Habitats Directive, and the Gray Wolf in Scandinavia* (2013) 25(4) *Georgetown International Environmental Law Review* 221, 221, who also refers to the FCS as the core concept under the HD "which directs MS to take measures to reach or maintain the FCS of natural habitats and species of wild plants and animals"
[164]See Milieu & IUCN, *ELD Biodiversity Damage Report*, 8; Article 2(2) HD provides that "measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora (..)." The BD, which does not use the concept of FCS, instead requires MS to take measures to maintain bird populations "at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or adapt the population to that level." As Epstein explains, the "vaguer goals of the BD were explicitly rejected in favour of the more closely defined FCS when drafting the HD.", see Epstein, *Population-Based Species Management*, 226; The Commission Guidance on Wind Energy in Natura 2000 states in this regard that "concept of Favourable Conservation Status is not mentioned in the BD but there are analogous requirements". See European Commission, Directorate-General for Environment, *Wind Energy Developments and Natura 2000 – Guidance Document* (Publications Office 2010) [online]§ 2.3.4.
[165] Problems arise in the application of the concept of "natural range" (see discussion further below) or the interpretation of vague terms such as "foreseeable future" or "long-term basis", which determine whether or not the conservation status of a natural habitat or species can be considered favourable. For further reference see: Y Epstein, JV López-Bao and G Chapron, *A Legal-Ecological Understanding of Favorable Conservation Status for Species in Europe* (2015) Conservation Letters [Epstein, López-Bao & Chapron, *Favorable Conservation Status*].

The definitions of **"conservations status"** for habitats and species under the ELD slightly deviates from the definitions employed under the HD. This difference entails that the relevant territorial scope for the assessment of the conservation status and thus for the assessment of the damage is not sufficiently clear. A closer look at the wording reveals the problem:

The **conservation status of a natural habitat** under Article 2(3)(a) ELD is defined [**emphasis added**]

> "as the sum of the influences acting on a natural habitat, and its typical species, that may affect its long-term natural distribution, structure, and functions, as well as the long-term survival of its typical species within, as the case may be, the European territory of the MS to which the treaty applies **or the territory of a MS or the natural range of that habitat**;"

The difference in the ELD is the addition of "**or the territory of a MS or the natural range of that habitat"**.

The ELD proceeds to define the conditions under which the **conservation status of a natural habitat** will be regarded as "**favourable**". These conditions are that [**emphasis added**]

- " its **natural range** and the areas it covers within that range are stable or increasing;
- the **specific structure and functions** which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future;
- and the **conservation status** of its typical species is **favourable**, as defined in [ELD Art 2(4)(b)]."

The **conservation status of a species** is defined in Article 2(3)(b) ELD [**emphasis added**]

> "as the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within, as the case may be, the European territory of the MS to which the Treaty applies **or the territory of a Member State or the natural range of that species**;"

Again, the difference in the ELD is the addition of "**or the territory of a Member State or the natural range of that habitat"**.

The conservation status of a species will be taken as "**favourable**" when [**emphasis added**]

- "**population dynamics** data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- the **natural range** of the species is neither being reduced nor is it likely to be reduced for the foreseeable future;
- and there is, and will probably continue to be, a sufficiently large **habitat to maintain its populations on a long-term basis**;"

The relevant difference in the wording consists of the addition of the phrase "**or the territory of a MS or the natural range of that species"**. Under the HD, the conservation status of a species or habitat is assessed with respect to "**the European territory of the MS to which the Treaty applies**". Under the ELD two more levels are added to the assessment: "**the territory of a MS** or the **natural range of [the habitat or species]**". [166] Obviously these additions change the territorial scope of the assessment.

As Fogleman (2015) points out, the three different territorial levels are listed in the disjunctive, which according to her leaves it unclear whether a significant effect on reaching or maintaining the favoured conservation status of a species or habitat has to be established at any **one of the three levels,** namely EU level, MS level and natural range level -, or whether an effect is not seen as significant unless it is established **at all three levels**. [167] If the latter interpretation were correct, Fogleman concludes, "an operator's activities could completely destroy a natural habitat in a MS but, because the effect on reaching or maintaining the favourable conservation status at EU level was not significant, the ELD would not be triggered". [168]

One could, however, argue, that the wording in the disjunctive clearly indicates that the three levels apply **alternatively**, i.e. an assessment may be carried out at either natural range or at MS or at EU level. The question then arises how the appropriate level for an assessment is determined. Is the level left to the discretion of the MS or are there additional criteria that determine the appropriate level for assessment? Depending on the level chosen for the assessment, the results for reaching the significance threshold can vary greatly. This is illustrated by Marc Clément (2015) in his reflections on the disappearance of the European

[166] ELD, Arts. 2(4)(a), 2(4)(b).
[167] Fogleman, *Threshold for Liability in the EU*, 203.
[168] *Ibid*.

Hamster and the *Alsace Hamster* (C-383/09) case.[169] The *Alsace Hamster (C-383/09)* case concerned the loss of habitats for the European Hamster in France and the application of the HD to the case. Urbanisation and changes in agricultural practices had led to fragmentation of habitats and a decline of favourable habitats, resulting in a sharp decline in the hamster population in the Alsace region of France between 2007 and 2011. A count in 2009 revealed that there were "no populations of the species in Alsace which reached its minimum viable population threshold, which is estimated at 1 500 individuals spread over an area of contiguous suitable land of 600 hectares". [170] According to the Commission, the French Republic had taken insufficient measures to prevent the deterioration of breeding sites and resting places and had thus failed to comply with its obligations under Article 12 (1)(d) HD.

In Europe, habitats for the European Hamster cover large territories from Romania to France. While the species is very common in Hungary, the Czech Republic, Slovakia and Romania, it is threated in Belgium, Germany, the Netherlands and France. [171] As a result, the same decline in European Hamster habitats has a greater impact on its conservation status in France than in Eastern European countries. This is, however, where the question on the scale of the assessment becomes relevant, as Marc Clément (2015) illustrates. [172] If the assessment is based on the European territory of the MS (EU level), the good conservation status of the European Hamster in Central and Eastern Europe could compensate for losses in Western Europe, including France. If the assessment is, however, carried out at MS level, the same reduction in habitats is obviously bound to lead to very different results.

11.1.2.1.2.2 Territorial scope in the case of natural range

A similar problem with the definition of conservation status under the ELD and the scope of the damage assessment relates to the concept of "**natural range**", which, as previously noted, is used under the ELD to define one of the three levels of assessment. The term "natural range" is neither defined in the ELD nor in the BHD. As before, in order to determine the significance threshold for a case of biodiversity damage, the territorial scope of the assessment needs to be clear. But what is the territorial scope in the case of "natural range"? In this regard, two observations are important: Firstly, the natural range of a species or natural habitat varies from

[169] Clément, 'Global Objectives and Scope', 9-20, discussing *inter alia Commission v France (Alsace Hamster),* C-383/09. The hamster is protected under the HD.
[170] *Commission v France (Alsace Hamster),* C-383/09, para.24.
[171] Clément, *Global Objectives and Scope*, 17.
[172] *Ibid.*

one species or habitat to another species and habitat. [173] Secondly, the natural range of species and habitats is by nature dynamic and can even change abruptly. This imprecision and volatility inherent in the concept of natural range, which is rooted in its ecological approach, has however important legal consequences. One the one hand, it makes it hard to define the concept of natural range in a general way and it is therefore not clear at what scale the assessment should take place. On the other hand, and as so pointedly noted by Fogleman (2015), the threshold for liability under the ELD becomes a "**moving target**" if one relates the assessment of damage under the ELD to the "natural range" of a species or habitat.[174]

11.1.2.1.2.3 High threshold for natural range

For some species, especially **migratory species** and **wide-ranging animals** such as wolves, the natural range can be vast. In another point of criticism, Fogleman (2015) observes that if the natural range is the scale at which the adverse effect of an incident must be evaluated, many incidents causing biodiversity damage will not meet the threshold. [175] This is because the spatial area affected by the incident is too small to have a "**significant**" adverse effect on the conservation status of a species or habitat within their natural range.

11.1.2.1.2.4 Findings on the territorial scope for damage assessment under the ELD

The above findings indicate substantial problems with the definition of the territorial scope of the damage assessment under the ELD. The observed difficulties are confirmed by the Commission's ELD REFIT evaluation, which states that "the **geographical reference** […] referring to "as the case may be, the European territory of the MS to which the treaty applies or the territory of a MS or the natural range" […] has shown difficulties in practical application. [176] Following a "pragmatic approach", the Commission proposes that for effective implementation of the ELD it should be clarified that a **site-related approach is required**. [177] The Commission also concludes that further interpretation and guidance on the territorial scope is necessary. [178]

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[173] Fogleman, *Threshold for Liability in the EU*, 204. Fogleman notes that the natural range of species and natural habitats also changes due to factors such as "climate change, fragmentation, and the introduction of alien species", which can lead to migration or extinction of species and natural habitats.
[174] Fogleman, *Threshold for Liability in the EU*, 205.
[175] *Ibid*., 206.
[176] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 53.
[177] *Ibid.*
[178] *Ibid.*, 61.

Concerning the concept of "**natural range**", the Commission states that it differs for each species and depends on the population abundance, describing "natural range" as

> "roughly the spatial limits within which the habitat or species occurs but is not identical to these precise localities or territory which may be patchy or disjointed. Thus, "natural range" includes areas not permanently used (for example for migratory species) and represents in any case a dynamic concept (can decrease or expand). Natural range can also be in an unfavourable condition for a habitat or a species, i.e. it might be insufficient to allow for the long-term existence of that habitat or species".[179]

From a selection of case studies in the MS it appears that the damage assessment was carried out at site level.[180]

In conclusion, the FCS concept appears to be problematic and thus a questionable reference to determine the threshold for application of the ELD liability regime. [181] The FCS is a legal concept that follows an ecosystem approach and therefore can only be understood by reference to ecological concepts. [182] Ecological concepts, however, often involve a certain degree of vagueness to account for the "dynamic, often unpredictable, and perhaps even chaotic" nature of ecosystems.[183] It is obvious, that the legal approach, which relies on clear definitions, and the ecological approach, which takes into account the "dynamic, often unpredictable, and perhaps even chaotic" [184] nature of ecosystems, are therefore difficult to reconcile. Notwithstanding these observations, the concept altogether appears to provide an important and sufficiently strong basis for the establishment of management plans and other measures to maintain or restore the FCS of protected species and habitats under the HD. In determining the

[179] Commission's legal interpretation provided in response to a question from the Czech Republic. See Milieu et al., *REFIT ELD Key Terms and Concepts*, 18, citing from the following document: European Commission. (2009). Response on legal interpretative questions raised by France and Czech Republic at the ELD government experts meeting of 4 February 2009. The Commission also refers to the EIONET system, which allows to determine for all protected species and natural habitats in the EU the distribution and natural range, see https://www.eionet.europa.eu/, accessed 1 May 2025.
[180] Milieu et al., *REFIT ELD Key Terms and Concepts*, 19, noting, however, that the territorial scope used was not clearly indicated.
[181] De Sadeleer, *Wildlife under Threat*.
[182] See Y Epstein, *Favourable Conservation Status for Species: Examining the Habitats Directive's Key Concept Through a Case Study of the Swedish Wolf* (2016) 28(2) *Journal of Environmental Law (Oxford)* [Epstein, *Favourable Conservation Status (Swedish Wolf)*]. Through a case study of the Swedish Wolfe, the article extensively discusses issues with the application of the concept of FCS in the context of the HD.
[183] For further reference, see Fogleman, *Threshold for Liability in the EU*, .204.
[184] For further reference, see Fogleman, *Threshold for Liability in the EU*, 204, footnote 127.

threshold for application of the ELD liability regime, however, the reference to the FCS creates numerous problems, turning the threshold for liability into a "moving target" or setting the threshold for liability too high.

Harmful incidents resulting from economic activity often have a relatively limited spatial impact, but devastating consequences for the affected natural resources. Due to the observed difficulties with the concept of FCS, a significant effect on "maintaining or restoring the FCS of a protected species or habitat" as currently required under the ELD may, however, not be demonstrable.[185]

The lack of clarity relating to the concept of FCS is further exacerbated by problems with the interpretation of the term "**significant**".

11.1.2.2 Interpretation of the term "significant"

Annex I of the ELD sets out in great detail the criteria for assessing the significance of any adverse effect on reaching or maintaining the FCS of protected species and habitats and states that [**emphasis added**]:

"Significant adverse changes to the baseline condition should be determined by means of **measurable data,** such as:

- the **number of individuals**, their **density** or the **area covered** […],
- the **role of the particular individuals** […] or of the **damaged area in relation to the species or to the habitat conservation**, the **rarity of the species or habitat**,
- the **species' capacity for propagation**, its **viability** or the **habitat's capacity for natural regeneration**,
- the species' or habitat's capacity, after damage has occurred, to **recover within a short time, without any intervention other than increased protection measures**, to a condition which leads, solely by virtue of the dynamics of the species or habitat, to a condition deemed equivalent or superior to the baseline condition."

Notably, "[d]amage with a proven effect on human health must be classified as significant damage.".

[185] De Sadeleer, *Wildlife under Threat*, 72-73, who gives the example of massive pollution of a lake which does not affect the conservation status of a species.

The ELD also stipulates in which cases the damage does **not** need to be classified as significant damage:

- negative variations that are smaller than **natural fluctuations regarded as normal** for the species or habitat in question,
- negative variations due to **natural causes or resulting from intervention relating to the normal management of sites**, as defined in habitat records or target documents or as carried on previously by owners or operators, [or]
- damage to species or habitats for which it is **established that they will recover, within a short time and without intervention**, either to the baseline condition or to a condition that leads, solely by virtue of the dynamics of the species or habitat, to a condition deemed equivalent or superior to the baseline condition.

While the criteria in Annex I state **how the significant adverse changes to the baseline condition should be determined**, namely by measurable data, and **what type of information** should be considered, such as number of individuals or their density, the criteria offer little guidance on a threshold, i.e. **what classifies as "significant"**. Only in cases of a **proven effect on human health**, it is clear that the damage **must** be classified as significant.

As a result, the interpretation of the term "significant" in the application of the Directive widely varies across MS. In the case of damage to protected species and habitats, for instance, it has been established that some countries such as Denmark, France or Slovenia transposed the term into meaning severe – almost catastrophic cases, while others - such as Germany or Poland - consider significant any biodiversity damage beyond small variations. [186] According to the ELD REFIT report, some MS appear to apply the Directive only to instances causing "excessive" damage.[187]

Practitioners have described Annex I as too complex and too difficult for authorities to understand. [188] One stakeholder – namely the "The Ad-Hoc Industry Natural Resource Management Group" – suggested in a survey on the effectiveness of the ELD, that methods or

[186] Milieu & IUCN, *ELD Biodiversity Damage Report*, 21.
[187] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 35.
[188] BIO Intelligence Service, *ELD Implementation Report*, 122.

approaches for an easier interpretation of the term "significance" under Annex I would be a welcome and useful amendment of the Directive.[189]

Stakeholders from the insurance sector have pointed out, [190] that the existence of a significance threshold generally contradicts one of the objectives of the ELD, namely the avoidance of net losses of biodiversity.[191] The comment was based on the consideration, that while a singular event of minor damage (i.e. not meeting the significance threshold under the ELD) may be less harmful, minor incidents are more frequent than significant damage and may altogether lead to more biodiversity loss than those few significant accidents that trigger the ELD threshold.

The interpretation of the term "significant" has a direct impact on the effectiveness of the liability regime, since the regime is not applied if the threshold is too high or its interpretation ambiguous. Given the widely diverging interpretation of the term "significant" in the MS, the Directive is currently not equally applied across MS.

In most MS, when the threshold that triggers the application of the ELD regime has not been met pre-existing sectoral legislation of the MS will apply to the damage.[192] This, however, means that important provisions, which are often not part of pre-existing sectoral legislation, do not apply, such as the specific access to justice provisions under the ELD.

The lack of harmonisation of the significance criteria is believed to contribute, at least in part, to the vast differences in the number of ELD cases reported by the MS to the Commission under Article 18 of the Directive.[193] The reports show that some have applied the Directive widely (Hungary, Poland), whilst others (Austria, Cyprus, the Czech Republic, Denmark, France, Ireland, Luxembourg, Slovakia, Slovenia) have not yet reported an incident where the ELD was applied.

[189] BIO Intelligence Service, *ELD Implementation Report*, 122. The report cites, in particular, a statement of the "The Ad-Hoc Industry Natural Resource Management Group".
[190] Insurance Europe, Spanish Pool of environmental risks. Quote found in: BIO Intelligence Service, *ELD Implementation Report*, 122-123.
[191] BIO Intelligence Service, *ELD Implementation Report*, 123.
[192] Milieu & IUCN, *ELD Biodiversity Damage Report*, 48.
[193] Milieu & IUCN, *ELD Biodiversity Damage Report*, 21 and 48, stated for environmental damage to biodiversity.

11.1.2.3 Coherence with threshold requirements under the BHD

The notion and interpretation of the term "significant" under the ELD also creates coherence issues with the BHD. These mainly concern Article 6(2) and Article 6(3) HDs, which both intend to prevent negative effects on a protected site.[194] In the case of Article 6(2), the intention is to avoid "deterioration of habitats" and "disturbances of species". In the case of Article 6(3), the aim is to avoid the authorisation of any plans or projects that could "adversely affect the integrity of the site". MS are required to "agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned".

Rulings of the ECJ as well as the Commission's guidance notice on Article 6(2) and (3) HD suggest, that the threshold for application of the BHD is substantially lower than the threshold required for application of the ELD's liability regime. To illustrate the different threshold requirements, the following chapters will revisit some of the previously discussed ECJ rulings on the HDs.

11.1.2.3.1 Thresholds under Article 6(2) HD

Under Article 6(2) HD, two thresholds apply. [195] Regarding the **disturbance of species**, Article 6(2) HD specifies that the disturbance needs to be "**significant**" in relation to the conservation objectives of the Directive. In order to assess whether a disturbance is "significant" in relation to the objectives of the Directive, the Commission advises MS to refer to the definition of favourable conservation status of a species in Article 1(i) of the HD.[196] For example any disturbance, which would contribute "to the long-term decline of the population of the species on the site" could be considered significant. Similarly, an activity contributing to "the reduction or to the risk of reduction of the range of the species within the site" or to "the reduction of the size of the available habitat of the species" would meet the threshold requirement under Article 6(2).

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[194] See Part I, Chapters 4.2.3.2. on Article 6(2) and Chapter 4.2.3.3. on Article 6(3)

[195] See Part I, Chapter 4.3.2.2.2 on "Threshold requirements under Article 6(2) HD", with further reference to European Commission, Managing Natura 2000 Sites, C(2018) 7621 final, § 3.

[196] According to Article 1(i) HD, the conservation status of a species will be taken as "favourable" when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis;

Regarding the **degradation of habitats**, Article 6(2) does not indicate a threshold. The requirement to be "significant in relation to the Directive's objectives" does not apply in the case of habitats. The Commission concludes from this that a deterioration of conservation parameters of habitats must therefore **"simply be avoided altogether**".[197] Deterioration could be considered to have occurred if, considering all the influences on the habitat, these influences would result in making **conservation parameters** for the habitat **worse than** they were **before**.[198] This indicates a low threshold under Article 6(2) HD.

11.1.2.3.2 Thresholds under Article 6(3) HD

The ECJ has confirmed in several rulings, that Article 6(2) and (3) HD must be construed "as a coherent whole", and are designed to ensure the same level of protection of natural habitats and habitats of species, whilst Article 6(4) constitutes merely a provision derogating from the second sentence of Article 6(3).[199] Any **plan or project approved in compliance with Article 6(3)** will therefore **necessarily** have to be **in conformity with Article 6(2)** and Article 6(2) can also apply to the implementation of plans or projects, that were authorised before Article 6(3) became applicable.[200]

Several rulings have demonstrated the **importance of the precautionary principle** in the Court's strict interpretation of the requirements under Article 6(3) HD. While the Directive does not expressly refer to the precautionary principle, the ECJ has made it clear, that the precautionary principle is of practical relevance at several stages of the application of Article 6(3). The resulting case law has established a high level of protection for protected species and habitats with thresholds, that many plans and projects cannot pass.[201]

In the seminal ruling *Waddenzee* (C-127/02), the Court invoked the precautionary principle to clarify the correct interpretation of "**likely to have a significant effect**"[202] and confirmed that

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[197] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, §3.4.
[198] European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, §3.
[199] *Sweetman*, C-258/11; *Briels*, C-521/12; *Hilde Orleans and Others v Vlaams Gewest* [Orleans], C-387/15.
[200] *Waddenzee* (C-127/02)*; Grüne Liga Sachsen* (C-399/14)
[201] See also J Jackson, *Conserving Europe's Wildlife*, 236. Howev er, as Kingston (2017) rightly points out "the parameters drawn by the Court are, themselves, open to a degree of interpretation: national competent authorities and judges may be far more easily satisfied, for example, that "no reasonable scientific doubt" remains than the ECJ would envisage." For forther reference, see Kingston et al, *European Environmental Law*, 439.
[202] *Waddenzee*, C-127/02, paras.44 and 45. For further reference, see Part I, Chapter 5.2.3.3.1., *The first threshold: The threshold that triggers an appropriate assessment under the HD*.

the **threshold** for finding a **likely significant effect** is a **low** one: if significant effects of a plan or project on a protected area cannot be ruled out, MS must proceed with an appropriate assessment. Many plans or projects must therefore be subject to an appropriate assessment before they can be approved.[203]

The second threshold was addressed by the Court in several judgments.[204] In *Commission v Italy* (C-304/05), the ECJ held that "**where doubt remains** as to the absence of such [negative] effects, the competent authority will have to **refuse authorisation**".[205] In *Sweetman* (C-258/11) the Court further clarified, that an appropriate assessment must "contain complete, precise and definite findings and conclusions capable of **removing all reasonable scientific doubt**".[206] In *Sweetman* (C-258/11), the Court also addressed the question of what constitutes an adverse effect on a site's integrity[207] The Court concluded that a competent authority cannot give approval for a plan or project where "there is a risk of lasting harm to the ecological characteristics of sites which host priority natural habitat types".[208] This is particularly the case, where there is a risk that the plan or project will bring about the "disappearance or the partial and irreparable destruction of a priority natural habitat on the site".[209]

In summary, the comparison between the interpretation of threshold values in the BHD and the ELD underscores the existing inconsistency between them: The high level of protection set out in Article 6 of the HD, with correspondingly low thresholds for the assumption of significant harm, is clearly not reflected in the current interpretation of the ELD. This finding is consistent with that of other studies.[210]

Considering the low threshold required to trigger the MS' obligations under the BHD, it is indeed surprising that in many MS the significance threshold for application of the ELD liability

[203] See also J Verschuuren, *Shellfish for Fishermen or for Birds? Article 6 Habitats Directive and the Precautionary Principle* (2005) 17(2) *Journal of Environmental Law* 265–283 [Verschuuren, *Article 6 Habitats Directive and the Precautionary Principle*], 281. Verschuuren notes that the Court in *Waddenzee (*C-127/02*)* has "placed so much emphasis on the precautionary principle that it is clear that avoiding the duty to assess the consequences of a project will be very difficult, if not impossible".
[204] For further reference, see Chapter 5.2.3.3.2, *Second threshold: The threshold for approval of a plan or project*.
[205] Commission v Italy, C-304/05, paras.57-58.
[206] *Sweetman*, C-258/11, para.44.
[207] *Ibid.*, para.44
[208] *Ibid.*, para.43
[209] *Ibid.*
[210] Milieu & IUCN, *ELD Biodiversity Damage Report*, 51.

regime is considered to be high.[211] As previously noted, under the ELD some countries such as Denmark, France or Slovenia transposed the term "significant" into meaning severe – almost catastrophic cases, [212] while others appear to apply the Directive only to instances causing "excessive" damage.[213]

11.1.2.3.3 Discussion of findings on divergent threshold requirements in ELD and BHD

The assumption of a high threshold under the ELD means that the ELD will not apply in many cases where the BHD does. Given the otherwise strong integration of terms and concepts from the BHD into the ELD's definition of damage, it is hardly conceivable that such a result was intended by the legislator. Indeed, Fogleman (2020) convincingly demonstrates that nowhere in the history of the ELD's legislative process is there any evidence that the threshold under the ELD was intended to be high. [214] The term "significant", as Fogleman recalls, was first mentioned in the Commission's White Paper on Environmental Liability (2000). In its paper, the Commission suggested that "only significant damage should be covered" and directly linked the concept to the BHD by stating that "the criteria for this should be derived, in the first place, from the interpretation of this notion in the context of the HD".[215] The meaning of the term "significant" was further discussed in the negotiations that followed the publication of the White Paper (2000). From Fogleman's foray through the history of the ELD, it becomes clear that, also for reasons of legal certainty, the authors of the Directive were eager to clarify the concept of damage under the ELD and develop criteria for it. [216] Both, the Committee of the Regions (2000) as well as the European Parliament (2000), voiced concerns, that the vagueness of the term "significant" could result in "unacceptable thresholds" and eventually "severely restrict the applicability of the regime". [217] Following the Commission's publication of a proposal for the Directive in 2002 and in response to the requests by the Committee and the European Parliament to further specify the concept, the Council added Annex I to the ELD.[218]

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[211] See also Fogleman, *Biodiversity Damage from Authorised Activities*, 33.
[212] Milieu & IUCN, *ELD Biodiversity Damage Report*, 21.
[213] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 35.
[214] Fogleman, *Biodiversity Damage from Authorised Activities*, 35.
[215] Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, 19.
[216] Fogleman, *Biodiversity Damage from Authorised Activities*, 35-43.
[217] Fogleman, *Biodiversity Damage from Authorised Activities*, 36 , with reference to Opinion of the Committee of the Regions on the "European Commission White Paper on Environmental Liability" [2000] OJ C317/28, C317/29, Section 2.4. and Opinion of the Committee on the Environment, Public Health and Faure Policy for the Committee on Legal Affairs and the Internal Market on the White Paper on Environmental Liability (COM2000) 66 – C5-0140/2000 – 2000/2084(COS) (12 September 2000) 4.
[218] Fogleman, *Biodiversity Damage from Authorised Activities*, 38, with reference to Common Position (Nr. 98), Major innovations introduced by the Council [2003] OJ C 277 E/10, E/30.

As illustrated above, the criteria stated in Annex I are insufficient. While they state **how** the significant adverse changes to the baseline condition should be determined, namely by measurable data, and what type of information should be considered, such as number of individuals or their density, the criteria offer little guidance on a threshold, i.e. **what** classifies as "**significant**". Only in cases of a **proven effect on human health**, it is clear that the damage **must** be classified as significant. Interestingly, though, the Directive states types of damage that do **not** have to be classified as "significant". These are listed under Paragraph 3 of Annex I. The list includes "negative variations that are smaller than **natural fluctuations regarded as normal"** or damage where it is "established that [the protected species or habitats] will **recover, within a short time and without intervention**". In a kind of inverse conclusion, one could argue that everything that exceeds the minor damage/low thresholds[219] mentioned there **must** thus be classified as significant by the MS. Furthermore, the clarification that the minor damages listed in paragraph 3 do not have to be classified as "significant" suggests that they would normally be considered "significant". [220]

Altogether, the history outlined by Fogleman (2020) clearly shows that over the course of the negotiations on the definition of damage, terms and concepts from the BHD were increasingly used to define biodiversity damage under the ELD. According to Fogleman (2020) this also indicates that the authors of the Directive intended to adapt the significance threshold from the BHD. [221] Fogleman (2020) presents a number of additional arguments that suggest a low threshold under the ELD that is aligned with the thresholds established under the BHD:

- Recital 5 of the ELD, which states that "When the concept in question derives from other relevant Community legislation, the same definition should be used so that common criteria can be used and uniform application promoted". [222]
- The common objective of the ELD and the HD to halt biodiversity loss.[223]

[219] Arguably the damage listed there can be considered minor. In *Naturschutzbund Deutschland,* the ECJ states in para.46 that "[…]the first and third indents of that paragraph envisage damage that is minor with regard to the species or habitat concerned, [while]the second indent of that paragraph concerns damage whose scope may be considerable depending on the natural causes affecting the species or habitat concerned or the management measures taken by the operator.
[220] See ClientEarth, *Reviewing the Environmental Liability Directive: ClientEarth Recommendations* [ClientEarth, *Reviewing the ELD*] (2015), 9; Fogleman, *Biodiversity Damage from Authorised Activities,* 41.
[221] See Fogleman, *Biodiversity Damage from Authorised Activities,* 39.
[222] *Ibid.,* 40.
[223] *Ibid.,* 40 with reference to ELD Recital 1 and HD Article 4.

- a high significance threshold would render the obligation to carry out preventive and emergency measures "a nullity in the vast majority of cases because an operator cannot carry out the measures "without delay" or "immediately" when the operator has no way of knowing whether the damage caused by it is biodiversity damage under the ELD".[224]

The assumption of a low significance threshold for biodiversity damage under the ELD is also supported by an argument that relates to the special nature of biodiversity. According to Article 3(1)(a) ELD, the scope of the Directive is generally confined to the occupational activities that are listed as dangerous in Annex III. Non-dangerous occupational activities, i.e. activities not listed as dangerous under Annex III, are only covered in the case of biodiversity damage, see Article (1)(b) ELD. This exceptional extension of the liability regime to non-dangerous activities in the case of biodiversity damage was, amongst others, argued with the nature of the natural resources protected under the BHD, which the Commission considered to be particularly vulnerable and therefore [more] easily at risk of damage by activities that are not necessarily dangerous.[225] Moreover, it was argued that the BHD protected species and natural habitats regardless of the activity that causes damage to them and that, in order to align the Directives, it was necessary to include, in the case of biodiversity damage, both dangerous and non-dangerous activities.[226]

11.1.2.4 Discussion of findings on threshold for damage to protected species and habitats under the ELD

Altogether, the history of the ELD combined with the additional arguments presented by Fogleman (2020) suggest that the threshold for damage to protected species and habitats under the ELD was meant to be low and aligned with the threshold requirements under the BHD. An alignment of the ELD threshold with the threshold requirements under the BHD would necessitate the thresholds to be clearly defined. However, this is currently not the case. The vagueness of the terms used under the HD may work well for the determination of conservation measures. A regime that triggers liability, however, needs clearer indicators. One way forward could be to further substantiate the criteria set out in Annex I of the ELD and harmonise it with the threshold requirements under the BHD. Ideally such an approach would guarantee that any

[224] See Fogleman, *Biodiversity Damage from Authorised Activities,* 43.
[225] For further reference, see discussion under Chapter 11.3.1, *The two standards of liability in the case of biodiversity damage.*
[226] European Commission, *Environmental Liability White* Paper *(COM(2000) 66 final),* § 4.2.2.

damage that needs to be prevented or restored/remediated by a MS under the BHD also falls within the scope of the ELD, so that given all other requirements under the ELD are met, the polluter can be held financially liable to prevent and remediate the damage it caused. After all, there is no reason why a polluter should only be held financially responsible for biodiversity damage that exceeds certain threshold values, while leaving it to the State (and thus the general public) to pick up the bill for the rest.

Due to the different aims of the Directives (conservation vs. liability), aligning the thresholds of the Directives may prove difficult or even undermine the effectiveness of the Directives in achieving their individual aims. The question is therefore if a threshold for biodiversity damage under the ELD is necessary at all. The eNGO ClientEarth (2015), for example, suggests to remove the threshold requirement entirely.[227] For protected species and habitats, any impact should be considered to have a "significant adverse effect", with the exception of *de minimis* impacts and natural recovery. The eNGO argues with the Environmental Impact Assessment Directive, under which - due to their added vulnerability and sensitivity - impacts on protected species and habitats are likely to be significant *per se*.[228] Finally, the eNGO suggests to further emphasize the importance of applying the precautionary principle to any uncertainties concerning the threshold requirement. This approach, however, bears the risk of merely shifting the problem, as it would then become necessary to determine whether an incident of damage has caused "de minimis impacts" or if "natural recovery" can be assumed.

Eventually, in the interest of legal certainty, a clearer description of what constitutes "significant" damage and thus triggers liability will remain necessary. Obviously, this is also the approach currently pursued by the Commission (2021). In its recent "Notice on Environmental Damage", the Commission (2021) has listed specific examples of what constitutes significant biodiversity damage, apparently starting from a low threshold.[229] In order to be aligned with the level of protection warranted under the BHD, any remaining

[227] ClientEarth, *Reviewing the ELD*, 8.
[228] ClientEarth, *Reviewing the ELD*, 8, with reference to *European Communities, Guidance on EIA Screening: Screening Checklist and Checklist of Criteria for Evaluating the Significance of Environmental Effects (2001).*
[229] European Commission, *Commission Notice: Guidelines Providing a Common Understanding of the Term 'Environmental Damage' as Defined in Article 2 of Directive 2004/35/EC on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage* [2021] OJ C118/1 [European Commission, Commission Notice on Environmental Damage [2021] OJ C118/1].

uncertainties concerning the threshold requirement under the ELD should be resolved by observing the precautionary principle, as is the case under the BHD.[230]

11.1.3 Summary of findings on the evaluation of biodiversity damage under the ELD

The evaluation of the provisions on the assessment of biodiversity damage under the ELD show the close integration of the ELD liability regime with the provisions of the BHD.

To begin with, the application of the ELD is basically confined to the species and habitats protected under the BHD.[231] Correspondingly, the scope of biodiversity, i.e. natural resources protected under the ELD, is largely determined by the provisions of the BHD, unless the scope is extended by MS to other natural habitats and species (Article 2(3)(c) ELD).

Similarly, the definition of what constitutes damage under the ELD in the case of damage to protected species and habitats is closely intertwined with provisions under the BHD. However, it is clear from the above findings that this integration, at least in its current design, leads to a number of problems. These concern, on the one hand, ambiguities in the interpretation of the term "significant" and, on the other hand, the use of terms and concepts from a conservation regime (BHD) in the context of a liability regime (ELD. In summary, the study of the evaluation of biodiversity damage found that:

Scope of protected species and habitats

- In principle, the scope of biodiversity covered under the ELD corresponds with and is thus **restricted** to the natural habitats and species protected under the BHD.
- In two aspects the scope differs from the BHD, both restricting as well as expanding it: The **restriction** is that the ELD unlike the BD does not cover all wild bird species, but only migratory birds and birds considered particularly threatened. The **expansion** is that the ELD also covers protected species, habitats of species and natural habitats, which occur outside Natura 2000 sites, whereas under the HD, the protective regime under Article 6 only applies to species, habitats of species and natural habitats inside Natura 2000 sites.

[230] See also in this regard Chapter 11.1.2.4., *Discussion of findings on threshold for damage to protected species and habitats under the ELD*, with reference to ClientEarth, *Reviewing the ELD*, 8.
[231] As discussed above, protection under the ELD is broader in some areas and narrower in others.

- Half of the MS have decided to make use of the option under paragraph 3 (c) and have included within the scope of their national liability regime, species and natural habitats not covered under the BHD.

Threshold for biodiversity damage

- The **territorial scope of the assessment** of "**favourable conservation status**" under the ELD should be clarified to ensure correct and effective implementation of the liability regime under the ELD. Currently it relates to "the European territory of the MS to which the treaty applies or the territory of a MS or the natural range", without any additional criteria, that, in a given case, determine the appropriate territorial scope for the assessment.
- the concept of "**natural range**", which is used under the ELD to define one of the three levels of assessment, is not a suitable reference point to measure changes in the favourable conservation status. Relating the assessment of the damage under the ELD to the "natural range" of a species or habitat links the **threshold for liability** under the ELD to a "**moving target**", as has been illustrated by *Fogleman (2015).*
- In more general terms, the concept of a "**favourable conservation status**" may not serve as a useful reference to determine the threshold for the application of the ELD liability regime and may end up in setting the threshold for liability too high.[232]
- In the interest of legal certainty and a more level playing field, a clearer description of what constitutes "**significant"** damage and thus triggers liability will remain necessary. There is a lack of guidance under the ELD on what actually is to be considered "**significant**", with the consequence that the interpretation of the term considerably varies across MS. Ideally the clarification should include reference to the thresholds under the HD and clarify the extent to which these thresholds correspond or deviate from each other.
- Obviously, this is also the approach currently pursued by the Commission (2021). In its recent "Notice on Environmental Damage", the Commission (2021) has listed specific examples of what constitutes significant biodiversity damage, apparently starting from a low threshold.[233]

[232] See reference above to De Sadeleer, *Wildlife under Threat*, 45.
[233] European Commission, *Commission Notice on Environmental Damage* [2021] OJ C118/1.

- In order to be aligned with the level of protection warranted under the BHD, any remaining uncertainties concerning the threshold requirement under the ELD should be resolved by observing the precautionary principle, as is the case under the BHD.[234]
- Information gathering under the BHD and the ELD should be integrated to ensure the **availability of suitable data on the baseline condition**.

11.2 Activities covered under the ELD

Generally, the scope of activities covered under the ELD is confined to activities that are considered dangerous or potentially dangerous and of an "occupational" nature. The concept of "occupational activity" closely ties in with the definition of the person liable under the ELD, the "operator", defined in Article 6(2) as

> "any natural or legal, private or public person who operates or controls the occupational activity".

Moreover, where this is provided for in national legislation, persons to whom "decisive economic power over the technical functioning" of an occupational activity has been delegated, including the "holder of a permit or authorisation" or the "person registering or notifying" the activity is included in the definition.[235]

The following chapters further explore the scope of activities covered under the ELD, moving from the meaning of dangerous or potentially dangerous activities (Chapter 11.2.1.) to the interpretation of the term "occupational", which has been further clarified by recent ECJ case law (Chapter11.2.2.).

11.2.1 Dangerous or potentially dangerous activities

In principle, Article 3(1)(a) ELD confines the scope of the Directive to environmental damage caused by activities that are considered dangerous or potentially dangerous.[236] The activities considered dangerous or potentially dangerous are listed in Annex III of the Directive.[237] They

[234] See also in this regard Chapter 11.1.2.4., *Discussion of findings on threshold for damage to protected species and habitats under the ELD*, with reference to ClientEarth, *Reviewing the ELD*, 8.
[235] ELD, Art. 2(6)
[236] ELD Article 3(1)(a)
[237] Activities listed in Annex III are considered to be dangerous or potentially dangerous activities and include, inter alia, industrial and agricultural activities requiring permits under the 1996 Integrated Pollution Prev ention and Control Directiv e, waste management operations, the release of pollutants into water or into the air, the production, storage, use and release of dangerous chemicals, and the transport, use and release of genetically modified organisms (GMOs).

are defined by reference to other pieces of EU environmental legislation and concern, *inter alia*, the operation of many industrial activities, waste management operations, the release of pollutants into water or into the air, the production, storage, use and release of dangerous chemicals, or the transport, use and release of genetically modified organisms (GMOs). Damage caused by activities other than those listed in Annex III falls outside the scope of the ELD ("non-Annex III activities" or "non-specified activities").

An exception, however, applies in the particular case of biodiversity damage, where according to Article 3 (1) (b) ELD the ELD liability regime shall also apply to damage caused by non-specified (non-Annex III) activities. The reasons for this extension of liability in the particular case of biodiversity damage can be traced back to the Commission's White Paper (2000).[238] The Commission considered it necessary to align a future liability regime with the BHD, which did not distinguish between dangerous and non-dangerous activities.[239] Furthermore, the Commission stressed the nature of the natural resources protected under the BHD, which it considered to be particularly vulnerable and therefore [more] easily at risk of damage by activities that are not necessarily dangerous.[240]

Where biodiversity damage was caused by non-Annex III activities, the *Commission (2000)* proposed to apply a different standard of liability. Instead of applying strict liability, in the case of damage caused by non-Annex III activities, liability should be fault-based and would therefore require proof that the operator had acted wrongly intentionally, by negligence, or by insufficient care.[241] The possible rationale for this and the resulting two standards of liability in the case of biodiversity damage are discussed in Chapter 11.3. on the ELD liability rules.

11.2.2 Activities of an occupational nature

The scope of the ELD is further confined to activities that are of an "occupational" nature.[242] "Occupational activity" is defined under Article 2(7) ELD as

> any activity carried out in the course of an economic activity, a business, or an undertaking, irrespectively of its private or public, profit, or non-profit character.

[238] European Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, § 4.2.2.
[239] *Ibid.*
[240] *Ibid.*
[241] *Ibid.*, § 4.2.2. and supranote 10. According to the Commission, such an act (or omission) "may involve non-compliance with legal rules or with the conditions of a permit, or may occur in any other form."
[242] See Article 3 ELD

The nature of an "occupational activity" was addressed in a preliminary ruling by the ECJ in *Naturschutzbund Deutschland* (C-297/19). The case concerned regular drainage of a protected wetland, which was carried out by a **public body**, the "Deich-und Hauptsielverband Eiderstedt" (Eiderstedt Dike and Main Sill Association) . For the public interest, the Eiderstedt Dike and Main Sill Association operated a pumping station for residential and agricultural purposes. The drainage caused water levels to fall, with adverse effects on a protected bird species, the Black Tern, *Chlidonias niger*. The referring Court, the German Federal Administrative Court, sought to clarify whether an activity **carried out in the public interest** constitutes an "occupational activity" within the meaning of Article 2(7) of the ELD. [243]

The Court answered the question in the affirmative and held that the term "occupational activity" covers all activities carried out in an occupational context, as opposed to a purely personal or domestic context.[244] The activities do not have to be market-related or competitive to fall within the scope of the Directive.[245] In particular, the term "occupational activity" would also include activities of a legal person governed by public law that operates in the public interest pursuant to a statutory assignment of tasks, such as the operation of a pumping station for the purpose of draining agricultural land.[246]

The broader repercussions of the Court's decision in *Naturschutzbund Deutschland* (C-297/19) are discussed in Chapters 11.3.2.3 and 10.3.2.4., which discuss the ruling in its entirety.

11.2.3 Summary of findings on activities covered under the ELD

From the above examination of the activities covered under the ELD and with a view to the subsequent comparison of the ELD and ECD, the following aspects can be summarised:

- generally, the scope of activities covered under the ELD is confined to activities that are considered dangerous or potentially dangerous and of an "occupational" nature: all other activities falls outside the scope of the Directive.
- the activities considered dangerous or potentially dangerous are listed in Annex III of the Directive

[243] *Naturschutzbund Deutschland,* C-297/19, para.28.
[244] *Ibid.,* para.76
[245] *Ibid.*
[246] *Ibid.,* para.77.

- an exception applies in the particular case of biodiversity damage, where the ELD also applies in cases where damage was caused by non-specified (non-Annex III) activities
- the term "occupational activity" covers all activities carried out in an occupational context, including activities carried out in the public interest and irrespective of whether these activities are market-related or competitive.
- the term "occupational" excludes all activities carried out in a purely personal or domestic context

11.3 Liability rules

11.3.1 The two standards of liability in the case of biodiversity damage

As previously explained, only in the case of biodiversity damage, two standards of liability apply under the ELD: **strict liability** and **fault-based liability**.[247] **Strict liability** applies to biodiversity damage caused by any of the **dangerous occupational activities** listed in Annex III ("Annex III activities"). **Fault-based liability** applies to biodiversity damage caused by **any occupational activities** other than those listed in Annex III ("non-Annex IIII activities"). Reportedly, much of the damage to biodiversity is caused by smaller operators engaged in non-Annex III activities (e.g. agriculture, forestry, fisheries or construction activities).[248] Thus it is to be expected that the requirement to prove operator fault or negligence will apply in a considerable number of cases – namely in all those cases, where damage to biodiversity was caused by non-Annex III activities.[249]

Applying a **standard of strict liability** means that only the causal link between the damage and the occupational activities of the identified individual operator(s) needs to be established.[250] There is no need to prove that the operator has been at fault or negligent**. Fault-based liability**,

[247] In the case of water damage and land damage, the scope of the Directive is confined to damage from dangerous or potentially dangerous activities and the standard of liability that applies in these cases is strict liability, as previously demonstrated.
[248] BIO Intelligence Service, Stevens & Bolton LLP, V Fogleman, K Salès et al, Study on ELD Effectiveness, Scope and Exceptions – Final Report, prepared for European Commission, DG Environment, Publications Office (2014), [online] [BIO Intelligence et al, *Study on ELD Effectiveness, Scope and Exceptions*],12, with further references; ClientEarth, *Reviewing the ELD*, 10-11.
[249] Milieu & IUCN, *ELD Biodiversity Damage Report*, vi, 83.
[250] Concerning the requirement for a causal link under the ELD, see Recital 13 and Article 4(5) of the ELD. For further reference, see Chapter 11.3.3., *Requirements for establishing the causal link.*

on the other hand, requires proof that the operator has acted wrongly intentionally or by negligence, or by insufficient care.[251]

The Commission (2000) explained the rationale for applying strict liability to dangerous activities in its White Paper arguing that a person who engages in an inherently dangerous activity should also bear the risk of that activity causing environmental damage, rather than the victim or society at large.[252] Where, on the other hand, biodiversity damage was caused by (non-dangerous) non-Annex III activities, the Commission (2000) proposed to apply a fault-based standard of liability. Such fault could involve "non-compliance with legal rules or with the conditions of a permit", or could "occur in any other form".[253] Other than for fault, activities carried out in compliance with measures implementing the BHD should not give rise to liability.[254] Where fault of the operator could not be established, the MS would be responsible for the restoration or compensation of biodiversity caused by non-Annex III activities. The Commission (2002) did not further explain if such responsibility of the MS would arise under the ELD or under the BHD. Notably, the Commission's subsequent proposal for the Directive included an obligation of the MS to ensure that the necessary preventive or restorative measures are taken, where, for different reasons, the operator could not be held financially liable for the prevention and/or remediation of the damage.[255]

Several commentators have criticised the prescription of fault-based liability in the case of non-Annex IIII activities.[256] There are a number of arguments that support the removal of the fault or negligence requirement for non-Annex III activities.

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[251] European Commission, *Environmental Liability White Paper* (*COM(2000) 66 final)*, § 4.2.2 and supranote 10. According to the Commission, such an act (or omission) "may involve non-compliance with legal rules or with the conditions of a permit, or may occur in any other form."
[252] See European Commission, *Environmental Liability White Paper* (*COM(2000) 66 final)*, § 4.3.
[253] *Ibid.*, § 4.2.2 and supranote 10.
[254] *Ibid.*, § 4.2.2. As will be demonstrated in the following chapter, this consideration is reflected in the adopted version of the ELD under the exemption for acts authorised under the BHD, as stated in Article 2 of the ELD.
[255] European Commission, *Explanatory Memorandum to the Proposal for a Directive on Environmental Liability*, COM(2002) 17 final, Article 9. In the adopted text of the Directive, this was, however, reduced to a power of discretion. For further reference, see Chapter 11.7., *Orphan damage*.
[256] Milieu & IUCN, *ELD Biodiversity Damage Report*, vi and 83; BIO Intelligence et al, *Study on ELD Effectiveness, Scope and Exceptions*, 12; ClientEarth, *Reviewing the ELD*, 10-11.See also: European Parliament, *2017 ELD Resolution* (26 October 2017), para.36. Others, inversely, have questioned whether the polluter pays principle requires strict liability at all and seem to argue in favour of extending a fault-based liability regime to Annex III activities. See Van Calster & Reins, *The ELD's Background*, 27.

The main argument is linked to the difficulties in providing evidence in environmental liability cases– a fact that is well established and also acknowledged by the Commission (2000) in its White Paper.[257] Requiring proof of fault or negligence would only further complicate the application of the ELD and this in a considerable number of cases – namely in all those cases, where damage to biodiversity was caused by non-Annex III activities.[258] Indeed experiences in the MS so far confirm that requiring fault or negligence on the part of the operator complicates the application of the ELD.[259]

Another argument against the prescription of fault or negligence concerns its apparent contradiction with the administrative liability systems of the MS. Administrative liability regimes that require proof of fault or negligence or distinguish between different types of activities are exceedingly rare in the MS.[260] As Saurer (2017) summarised it for German law: the requirement of fault is an "irritation" for German administrative law, where, according to the traditional principles, the liability of a person who has caused damage is not dependent on fault, but governed by the principle of effective danger prevention ("Prinzip der effektiven Gefahrenabwehr").[261]

Inevitably, the question arises how such differentiation between different types of activities is then justified.[262] As previously demonstrated, the Commission (2000) mainly argued the application of two different standards of liability with the risks associated with different types of activities (dangerous vs. non-dangerous). A relatively simple explanation for the differentiation between two different standards of liability for different types of activities may be that the ELD was initially conceived as a civil liability regime and that at the time of the publication of the White Paper, the proposed regime still included both civil as well as administrative law aspects. In contrast to administrative liability regimes, in civil liability regimes applying strict liability to dangerous activities and fault-based liability to other

[257] See European Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, § 4.3. (p.16). For further reference on difficulties relating to proof in environmental cases, see also Part III on ECD, Chapter 19.2.2., *Dark figure of unrecorded environmental crime*.
[258]ClientEarth, *Reviewing the ELD*, 10-11; Milieu & IUCN, *ELD Biodiversity Damage Report*, vi and 83.
[259] Milieu & IUCN, *ELD Biodiversity Damage Report*, vi and 83.
[260] BIO Intelligence et al, *Study on ELD Effectiveness, Scope and Exceptions*, 63.
[261] See J Saurer, Das Verschuldenserfordernis im Umweltschadensgesetz, *Natur + Recht* 39:5 (2017), 289–292 [Saurer, *Verschuldenserfordernis im Umweltschadensgesetz*], with further reference to Gellermann, in: Landmann/Rohmer (Hrsg.), Umweltrecht, 81. EL 2016, 19 BNatSchG, Rdnr. 14; Kloepfer, Umweltrecht, 4. Aufl. 2016, 6 Rdnr. 332 ff.
[262] See Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, § 4.3.

activities is common. In German tort law, for example, which generally requires fault on the part of the tortfeasor, certain exceptions to the principle of fault exist and instead strict liability applies. Where strict liability applies, liability is completely independent of any unlawful conduct, negligence or intent. Instead, it is linked to a particular risk propensity of an activity due to an increased probability of an accident. Most notably, under Section 1 of the Environmental (Civil) Liability Act (UmweltHG) the owner of an installation listed in Annex I of the UmweltHG is strictly liable for **death, personal injury, damage to health or damage to property** caused by environmental effects emanating from the installation. Annex I UmweltHG lists installations which, due to their nature or operation, are particularly likely to cause harmful effects on the environment. This is intended to cover the risks that can never be completely ruled out despite all conceivable care in dealing with sources of increased danger. Other examples for the application of strict liability in German civil law can be found in product liability or pharmaceutical law.

Historically, therefore, the application of two different standards of liability may be a remnant of the genesis of the ELD for which there is no real justification under the ELD in its current design as an administrative liability regime– at least from a legal point of view.[263]

In its recent REFIT evaluation of the ELD, the *Commission (2016)* acknowledges that

> "a broadening of the strict liability standard to cover all economic activities (not only dangerous activities listed in Annex III ELD) [would] encompass more environmental damage being treated under the ELD [which would] thus increase the level of environmental protection and the effectiveness of the Directive in particular with respect to biodiversity damage by replacing completely the fault-based liability standard". [264]

In more general terms, the Commission (2016) also notes that

> "A strict liability system (which does not require any form of culpability) represents the polluter-pays principle more adequately and is commonly regarded as highly effective

[263] For further reference on the genesis of the ELD, see Chapter 14, *Background, history and evolution of the Environmental Criminal Liability Directive 2008/99/EC.*
[264] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 39.

to its aims if it is strictly enforced and not undermined by too many exceptions and defences."[265]

On the other hand, the Commission (2016) emphasizes that

> "significant draw-backs in terms of additional financial burdens on operators and an increase in insurance premiums or else financial security payments would need to be considered". [266]

From these observations, the Commission (2016) concludes rather surprisingly, that

> "the principle decision […] to reserve strict liability to dangerous occupational activities while other occupational activities should remain being subject to a fault-based liability standard could be verified".

Further discussion of the pros and cons of changing the fault requirement is not provided by the Commission (2016). It appears that economic factors are being weighed heavily in the consideration process, such as the above cited "additional financial burdens on operators" and an "increase in insurance premiums or else financial security payments". [267]

Notably, the European Parliament (2017) has called for a removal of the requirement of fault or negligence and an extension of strict liability to non-Annex III activities.[268] The Parliament argues that the application of strict liability to all activities would improve the effectiveness of the ELD in "implementing the polluter-pays-principle" and "provide an incentive for operators to undertake proper risk management for their activities".[269]

According to the 2016 REFIT evaluation of the ELD, fault or negligence based liability for damage to biodiversity was established in 31 cases, making it "third highest frequency in causing environmental damage".[270]

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[265] *Ibid.*, 14.
[266] *Ibid.*The Commission based this claim on a study by BIO Intelligence et al, *Study on ELD Effectiveness, Scope and Exceptions*, which, unlike the Commission, concluded that removal of the fault-based standard of liability would improve the effectiveness of the Directive.
[267]*Ibid.*
[268] European Parliament, *2017 ELD Resolution* (26 October 2017), para.36.
[269] *Ibid.*
[270] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 30.

In summary, while more data may be necessary in order to determine the impact of the fault requirement on biodiversity cases, the findings of existing studies appear to confirm that its removal is likely to simplify the application of the ELD to biodiversity damage in a considerable number of cases and thus improve the effectiveness of the ELD.

11.3.2 Exceptions to liability for biodiversity damage

There are a few cases in which the operator can be exempted from liability under the ELD. Exceptions to liability apply *inter alia* to environmental damage (or any imminent threat of such damage) caused by armed conflict, natural disaster, liability for types of environmental damage covered by international conventions (e.g. maritime pollution), and nuclear risks, which are covered by the Euratom Treaty.[271] The Directive also excludes liability for damage (or any imminent threat of such damage) caused by **pollution of a diffuse character**. [272]

Two further exceptions to liability exclusively apply to biodiversity damage. The two exceptions are damage caused by an "act" authorised under Article 6(3) and (4) HD and damage that results from the "normal management of the site". They are discussed in the following.

11.3.2.1 Damage from activities authorised under the BHD

According to subparagraph 2 of Article 2 (1)(a) ELD, liability under the ELD does not attach to damage resulting from an "act" authorised in accordance with the BHD [**emphasis added**]:

> "**Damage** to protected species and habitats **does not include** previously identified adverse effects which result from an act by an operator which was expressly authorised by the relevant authorities in accordance with […] Article 6(3) and (4) HD".[273]

Notably, this exemption, however, **only** applies to adverse effects **previously identified** and **expressly authorised**. It therefore remains the responsibility of the operator to ensure that any negative effects of the authorised plan or project do not exceed the scope of the project approval.

[271] ELD Article 4 (1)-(3).
[272] ELD Article 4 (4).
[273] ELD Article 2 (1)(a) subpara. 2; The provision further states that in the case of habitats and species not covered by EU law, such authorisation must be in accordance with equivalent provisions of national law on nature conservation. Article 16 HD and Article 9 BD provide derogations for species protection measures. The provision gives expression to Recital 6 of the ELD, which states that [emphasis added] "account should […] be taken of specific situations where Community, or equivalent national, legislation allows for certain derogations from the level of protection afforded to the environment".

Confining the exemption under Article 2(1)(a) ELD to previously identified negative effects is also aligned with ECJ case law on the HD. [274] In several rulings, the ECJ has clarified that the approval of a plan or project under Article 6(3) HD does not relieve MS of their obligation to avoid deterioration and significant disturbance under Article 6(2) HD.[275] Where a plan or project approved under Article 6(3) HD has adverse effects which have not been previously identified and which may result in deterioration or disturbance, Article 6(2) HD continues to apply.

11.3.2.2 Damage from "normal management" of the site

The ELD further provides, that damage can be exempt from liability when it results from the "**normal management**" of the site. This is expressed in the **second indent of the third paragraph of Annex I**, which states that the following does not have to be classified as significant damage:

> "negative variations due to natural causes or resulting from interventions relating to the normal management of sites, as defined in habitat records or target documents or as carried on previously by owners or operators".

The exception provides for **two cases** in which damage does not have to be classified as "significant damage", namely (i) damage due to **natural causes** and (ii) damage resulting from interventions relating to the "**normal management**" of sites.

A recent ECJ judgement on the ELD, *Naturschutzbund Deutschland* (C-297/19), has addressed and further clarified the scope of the exceptions stated under **Annex I ELD (normal management**) and under **Article 2(1)(a) ELD (authorised activities**).[276] The judgment places a strong emphasis on the precautionary principle and recalls that the liability regime established under the Directive "is based on a high degree of environmental protection and on the precautionary principle and the "polluter-pays" principle".[277] The potential repercussions of the judgment for the implementation of the two exceptions are discussed in the following.

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[274] For further reference, see also in this regard C Kieß, *Die Sanierung von Biodiversitätsschäden nach der europäischen Umwelthaftungsrichtlinie* (2008, Springer-Verlag Berlin Heidelberg) [Kieß, *Biodiversitätsschäden und Umwelthaftung*], 69.

[275]See *Waddenzee* (C-127/02), and the additional case law cited in Chapter 5.2.3.2.1., *A general obligation of protection: the ongoing nature of Article 6(2) HD*.

[276] See *Naturschutzbund Deutschland* (C-297/19), para.28. See also previous discussion of the case under 11.2., *Activities covered under the ELD*.

[277] See *Naturschutzbund Deutschland*, C-297/19, para.31. The Court refers to *Túrkevei Tejtermelő Kf*, C-129/16, paras.47, 53 and the case law cited there.

11.3.2.3 Liability for authorised activities? The ECJ ruling in Naturschutzbund Deutschland (2020)

The case ***Naturschutzbund Deutschland (2020)*** concerned regular drainage of a protected wetland with adverse effects on a protected bird species. The management plan of the site states that the protected area remains mainly managed traditionally as grassland over extensive areas. [278]

For the purposes of habitation and agricultural use, the protected site (the "Eiderstedt peninsula") has to be drained, which takes place by means of ditches, located between the plots. [279] The drainage involves the operation of a pumping station, which irrigates and drains agricultural land. The referring Court, *inter alia,* asked to clarify

> - under what conditions the **management** of sites, as defined in habitat records or target documents, is to be considered **"normal"** within the meaning of the ELD; and
> - what the timescale is for deciding if management is **"as carried on previously"** by owners and operators. [280]

The ECJ started with a number preliminary observations regarding the two exceptions to liability from biodiversity damage, namely the exceptions stated under Article 2(1)(a) ELD (**authorised activities**) and Annex I ELD (**normal management**).

First the Court addressed the **third paragraph of Annex I**, which states that the damage listed there "**does not have to be classified as significant damage**". The Court clarified, that the use of the words "does not have to" means that it is at the discretion of the MS whether or not they consider the damage listed in the third paragraph of Annex I to be significant. [281]

Next, the Court addressed the **exemption for authorised activities** stated under the **second paragraph Article 2(1)(a) ELD** and noted that any damage falling within its scope is automatically excluded from the concept of "damage to protected species and habitats" [282] and

[278] See *Naturschutzbund Deutschland,* C-297/19, para.19.
[279] *Ibid.,* para.20.
[280] *Ibid.,* para.28.
[281] *Ibid.,* para.36.
[282] *Ibid.,* para.37.

that the question of environmental damage is therefore only relevant, where this exclusion does not apply. [283]

The Court finds that both exceptions "**must necessarily be interpreted strictly**" in so far as they render the ELD liability regime inapplicable to certain damage to protected species and habitats. [284]

Regarding the exception stated under the **third indent of Annex I of the ELD** the Court observes that the scope of the damage may be considerable depending on the natural causes or the management measures taken by the operator. [285] The Court notes that the **normal management of sites** involves two alternatives. [286] These two alternatives include the normal management of sites

- **as defined in habitat records or target documents**;[287] or
- **as carried on previously by owners or operators**.

The Court makes it clear that both alternatives require that the management measures can be considered "**normal**". [288] Regarding the latter alternative it is therefore not enough to demonstrate that the damage has been caused by previous management measures, these measures also need to be considered "normal". [289] Otherwise MS would have the power to accept management measures that are excessively harmful merely on the ground that they result from previous practice. [290] Such a result would be contrary to the requirements that follow from the **precautionary principle** and the **polluter pays principle**. It would widen the scope of the exceptions excessively and render the liability regime established under the ELD "partly redundant" by excluding potentially significant damage caused by "abnormal" action.

[283] *Ibid.,* para. 38.
[284] *Ibid.,* paras. 44-45.
[285] *Ibid.,* paras. 46.
[286] *Ibid.,* para.40.
[287]Regarding the concepts of "habitat records" and "target documents," the Court observes that neither the Birds Directive nor the Habitats Directive refer to these concepts, but it is apparent from the practice of the Member States that these correspond to the documents Member States must adopt in order to comply with the Birds and Habitats Directives. Essentially, these documents contain the "very measures necessary for management of protected species and habitats", see *Naturschutzbund Deutschland,* C-297/19, para. 59.
[288] See *Naturschutzbund Deutschland,* C-297/19, paras.42-43.
[289] *Ibid.,* para.47
[290] *Ibid.,* para.48

The ECJ also addressed the meaning of the word "**normal**". In this regard, the Court held that "in order not to negate the effectiveness of the word "normal" in the context of environmental protection, […] management can be regarded as normal only if it is consistent with good practices such as, *inter alia*, good agricultural practices" [291] and "if it **complies with the objectives and obligations laid down in the BHD**". [292] In order to provide an answer specifically to the question of the referring Court and considering the facts described there, the ECJ ruled that [**emphasis added**]

> "the concept of "normal management" **may**, in particular, cover agricultural activities taken as a whole carried out on a site hosting protected species and natural habitats, that is to say, including activities which may be the essential complement thereof, such as irrigation and drainage and, therefore, the operation of a pumping station". [293]

11.3.2.4 Discussion of findings on exceptions to liability and the repercussions of the Court's ruling in Naturschutzbund Deutschland

Fogleman (2020) concludes from the Court's preliminary ruling in *Naturschutzbund Deutschland* (C-297/19) and from the Court's previous ruling in *Gert Folk* (C-529/15) that some, probably many, authorised activities affecting Natura 2000 sites will have to be modified or stopped to prevent further damage, and that damage already caused by such activities will have to be remediated.[294] The repercussions of such an interpretation of the Court's rulings are potentially enormous, since an authorisation would no longer guarantee that damage caused by these activities falls outside the scope of the ELD and thus protect an operator from liability.

An important observation Fogleman (2020) makes on *Naturschutzbund Deutschland* (C-297/19) is that the damage in this case is not the result of an accident, but of an activity the MS had authorised, namely the operation of a pumping station, that "had been carried out for many years" as part of the management of a protected site.[295] She refers to this type of damage as "chronic damage" and in her considerations clearly distinguishes damage caused by authorised

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[291] *Ibid.*, para.52
[292] *Ibid.*, para.55. As previously noted, Article 6(1) HD on the management of protected sites does not apply to the sites protected under the Birds Directive (SPAs), and the management of SPAs is still subject to Article 4(1) and 4(2) of the BD, which also require the adoption of conservation measures.
[293] See *Naturschutzbund Deutschland* (C-297/19), para.57.
[294] Fogleman, *Biodiversity Damage from Authorised Activities*, 2, 30. For further discussion of damage resulting from authorised activities, see also Chapter 11.3.4.1., *Permit Defence*. For further discussion of a duty to prevent damage from authoriSed activities see Fogleman, *Duty to Prevent Environmental Damage*,707-721, and related discussion in Chapter 10.4.3., *Duty to prevent damage from authorised activities*.
[295]Fogleman, *Biodiversity Damage from Authorised Activities*, 1.

activities from accidental damage. While the Court acknowledges that damage resulting from **authorised activities** is in principle exempt from the ELD liability regime, the Court also stresses that the exemptions need to be interpreted strictly - in light of the **precautionary principle** and the **polluter pays principle**. Addressing the exception for normal management of a site the Court finds that such a strict interpretation of the exceptions can only mean that a MS is not empowered to accept measures that are "**excessively harmful**", and thus "liable to endanger or even destroy those species or habitats and to increase the risk of biodiversity loss in breach of the conservation obligations owed by the MS under the HD and the BD".[296] Because this would widen the scope of the exception "excessively" and render the liability regime established under the ELD "partly redundant".[297] Although the Court does not explicitly apply the same considerations to the exception for authorised activities stated in Article 2(1)(a) ELD, the question arises whether a MS should then be allowed to authorise, by way of permits, activities that are likely to endanger protected biodiversity and thus to be in breach of MS' obligations under the BHD. In fact, there is no reason why the same considerations should not apply to the exception for authorised activities. More generally, in consistent application of the Court's considerations concerning the exception for the normal management of a site, one should be able to conclude from the Court's ruling that the exception for authorised activities stated in Article 2(1)(a) ELD is equally confined to acts that comply with MS **conservation obligations under the BHD**. This would mean, unlawful authorisations that are in breach of the BHD do not fall within the scope of the exception referred to in Article 2(1)(a) ELD and thus do not exempt the operator from liability under the ELD.

Such reading of the judgement is also aligned with the Court's preliminary ruling in *Gert Folk* (C-529/15). The case was about water damage caused by a hydroelectric power plant that was authorised in 1998 and began operations in 2002. The ruling addressed, *inter alia*, the exception for water damage stated under Article 2(1)(b) ELD. The exception applies to cases where the derogation under Article 4(7) of the Water Framework Directive (short:"WFD") applies.[298] In *Gert Folk* (C-529/15) the authorisation for the hydroelectric power plant had been granted in accordance with national provisions but without an assessment of whether the conditions for a derogation under Article 4(7) WFD had been satisfied. The referring (Austrian) Court sought

[296] See *Naturschutzbund Deutschland*, C-297/19, para.48
[297] *Ibid.*
[298] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, Official Journal L 327, 22/12/2000, P. 0001–0073.

to clarify whether, in order to determine whether environmental damage within the meaning of Article 2(1)(b) ELD had occurred, those conditions must be assessed by the court itself.[299] The ECJ held that a national court may review the legality of the authorisation and may deny the exemption if the authorisation was not issued in full compliance with the derogation regime laid down in Article 4(7)(a) to (d) WFD. [300] The Court also made it clear, that the exception stated under Article 2(1)(b) ELD precludes a provision of national law

> "which excludes, generally and automatically, that [significant] damage be categorised as "environmental damage", due to the mere fact that it is covered by an authorisation granted under that law". [301]

In conclusion, the Court's ruling in *Gert Folk* (C-529/15) is further evidence of the need for a strict reading of the exceptions stated under the ELD.[302]

Another of Fogleman's (2020) observations on the case *Naturschutzbund* (C-297/19) deserves closer attention. She notes that of the few cases (six in total) that the ECJ has so far decided in relation to the ELD, two cases have concerned authorised activities already. [303] Nevertheless, the prevailing view seemed to be that liability under the ELD applied primarily to accidental damage. Only rarely would national authorities apply the ELD to damage caused by authorised activities.[304]

As noted in the historical outline of the ELD, discussions on an EU-wide liability regime were initially triggered by catastrophic accidents such as the fire at the Sandoz factory in Basel. However, from the outset, the Commission included damage from authorised activities in its considerations for a liability regime. Fogleman (2020) draws attention to the Green Paper on Remedying Environmental Damage (1993), where the Commission stated, that

> "damage from industrial accidents forms only a small part of the environmental damage occurring within the Community today. Emissions from industrial facilities and motor vehicles pollute the air, causing forests to die. Waste waters from cities and farms pollute surface and ground waters. Hazardous substances deposited in the past contaminate soils. The damage caused by these non-accidental activities may be less spectacular than

[299] *Gert Folk,* C-529/15, para.35.
[300] *Ibid.,* para.35-40.
[301] *Ibid.,* para.34.
[302] See also European Commission, *Commission Notice on Environmental Damage* [2021] OJ C118/1, para.174.
[303] Fogleman, *Biodiversity Damage from Authorised Activities,* 23. The two cases are (1) *Naturschutzbund Deutschland,* C-297/19, and (2) *Gert Folk,* C-529/15.
[304]Fogleman, *Biodiversity Damage from Authorised Activities,* 23.

damage from headline-grabbing accidents, but it is more extensive, and no less in need of remedial action".[305]

Considering the damage caused to protected species and habitats by authorised activities, it appears indeed necessary to put more emphasis on the application of the ELD to "chronic damage". Otherwise, MS may find it too easy to justify, by way of authorisation, activities that cause significant damage to the natural resources protected under the ELD. The Court's preliminary rulings in *Gert Folk* (C-529/15) and in *Naturschutzbund Deutschland* (C-297/19) provide important points of reference in this regard that could be further developed, for example in the form of ELD guidelines.

The role of permits is also controversial in the context of the ECD, where it is referred to as the "administrative dependency of environmental criminal law". In both cases, i.e. in the case of administrative liability under the ELD and in the case of criminal liability under the ECD, the underlying question is, whether a permit that is in breach of MS' conservation objectives under the BHD should have the power to release an operator/offender from his liabilities. In the case of the "authorisation exception" under the ELD it appears that the recent ECJ rulings in *Gert Folk* (C-529/15) and in *Naturschutzbund Deutschland* (C-297/19) provide have answered this in the negative. For the discussion on the role of permits in the context of criminal liability, the reader is referred to Chapter 16.3.[306] For a final discussion of the role of permits in the context of the ELD and ECD the reader is referred to the final conclusions of this dissertation.

11.3.3 Requirements for establishing the causal link

Application of the ELD liability regime to a case of environmental damage requires that a causal link can be established between the damage and the activities of individual operators.[307] In *ERG and others* (C-378/08), the ECJ addressed the evidence that needs to be demonstrated by national competent authorities in order to establish the causal link. [308] The case involved a site known as the Augusta Roadstead on the island of Sicily. Since the 1950s, numerous industrial activities had operated on the site, including oil refineries and petrochemical and cement plants.

[305] European Commission, *Green Paper on Environmental Damage (COM(93) 47 final)*, 4 (Introduction).
[306] See Chapter 15, *Theoretical foundations and underlying rationale of environmental criminal law*.
[307] This is formally expressed in Article 4 (5) which states that the ELD "shall only apply to environmental damage or to an imminent threat of such damage caused by pollution of a diffuse character, where it is possible to establish a causal link between the damage and the activities of individual operators".
[308] *ERG and others*, C-378/08.

The activities had resulted in elevated concentrations of some chemicals in sediments, including mercury and petroleum hydrocarbons. The Italian authorities ordered sediment remediation on the basis of the presence of contaminants. One of the questions addressed by the ECJ was whether the authorities could presume a causal link on grounds of proximity between the operator activities and the presence of contaminants in sediments. The Court noted that the ELD does not specify how such a causal link is to be established and that MS have broad discretion in the determination of the causal link "when laying down national rules developing or giving concrete expression to the "polluter pays" principle".[309] The Court added, however, that "in accordance with the "polluter pays" principle, the obligation to take remedial measures is imposed on operators only because of their contribution to the creation of pollution". A MS may therefore use **causal presumptions** only if "the competent authority [has] plausible evidence capable of justifying its presumption, such as the fact that the operator's installation is located close to the pollution found and that there is a correlation between the pollutants identified and the substances used by the operator in connection with his activities". [310]

The Court has confirmed in a number of rulings, that the NCA's obligation to establish a causal link also applies in the context of strict liability (i.e. operators of Annex III activities).[311] Where a causal link cannot be established between the environmental damage and the activity of the operator, the ECJ has ruled that the situation is governed by national law, subject to observance of the EU Treaties and without prejudice to other EU secondary legislation. [312]

According to Milieu et al. (2014), the requirement of a causal link complicates the procedure under the ELD and makes it "more difficult, longer and more costly". [313] In many cases of environmental damage, the harmful effects of a damaging act would take years to unfold.[314] This would make it difficult to trace the damage back to a specific act and establish the required causal link.[315] The difficulties would increase in the case of fault-based liability that applies in case of biodiversity damage caused by non-Annex III occupational activities. As a result, there would be cases, where, because a causal link could not be established, neither the operator nor

[309] *Ibid.*, para. 55
[310] *Ibid.*, para. 57. See similarly, *ERG and others and ENI* , C-379/08 and C-380/08.
[311] *FIPA group and others*, C-534/13, para.55; *ERG and others* (C-378/08), paras. 63, 65.
[312] *FIPA group and others* (C-534/13), 46; *ERG and others* (C-378/08), para. 44; *ERG and others and ENI* (C-379/08 and C-380/08), para. 34.
[313] Milieu & IUCN, *ELD Biodiversity Damage Report*, 89.
[314] See also Chapter 19.2.2., *Dark figure of unrecorded environmental crime,* with further reference to Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis,* 38.
[315] *Ibid.*

the competent authority had undertaken any remedial actions. The authors of the study therefore rightly suggest an **amendment of the wording of the Directive** that reflects the ECJ case law.[316] Such an amendment should clearly state that "the causal link should be assumed, if the operator is located close to the pollution and that 'plausible evidence' should be provided by the competent authorities to justify the rebuttable presumption of a causal link under the ELD".[317] This would simplify the implementation of the ELD, thereby reducing the time needed to establish liability and the costs for implementing the Directive.

Multiple-party causation of environmental damage is not specifically addressed under the ELD and continues to be covered by the rules of national law.[318]

11.3.4 Defences under the ELD

The person liable under the ELD is the "operator", which is defined in Article 2(7) ELD as

> "any natural or legal, private or public person who operates or controls the occupational activity or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of such an activity has been delegated, including the holder of a permit […]".

Article 8(1) ELD requires the operator to bear the costs for the preventive and remedial actions taken under the Directive. Under Article 8 (3) and (4) a number of defences are available to the operator if the relevant conditions are met.[319] There are in total four defences, two of which are mandatory and two of which are optional:

- Third party defence (mandatory)
- Compliance with compulsory order defence (mandatory)
- Permit defence (optional)
- State-of-the-art defence (optional)

[316] Milieu & IUCN, *ELD Biodiversity Damage Report*, 90.
[317] *Ibid.*
[318] This is formally expressed in Article 9 ELD, which states that the Directive is "without prejudice to any provisions of national regulations concerning cost allocation in cases of multiple party causation".
[319] Throughout this dissertation the term "defences" is used, since the term is commonly used in legal literature, although the word "defence" is not in the ELD.

MS must adopt the mandatory defences. [320] They have discretion to adopt the optional defences. [321] Sixteen MS have adopted the two optional defences, i.e. the permit and the state-of-the-art defence.[322]

Notably, the optional defences only apply to remedial measures. They do not apply to preventive measures. The operator cannot use a defence to release himself from his obligation to prevent damage.

The four defences available under the ELD have raised a number of issues. These concern both the application as well as the nature of the defences. Concerning the **nature of the defences,** there is continuing debate about whether the defences available under Article 8 relieve the operator of the obligation to take (preventive) and remedial measures. Some commentators argue that they do ("defences to liability"), while others state that they only give the operator the right to recover his costs after he has undertaken the necessary response action ("defences to costs"). Concerning the **application of the defences**, problems mainly arise under the optional "**permit defence**" and the mandatory "**third party defence**". They are discussed below (Chapter 11.3.4.1. and Chapter 11.3.4.2.), followed by a discussion about the general **legal nature of the defences** (Chapter 11.3.4.3.).

11.3.4.1 Permit Defence

The so-called permit defence is an **optional defence** available under Article 8(4)(a) ELD:

> "The MS may allow the operator not to bear the costs of **remedial action** […] where he can demonstrate that he was **not at fault or negligent**, **and** that the environmental damage was caused by […] an **emission or event expressly authorised** by, and fully **in accordance with the conditions** of, an **authorisation** conferred by or given **under** applicable national laws and regulations which implement [**legislation listed in Annex III of the ELD**][…]

Under the conditions stated in Article 8(4)(a), the permit defence may release the operator from bearing the costs of remedial action. Its implementation is at the discretion of the MS. Notably, the permit defence only applies to remedial measures and not to preventive measures. [323]

[320] ELD. Art. 8(3).
[321] ELD, Art. 8(4).
[322] Fogleman, *Study on Integrating the ELD*, 51-52.
[323] See discussion in Chapter 11.4.3., *Duty to prevent damage from authorised activities*.

Moreover, the availability of the permit defence is confined to operators of the dangerous activities authorised under Annex III legislation, which are subject to strict liability.

Defences in pre-existing MS legislation for preventing and remedying environmental damage are rare[324] and the adoption of the permit defence has been highly controversial. [325] While some, including industry, were in favour of it on the grounds of legal certainty and competitiveness, others have generally criticized the permit defence as a violation of the very spirit of strict liability for environmental harm. [326] The permit defence would fail to encourage polluters to reduce the harm caused by the pollutants or the quantity of pollutants discharged below the limits set by the permit.[327] Conversely, its removal from the Directive would promote the **polluter-pays principle,** create a more **level playing field** and improve the **effectiveness** of the ELD.[328]

The arguments for and against the permit defence are further explored in the following. In order to fully appreciate the controversial discussions surrounding the defence, it is helpful to revisit the history of the ELD.[329] The inclusion of the permit defence was controversial from the very beginning and the inclusion of the defence as an option as opposed to an obligation was, not least, the result of numerous disagreements throughout the negotiation process.[330]

The inclusion of a "permit defence" was one the main concerns promoted by industry in the controversial discussions surrounding the introduction of an environmental liability regime. The exact legal nature of such a "defence" changed at various stages, not least due to the changes of the overall legal nature of the proposed regime from a primarily civil liability to an administrative liability regime.

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[324] Fogleman, *Study on Integrating the ELD*, 9.
[325] E Rehbinder, *Implementation of the Environmental Liability Directive in Germany*, *Environmental Liability* 15:5 (2007), 199-203 [Rehbinder, *Environmental Liability Directive in Germany*], 112-113.
[326] For further reference, see discussion below and European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 50: "Key business stakeholders consider the maintenance of the two optional defences (permit defence and state-of-the-art defence) politically indispensable for the co-operation of industry"; BIO Intelligence Service, *ELD Effectiveness: Scope and Exceptions. Final Report Prepared for European Commission, DG Environment* [BIO Intelligence Service, *ELD Scope and Exceptions*] (2014), 144 – 146.
[327] K De Smedt, *Environmental Liability in a Federal System: A Law and Economics Analysis* (2007, Intersentia) [De Smedt, *Environmental Liability in a Federal System*], 155-159; De Sadeleer, *Environmental Principles*, 40.
[328] In 2017, the European Parliament called for a removal of the permit defence. See European Parliament, *2017 ELD Resolution* (26 October 2017), para.34.
[329] See also the informative review of the two optional defences in the ELD's history in: BIO Intelligence Service, *ELD Scope and Exceptions*, Chapter 5.
[330]See BIO Intelligence Service, *ELD Scope and Exceptions*, 132.

Industry representatives called for "a defence in relation to damage caused by releases authorised through EC regulations, for state of the art and/or for development risk"[331] and ultimately "insist[ed] that complying with a permit/state-of-the-art/development risk should be retained as defences".[332] The Commission acknowledged that "**for economic reasons**" operators needed "**predictability regarding their liabilities**", but also noted that such defences were "normally not allowed by existing national environmental liability regimes of EU MS".[333] Instead of including the requested "permit defence", the Commission suggested to apply "equity",[334] noting that in certain circumstances it might be [**emphasis added**]

> "**inequitable** for the polluter to have **to pay the full compensation for the damage caused** by him. […] [F]or instance, where the operator who caused the damage can prove that this damage was entirely and exclusively caused by **emissions that were explicitly allowed by his permit** […] some room might be granted to the court (or any other competent body, e.g. an arbiter) to decide that **part of the compensation should be borne by the permitting authority**, instead of the polluter". In such cases, however, "[f]urther criteria would need to be defined for such a provision, for instance that the liable operator had done everything possible to avoid the damage".[335]

The regime under discussion at the time was still primarily a civil liability regime.

When the Commission finally published its proposal for the ELD in 2002, what was to become the "permit defence" was included at this stage of the ELD's genesis as an "exception to liability". Article 9(1)(c) of the proposed Directive, which was entitled "Exceptions", stated that:

> "[T]his Directive shall not cover environmental damage or an imminent threat of such damage caused by […] an emission or event allowed in applicable laws and regulations, or in the **permit or authorisation** issued to the operator;"

The Explanatory Memorandum to the proposed Directive further stated that [**emphasis added**]

> "The proposal has indeed been developed consistently with **principles of economic efficiency** and **social fairness**. Firstly, the **proposal does not apply to emissions**

[331] European Commission, *Environmental Liability White Paper* (COM(2000) 66 final), 12.
[332] European Commission, *Explanatory Memorandum to the Proposal for a Directive on Environmental Liability*, COM(2002) 17 final, 10.
[333] European Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, 17.
[334] Equity essentially means fairness. In English law it also applies to a specific set of legal principles. The application of equity principles allows judges to consider mitigating circumstances.
[335] European Commission, Environmental Liability White Paper (COM(2000) 66 final), 19.

> **allowed in permits** and damage that cannot be predicted on the basis of the state of scientific and technical knowledge at the time emissions are released or activities take place".[336]

The Commission also clarified that:

> "Where one of the exemptions foreseen in Article 9(1) applies, the scheme provided by this proposal will not apply and the matter will be left to national law. In certain cases, the operator will not be able to rely on the exemption if he has been negligent".[337]

As observed by commentators, the Commission's reference to the negligence of an operator suggests that, at least in certain cases, the Commission intended to apply the "defences" indeed as defences and not as exceptions.[338] Notably, unlike exceptions, defences need to be raised and proven by the defendant.[339]

Obviously, the inclusion of such exceptions to liability meant that the operator who had caused the damage could no longer be held liable for the prevention and remediation of the damage. To ensure that the preventive and remedial measures were also carried out in cases where an exemption applied and where the operator was therefore relieved from his preventive and remedial duties, Articles 4 and 5 of the proposed Directive stipulated that in such a situation the NCA would have to take the necessary measures instead.[340]

The legal nature of the defences continued to change throughout the subsequent negotiations of the ELD from "exceptions" back to "mitigating factors" ("equity") until they resulted in their final form as defences under Articles 8(4) ELD.[341] The originally proposed obligation of the NCA to prevent and remediate the damage in cases where the operator did not take the necessary measures was, however, removed from the final version of the ELD. It was replaced with a power of discretion of the NCA.[342] Under the final version of the Directive, the

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[336] European Commission, Explanatory Memorandum to the Proposal for a Directive on Environmental Liability, COM(2002) 17 final, 10.
[337] *Ibid.*
[338] See BIO Intelligence Service, *ELD Scope and Exceptions*, 131.
[339] Betlem, *ELD Scope and Defences*, 377.
[340] See BIO Intelligence Service, *ELD Scope and Exceptions*, 132, with reference to ELD Arts. 4(1), 4(4), 5(1), 5(2).
[341] For further reference, see BIO Intelligence Service, *ELD Scope and Exceptions*, 132.
[342] For further reference, see V Fogleman, *Enforcing the Environmental Liability Directive: Duties, Powers and Self-Executing Provisions* (2006) 4 Environmental Liability 127–146 [Fogleman, *Enforcing the ELD*], 132. She observes that the obligation originally included in the Commission's proposal for a Directive was removed by the Council and replaced with a discretionary power.

competent national authority is no longer obliged ("*shall*"), but instead "empowered" ("*may*") to take the necessary preventive or remedial measures in cases where the liable operator did not do so. [343]

A permit defence essentially distinguishes between two types of damage: lawful and unlawful damage. Lawful damage takes place within the limits set out under a permit; unlawful damage exceeds the limits established by the permit.

The permit defence has been opposed by commentators who argue that it contradicts the **polluter-pays principle** and the **preventive principle**.[344] According to De Sadeleer (2002), confining the polluter's liability to unlawful damage is neither appropriate nor legally coherent or fair.[345] An operator who sees his harmful activities covered by a permit would have little or no incentive to reduce the impact of his activities on the environment and prevent unnecessary damage.[346] Moreover even in civil law a permit would not automatically exempt the permit holder from liability and a permit defence would thus produce incoherent results. [347] And finally, relieving the polluter of its financial liability would result in society at large paying for the damage instead of the polluter, thus undermining the very essence of the polluter pays principle. [348]

Supporters of a permit defence argue that the defence would promote **legal certainty** and thereby increase the incentive to comply with the permit conditions which would also contribute to preventing damage.[349] If, however, the operator was held liable for damage from activities previously authorised under a permit, this would not only be inconsistent[350] but also make the

[343] See also discussion of orphan damage under Chapter 11.7.
[344] See De Sadeleer, *Environmental Principles*, 40; for further reference see De Smedt, *Environmental Liability in a Federal System*,155-159.
[345] De Sadeleer, *Environmental Principles*, 40.
[346] De Sadeleer, *Environmental Principles*, 40; De Smedt, *Environmental Liability in a Federal System*, *156*, citing: Faure, M.G., "How Law and Economics May Contribute to the Harmonisation of Tort Law in Europe", in: Zimmermann, R. (ed.), Grundstrukturen des Europäischen Deliktsrechts, Baden-Baden: Nomos Verlagsgesellschaft, 2003, p. 31-82.;
[347] De Sadeleer, *Environmental Principles*, 40.
[348] *Ibid.*
[349] L Bergkamp and A van Bergeijk, 'Scope of the ELD Regime' in B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (Oxford University Press 2013) [Bergkamp & van Bergeijk, *Scope of the ELD*], 153, referring to a stakeholder interview with Julien Bedhouche, from FERMA, in the framework of the study and other stakeholder opinions.
[350] Bergkamp & van Bergeijk, *Scope of the ELD*, 91.

polluter pay twice: on the one hand for compliance with the permit conditions and on the other hand for damage that occurs despite complying with permit conditions.[351]

These arguments, however, misconstrue the rationale behind the application of strict liability for inherently dangerous activities. Strict liability is not about unlawful conduct, negligence or intent. Instead, it is linked to the responsibility for a person or thing, such as an installation, and typically correlates with a particular risk propensity due to an increased probability of an accident.[352] This is intended to cover the risks that can never be completely ruled out despite all conceivable care in dealing with sources of increased danger, such as installations which, due to their nature or operation, are particularly likely to cause harmful effects on the environment. In short, operators who benefit from the operation of inherently dangerous activities must be aware that they also bear the risks of these activities. Whether or not an operator acts in accordance with its permit is therefore irrelevant.

Additional arguments for the removal of the permit defence come from scholars of **Law and Economics**, which analyse the law from an economic perspective and for which efficiency aspects are central. They contend that the availability of a permit defence would lead to the "unavoidable lobbying and public choice effects" that are typically associated with the granting of permits: if an operator can release himself from liability by invoking a permit defence, then the obvious choice for the operator would be to seek out a "friendly" official in order to obtain a permit with "lenient conditions".[353]

More generally, the **concept of a permit defence** would also assume that **permit conditions** always represent **optimal environmental standards**. However, this would not always be the case. Firstly, the quality of the regulator's decision on the permit conditions also depended to a considerable extent on the availability and quality of information, which would not always be easy to obtain. Gathering information could be costly and time-consuming and regulators would often rely on information from the regulated industry.[354] In addition, by necessity regulatory

[351] Bergkamp, *Liability and Environment*, 65.
[352] See Chapter 11.3.1., *The two standards of liability in the case of biodiversity damage*.
[353] De Smedt, *Environmental Liability in a Federal System*, 156, with reference to Faure, M.G., (ed.), "Deterrence, Insurability, and Compensation in Environmental Liability, Tort and Insurance Law Vol. 5, European Centre of Tort and Insurance Law (ECTIL), Wien/New York: Springer, 2003, p.56
[354] De Smedt, *Environmental Liability in a Federal System*, 156, with reference to Faure with reference to S Shavell, *Liability for Harm versus Regulation of Safety*, Journal of Legal Studies 13:2 (1984), 357-374 [Shavell, *Liability for Harm versus Regulation of Safety*], 360.

decisions would be based on the information available and the risks known at the time of their adoption. Especially in the case of biodiversity damage, which is often the result of multiple influences, it could be difficult to predict all the risks associated with an activity and to capture them accurately with permit conditions.[355] Conditions set out in a permit could therefore only represent the minimum of what is expected of an operator to avoid environmental damage. Where an operator is in a position to further reduce his impact on the environment through cost-effective measures, it would therefore be efficient to hold him liable – regardless of his compliance with permit conditions.[356] Finally, **pressure and lobbying from various interest groups**, as well as **bribery** and **corruption**, could influence regulators' decision-making and ultimately create the risk of **regulatory capture**, whereby an NCA, instead of serving the interests of the public, would end up promoting the interests of the industries it is supposed to regulate.

Apart from these arguments concerning the nature of the permit defence, other arguments concern the fact that the **permit defence is optional** and not mandatory. This means that in some MS operators have the possibility to release themselves from liability by invoking a permit defence, while operators in other MS don't. According to observers, there is a risk that this could create the basis for an uneven playing field among operators in the EU MS, because in some MS operators, in spite of having caused significant environmental damage, could escape their financial liability. [357] Obviously, addressing these concerns would require that the defence is either removed entirely, as it has been suggested by commentators, or made mandatory. The European Commission (2016) contends that there is no clear correlation between the availability of a permit defence and the number of ELD cases in a MS.[358] The Commission has also made it clear that due to the negative feedback from, key stakeholders the deletion of the defences would not be considered a feasible option. [359]

[355] De Smedt, *Environmental Liability in a Federal System*, 156.
[356] De Smedt, *Environmental Liability in a Federal System*, 156, with reference to Faure, M.G., (ed.), "Deterrence, Insurability, and Compensation in Environmental Liability, Tort and Insurance Law Vol. 5, European Centre of Tort and Insurance Law (ECTIL), Wien/New York: Springer, 2003, p.57-58.
[357] See BIO Intelligence Service, *ELD Scope and Exceptions*, 155. The study recommends removing the defences entirely.
[358] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 51.
[359] *Ibid.*

The European Parliament has called for the removal of the permit defence. [360] Alternatively, the European Parliament suggest to limit the scope of the defence by introducing a reversal of the burden of proof.[361] The operator, in order to invoke the defence, would have to prove that he could not have known of the danger of his activity. Obviously, in the case of the activities listed as dangerous in Annex III of the ELD, such a reversal of the burden of proof would render the permit defence practically void, reducing its scope to non-specified activities.

While, as a matter of policy, the permit defence appears to be highly controversial, from a legal point of view, there is no justification to maintain the permit defence. As demonstrated, it contradicts central objectives of the Directive, namely the application of the polluter-pays principle as well as the prevention of damage through incentives to minimise the risk of damage (despite the existence of a permit). In conclusion, the better arguments speak for removing the permit defence.

Obviously most of the arguments presented in the context of the permit defence also apply to the exemption for damage caused by activities authorised under the BHD, which is stated under the second paragraph of Article 2 (1)(a) Article ELD.[362]

As previously noted, the role of permits is also controversial in the context of the ECD, where it is discussed as the "administrative dependency of environmental criminal law". For the discussion on the role of permits in the context of criminal liability, the reader is referred to Chapter 16.3.[363] For a final discussion of the role of permits in the context of the ELD and ECD the reader is referred to the final conclusions of this dissertation.

11.3.4.2 Third Party Defence

As a **mandatory defence,** the so-called **third party defence** must be adopted by MS. The defence is laid out in Article 8(3)(a) of the ELD, which states that [**emphasis added**]

> "An operator shall not be required to bear the cost of preventive or remedial actions when he can prove that the environmental damage or imminent threat of such damage

[360] In 2017, the European Parliament called for a removal of the permit defence. See European Parliament, *2017 ELD Resolution* (26 October 2017), para.34.
[361] European Parliament, *Report on the Liability of Companies for Environmental Damage (2020/2027(INI))* (6 April 2021) [online] [European Parliament, *2021 Report on Company Liability* (6 April 2021)], para.40.
[362] see discussion in Chapter 11.3.2, *Exceptions to liability for biodiversity damage*.
[363] See Chapter 16, *Theoretical foundations and underlying rationale of environmental criminal law*.

> […] was caused by a **third party** and occurred despite the fact that appropriate safety measures were in place;

The Directive further states that

> "In such cases MS shall take the appropriate measures to enable the operator to recover the costs incurred".

The ELD does not define the term "third party" nor does it specify under which conditions the third party is liable. Thus, the ELD being silent on these issues, the term "third party" has become the subject of diverging interpretations. Some commentators refer to Article 3(1)(a) of the Directive and conclude from the wording of Article 3(1)(a) ELD, that only persons qualifying as "operators" of activities listed in Annex III should be included within the definition of "third party". [364] Such a restrictive interpretation of the term "third party" is opposed by commentators who argue that it leads to a contradiction of the polluter-pays principle, which in very simple terms states that the person who caused the damage should also pay for it. [365] The term "third party" should therefore cover all persons (both natural persons and legal entities), who access the operator's site without authorisation, including terrorists and other criminals.[366]

Obviously, these diverging interpretations of the term "third party" can lead to substantially different outcomes. A broad definition of the term "third party", as put forward by Bergkamp & Bergeijk (2013) will make it easier for the operator to use the defence. [367] If the defences are furthermore interpreted as defences to liability and not just defences to cost, the environmental damage may never be prevented or remediated.[368]A narrow definition, on the other hand, risks turning the defence meaningless.

Neither line of argument put forward is convincing. Concerning the argument put forward by Bergkamp & Bergeijk (2013), it is clear from the wording of Article 8(1) ELD, that, in principle, the Directive does indeed confine its scope and thus the application of the polluter

[364] Salanitro, *Environmental Liability Directive*, 13.
[365] L Bergkamp and A van Bergeijk, 'Exceptions and Defences' in B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (Oxford University Press 2013) [Bergkamp & van Bergeijk, *Exceptions and Defences*], 87.
[366] *Ibid.*
[367] *Ibid.*
[368] On the question of the nature of the defences, see discussion under Chapter 11.3.4.3., *Nature of the defences: Defences to costs or defences to liability?*

pays principle to the "operator". In other words, the Directive does not, as Bergkamp & Bergeijk (2013) contend, apply the polluter pays principle broadly to any person causing the damage. The term operator is clearly defined in Article 2(6) ELD as the "person who operates or controls the occupational activity". That said, the defence set out under Article 8(3)(a) ELD clearly introduces a person that is different from the operator, namely a "third party". Problematically, the Directive introduces the term "third party" without further defining it. However, it appears from the wording and the systemic context, that the defence was indeed introduced to cover cases where the damage was caused by a person other than the operator, even though appropriate security measures were taken by the operator. These third parties, as suggested by Bergkamp & Bergeijk (2013), would include all persons (both natural and legal persons) who gain unauthorised access to the operator's premises, including terrorists and other criminals.[369] To contend, on the other hand, that only an (the) operator can be the third party effectively renders the defence meaningless.

In summary, the above findings indicate that enhancing the effectiveness of the ELD requires a clarification of the term "third party." While it is clear from the wording of the Directive that a third party is a party other than an operator and therefore does not need to be qualified as such, neither the scope of persons covered by the term "third party" nor the standard of liability applicable to third parties is further defined. As previously mentioned, the diverging interpretations become particularly critical when the defences are furthermore interpreted as defences to liability and not just defences to cost, meaning the environmental damage may never be prevented or remediated. This is addressed in the following.

11.3.4.3 Nature of the defences: Defences to costs or defences to liability?

There is continuing debate about whether the defences available under Article 8 ELD release the operator from the obligation to take (preventive and) remedial measures. Some commentators argue that they do ("defences to liability"), while others maintain that they only give the operator the right to recover his costs after he has undertaken the necessary remedial action ("defences to costs"). The debate is reflected in the different solutions developed by MS in their transposition of the Directive. [370] In some MS operators have a duty to remediate

[369] Bergkamp & van Bergeijk, *Exceptions and Defences*, 87.
[370] See BIO Intelligence Service, *ELD Scope and Exceptions*, 151.

environmental damage and seek recovery of their costs whilst in other MS operators can challenge their liability for incurring such costs.

The wording of the relevant provisions in the Directive seems to be clear on the issue. Article 8 (3), last sentence, requires MS to "take the appropriate measures to enable the operator to recover the costs incurred" when the defences apply. Article 5 (4) and Article 6(3) of the ELD state that "if the operator ... is not required to bear the costs under this directive, the competent authority may take these measures itself". And Article 11 (3) provides that, when the damage was caused by a third party, "competent authority **may** empower or require third parties to carry out the necessary preventive or remedial measures".

The clear wording of the Directive notwithstanding, Bergkamp & Bergeijk (2013) contend that the defences are constructed to "release operators from the obligations to remediate the damage and from all liability". [371] They argue that if the defences were to be understood to give operators only a right to recover their costs, the authorities could simply issue orders to the operator to take measures and the operator would only later be able to recover the costs. In their view such a result would render the defence essentially "meaningless". As to the contradiction of their interpretation with the wording of the Directive, they argue that "the term "costs" was only used by the EU legislator to make clear that, where a defence applies, the operator should not be exposed to costs, whether due to inability to recover costs or due to orders to take measures". Thus, according to Bergkamp & Bergeijk (2013), for the operator not to be required to bear the costs, "he must be released from the obligations to take any actions".

These diverging interpretations of the provisions under Article 8 ELD can lead to very different outcomes. If the defence is a "defence to costs" and not a "defence to liability" the operator will only be able to invoke the defence after he has carried out the necessary preventive or remedial measures. In a situation where, for example, the third party that caused the damage cannot be identified, the operator is effectively left without recourse or legal remedy. Likewise, the risk that an identified "third party" cannot pay for the damage remains with the operator. If, however, the rules establish a "defence to liability", neither the operator nor the third party is obliged to prevent or remedy the damage until a court has ruled on the question of liability.[372]

[371] Bergkamp & van Bergeijk, *Exceptions and Defences*, 89.
[372] Salanitro, *Environmental Liability Directive,* 15; BIO Intelligence Service, *ELD Implementation Report*, 61.

These arguments notwithstanding, the wording of the Directive seems to be clear on the issue. The Commission also confirmed that the defences are to be understood as defences to costs and that "such was the intention when the ELD was adopted".[373] Furthermore, if indeed the rules were interpreted as "defences to liability", in the case of the third party defence neither the operator, nor the third party, would be required to prevent or remediate the environmental damage until a court had decided on the liability and, throughout this time, the damage would not be remedied and could even aggravate. Such an interpretation is clearly against the intent of Articles 5(1) and 6(1), which both require the operator to take the necessary preventive and remedial measures "without delay" where environmental damage has occurred or where there is a threat of environmental damage.

11.3.5 Summary of findings on liability rules for biodiversity damage & proposals for amendments

From the above examination of the liability rules under the ELD, it appears that several issues need further clarification or amendment:

- to align the ELD with the BHD, the distinction between dangerous and non-specified activities should be removed. Strict liability should apply to all activities causing biodiversity damage;
- in line with ECJ case law, the ELD should provide for a rebuttable presumption of causality in cases where the operator is located close to the damage and the competent national authority provides "plausible evidence" to justify the presumption;
- the application of the ELD to activities authorised under the BHD needs further clarification and should ensure that MS are not empowered to authorise or accept as management measures activities that are in breach of their conservation obligations under the Birds and Habitats Directives;
- the permit defence should be removed entirely as it threatens to undermine the aims of the Directive. The removal of the optional defence would also lead to a more level playing field;
- the term "third party" should be clarified;

[373] See BIO Intelligence Service, *ELD Scope and Exceptions*,151, with reference to the 2nd ELD Stakeholder Conference, 11 June 2013, Summary Report: "*It was clarified that from a legal point of view these defences relate only to the costs of remediation but not to the application of the ELD as such – the scope of the ELD stays untouched*".

- it should be clarified that the defences are to be understood as defences to costs and not as defences to liability.

11.4 Prevention of damage to protected species and habitats under the ELD

The prevention of environmental damage is one of the central objectives of the ELD. Where environmental damage has not yet occurred but there is an imminent threat of such damage, the ELD obliges the operator to take the necessary preventive measures.[374] Broadly speaking, preventive measures under the ELD include all measures "taken in response to an imminent threat of environmental damage, with a view to preventing or minimising that damage".[375] According to Article 8(1) ELD, the operator also bears the costs for the preventive actions taken pursuant to the Directive, unless it is able to invoke one of the mandatory defences listed in Article 8(3) ELD.[376] This chapter addresses preventive measures and key issues that concern their effective application in the MS, namely their differentiation from emergency remedial measures under the ELD (Chapter 11.4.1), the relevance of the significance threshold (Chapter 11.4.2) and the duty to prevent damage from authorised activities (Chapter 11.4.3). Next, the role and powers of the NCA in the context of preventive measures under the ELD is explored (Chapter 11.4.4) and the duty of the operator to take preventive measures under the ELD is compared with the obligations of MS to avoid damage to protected species and habitats under the BHD (Chapter 11.4.5). The findings are summarised in a final chapter (Chapter 11.4.6).

11.4.1 Preventive measures and emergency remedial measures

The ELD obliges the liable operator to take preventive measures, emergency remedial measures and remedial measures.[377] Reports on the implementation of the Directive into MS's national laws suggest that the concepts of "**preventive measures**" and "**emergency remedial measures**" need to be further clarified.[378] In some MS, measures aiming to contain further damage are considered as "preventive measures" under Article 5 ELD, while in others they are considered "emergency remedial measures" under Article 6 (1)(a) ELD. The problems with the

[374] ELD, Art. 5(1).
[375] ELD, Art. 2(10).
[376] As demonstrated, the operator must not be required to bear the cost of preventive action costs when one of the two mandatory defences listed under Article 8 (3) ELD applies, namely the so-called third party defence and the so-called compliance with compulsory order defence.
[377] Emergency remedial action is different from remedial action, which is discussed in Chapter 11.5. below.
[378] See Milieu & IUCN, *ELD Biodiversity Damage Report*, 31 and 34.

interpretation and differentiation of the two concepts have led to discontinuity in the application of the ELD in some MS. The two concepts are discussed in the following.

Preventive measures are mandated in cases of an "imminent threat of damage" (Article 5 ELD). Operators must take the necessary preventive measures without delay, as well as notify the NCA whenever such threat is not dispelled despite the preventive measures taken.[379] An "imminent threat of damage" is defined as a "sufficient likelihood that environmental damage will occur in the near future".[380] Preventive measures are taken with a view to **preventing** or **minimising** that damage.[381]

So-called **emergency remedial measures**,[382] on the other hand, are mandated in cases where damage has occurred (Article 6 ELD). Operators must, without delay, notify the NCA and take all the practical steps to immediately control, contain, remove or otherwise manage the damage. Emergency remedial measures are taken with a view to limiting or preventing further environmental damage. [383]

The provisions under Articles 5 and 6 ELD are self-executing, which means that they have direct legal effect and do not require an administrative order. [384] They are not entirely new in the national legislation of the MS. Some, like the Netherlands, already had similar provisions before the ELD was implemented. [385]

Differences in interpretation of these two concepts in the MS indicate, that it is not clear when a measure is of a "preventive" nature, i.e. "where environmental damage has not yet occurred but there is an imminent threat of such damage occurring"[386] and when it is of an "emergency remedial" nature, i.e. when environmental damage has occurred and the measures shall limit or prevent further environmental damage. [387] While some MS relate preventive measures

[379] ELD, Art. 5 (1)-(2).
[380] ELD Art. 2 (9).
[381] See ELD, Art. 2(10), where preventive measures are defined as "any measures taken in response to an event, act or omission that has created an imminent threat of environmental damage, with a view to preventing or minimising that damage".
[382] See European Commission, *Commission Handbook on Environmental Liability Directive, Two Day Training Handbook and Accompanying Slides, February 2013* COM(2013) [online].
[383] ELD, Art. 6 (1)(a).
[384] Brans, *Fundamentals of Liability*, 46; See also Fogleman, *Enforcing the ELD*.
[385] Brans, *Fundamentals of Liability*, 46.
[386] ELD, Art. 5.
[387] ELD, Art. 6 (1)(a).

exclusively to situations where no damage at all (significant or not) has occurred, others consider that the concept of preventive measures also includes measures taken after the harmful incident has occurred to prevent the damage from becoming significant.[388] Only the latter interpretation is aligned with Article 2(10), which defines "preventive measures" as measures taken with a view to preventing **or** minimising damage and with Article 2(1), which defines "environmental damage", as damage that is "significant". The former interpretation, on the other hand, which relates preventive measures exclusively to situations where no damage at all has occurred, risks a **discontinuity in the application of the ELD**. In the French system for example, any measures taken after the harmful incident has occurred but before the damage has become significant, is considered to fall outside the scope of the ELD.[389] They do not qualify as preventive measures, because the damage has already occurred. Nor do they qualify as remedial measures, because the damage has not yet turned significant. As a result, in France measures taken to prevent the damage from becoming significant are considered emergency measures under sectorial legislation, where, however, the polluter pays principle does not apply. If the measures taken under sectorial legislation fail to contain the damage and the damage becomes "significant", the ELD applies again and remedial measures, including emergency remedial measures to limit or to prevent further environmental damage, are required. Such **discontinuity in the application** of the ELD interrupts the application of the ELD in favour of sectoral legislation. The resulting execution of preventive measures by public authorities under sectoral legislation means that the operator is not subjected to the polluter pays principle and the costs are borne by the public at large.

To avoid such outcomes, clarifications in the form of guidelines or amendments should ensure that the **definition of preventive measures** includes measures that prevent the damage from becoming "significant" and thus minimise it: Preventive measures are prior in time and are taken before the damage has turned significant in order to prevent it from becoming significant, emergency remedial measures apply once the damage has turned "significant". [390]

[388] For further reference, including case studies and discussion see Milieu & IUCN, *ELD Biodiversity Damage Report*, 31 and 58-63.
[389] Milieu & IUCN, *ELD Biodiversity Damage Report*, 59, with further references.
[390] *Ibid.*, 63.

11.4.2 The significance threshold in the context of preventive measures

The previously observed difficulties with the interpretation of the significance threshold under the ELD, which in some MS lead to the assumption of an excessively high significance threshold, also complicate the application of preventive measures.[391] According to studies carried out in the context of the ELD REFIT Evaluation (2016), measures to prevent damage to biodiversity from becoming significant are often not taken because it is wrongly assumed that preventive measures must only be taken when it is known that the damage will be significant.[392] In the case of preventive measures and emergency measures, which need to be carried out "without delay" or "immediately", the assumption of a high significance threshold further exacerbates the problem and makes it nearly impossible for the operator to determine whether the damage falls within the scope of the ELD. [393] It may take several months to assess whether the adverse effects on reaching or maintaining the favourable conservation status of habitats or species are significant within the meaning of the damage definition set out under Article 2 (1) (a) ELD. In such a situation, it is impossible for an operator to determine whether it has a duty to carry out the preventive measures required under Article 5 ELD ("without delay") or Article 6 ELD ("immediately").[394] The ELD REFIT Evaluation (2016) in addressing this problem concludes that "an approach requiring a "reasonable belief" instead of certainty that the damage may be significant, appears practical and increases the effectiveness of the Directive".[395]

11.4.3 Duty to prevent damage from authorised activities

Fogleman (2019) has examined to what extent the duty to prevent environmental damage applies to activities, which have been authorised by a permit if those activities are known or likely to cause environmental damage.[396]

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[391] For a discussion of the significance threshold under the ELD, refer to Chapter 11.1.2, *The significance threshold under the ELD*.
[392] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 53.
[393] See also discussion abov e on the significance threshold with reference to Fogleman, *Biodiversity Damage from Authorised Activities*, 43.
[394] See also discussion of the issue in Fogleman, *Study on Integrating the ELD*, 9.
[395] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 42.
[396] Fogleman, *Duty to Prevent Environmental Damage*, 707-721; Fogleman discusses the issue also in the context of the Case *Gert Folk*, C-529/15. The case concerned water damage under the ELD. For further reference, see *Gert Folk*, C-529/15. The second case Fogleman discusses involves biodiversity damage and a temporary derogation under Article 6(4) HD. The two cases also demonstrate to what extent it may be necessary to revoke or vary a permit in order to prevent damage under the ELD. See also her subsequent discussion of damage from authorised activities in Fogleman, *Biodiversity Damage from Authorised Activities*, 35–54, and the related discussion in Chapter 10.3.2.4., *Discussion of findings on exceptions to liability and the repercussions of the Court's ruling in Naturschutzbund Deutschland*.

As previously noted, the permit defence only applies to remedial measures and not to preventive measures.[397] Thus, an operator whose authorised activities cause an imminent threat of environmental damage cannot escape its duty to take preventive measures by pleading compliance with its permit as a defence to liability. In this context, *Fogleman (2019)* has explored the following two questions: Firstly, if an operator has an obligation to prevent damage from his authorised activities if he knows that they may or will cause environmental damage. And secondly, should such a duty to prevent damage from authorised activities exist, if the variation or revocation of a permit qualifies as "preventive measure" under the ELD.

In order to address the first question, Fogleman (2019) recalls that preventive measures under the ELD are taken in response to "an imminent threat" of environmental damage.[398] Such imminent threat, according to the ELD, requires "a sufficient likelihood that environmental damage will occur in the near future".[399] Based on this definition of "imminent threat", Fogleman (2019) argues that "if the [authorised] activities have caused environmental damage in the past, there would seem to be "a sufficient likelihood that environmental damage would occur in the near future" if they are carried out again".[400] Consequently, *Fogleman (2019)* reasons, the operator, in order to comply with his duty to prevent damage, would have to modify the authorised activity so that it does not cause environmental damage in the future or, if this is not possible, discontinue the permitted activity.

A corollary issue Fogleman (2019) investigates is if the variation or revocation of a permit that authorises damaging activities qualifies as a preventive measure under the ELD.[401] She concludes that this is not the case. Firstly, because only a competent authority can vary or revoke a permit, whereas the ELD obliges the operator to take the necessary preventive measures.[402] Secondly, if the damage was caused by activities in the past, the revocation/variation of a permit would be a measure taken in response to an act that has caused damage but not to an act that "has created an imminent threat of environmental damage", as required for preventive measures under Article 2(10) ELD.

[397] See ELD, Art. 8(4)(a) and related discussions in Chapter 11.3.4.1., *Permit Defence*.
[398] See ELD, Art. 2(10).
[399] See ELD, Art. 2(9).
[400] Fogleman, Duty to Prevent Environmental Damage, 717.
[401] *Ibid*., 717.
[402] ELD, Art. 5(1).

Fogleman's observations certainly deserve further investigation. In conclusion it appears that the application of preventive measures to a case of environmental damage caused by authorised activities needs further clarification.[403] Further, while the variation or revocation of a permit that authorises environmental damage may sometimes be a necessary measure to prevent damage, it does not appear to qualify as a preventive measure under the ELD.

11.4.4 Role and powers of NCA

The NCA must require that the preventive measures are taken by the operator.[404] If the operator fails to comply with his obligations under Article 5 ELD to take preventive measures, cannot be identified or is not required to bear the costs, the competent authority may take the preventive measures itself. [405] Moreover, the NCA may, at any time, require the operator to provide information on any imminent threat of environmental damage or in suspected cases of environmental damage[406] and give instruction to the operator to be followed on the necessary preventive measures to be taken.[407] This ensure that that the NCA remains in control of the measures to be adopted at all times. The NCA may, at any time, take the necessary preventive measures itself.[408] Notably, there is no obligation of the NCA to take preventive measures if the operator fails to do so.[409] The Commission's proposal for the Directive originally provided for an subsidiary obligation of the NCA to prevent and remediate the damage in cases where an operator failed to comply with his obligations under the Directive[410] or where, for different reasons, the operator could not be held liable for the prevention and remediation of the damage.[411] In the adopted text of the Directive, this was, however, reduced to a power of discretion.[412] As a result, the ELD in its current form leaves the decision to prevent or remediate the damage to the NCA, meaning that ultimately nobody is required to prevent or remedy the

[403] See also related discussion in Chapter 11.3.2.4., *Discussion of findings on exceptions to liability and the repercussions of the Court's ruling in Naturschutzbund Deutschland*.
[404] ELD, Art. 5(4)
[405] *Ibid.*
[406] ELD, Art. 5(3)(a).
[407] ELD, Art. 5(3)(c)
[408] ELD, Art. 5(3)(d)
[409] See also discussion in Chapter 11.8., *Orphan damage*.
[410] European Commission, *Explanatory Memorandum to the Proposal for a Directive on Environmental Liability*, COM(2002) 17 final, Arts. 4-5.
[411] *Ibid.*, Art. 9
[412] For further reference, see Fogleman, *Enforcing the ELD*,132. She notes that the obligation which was in the Commission's proposal for a Directive, was removed by the Council and replaced by a discretion to carry out such measures.

damage inflicted on the natural resources. Such an outcome is also referred to as the problem of "**orphan damage**".[413]

11.4.5 Preventive measures under the ELD and BHD in comparison

In the case of damage to protected species and habitats, a duty for MS to take preventive measures may, nonetheless, arise under Article 6(2) HD, which obliges MS to avoid harm to protected species and habitats inside Natura 2000 sites.[414] However, a difference in the scope of protected species and habitats under the ELD, on the one hand, and Article 6 HD, on the other, means that this is not always the case. While the ELD also covers protected species habitats, which occur outside Natura 2000 sites,[415] the application of the site protections measures established under Article 6 HD is confined to species and habitats located within Natura 2000 sites. Thus, where the imminent threat concerns protected species and habitats located outside Natura 2000 sites and the operator fails to take the preventive measures, there is no obligation of MS under Article 6 (2) HD to take the preventive measures instead. Obviously, threats for protected species and habitats within Natura 2000 can also originate from activities located outside Natura 2000 sites. As the analysis of ECJ case law has demonstrated, in such cases MS have an obligation to take the necessary measures to prevent activities outside the protected area from causing harm to protected species and habitats inside the protected area.[416]

Notably, the analysis of the implementation of the two different instruments in the MS shows that in many countries there is in principle a systematic preference for the application of preventive measures under Article 6(2) HD. In France and Germany, for example, the NCA will first apply existing sectorial legislation, including the BHD. In other MS, the BHD will apply until the "higher" threshold of the ELD has been reached.[417] Obviously, such a preference for applying the BHD to an imminent threat to protected species and habitats (inside Natura sites) means the polluter pays principle is not applied and the costs of preventive measures are borne by the tax payer.

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[413] The problem of orphan damage is discussed in more detail below, in Chapter 11.8., *Orphan Damage*.
[414] See also discussion of BHD in Part I of this dissertation.
[415] For further reference, see findings in Chapter 11.1.1., *Scope of biodiversity protected under the ELD*.
[416] *Commission* v *United Kingdom*, C-6/04, para. 34. For further reference, refer to Chapter 5.2.3.2.4., *Natural developments or external events with a negative impact on the site*.
[417] Milieu & IUCN, *ELD Biodiversity Damage Report*, 49.

11.4.6 Summary of findings on preventive measures

From the above examination of the provisions relating to preventive measures under the ELD, it appears that the interpretation of the concept "preventive measures" needs further clarification. Such clarification could be achieved in the form of guidelines or amendments and should ensure that:

- the difference between **preventive measures** and **emergency remedial measures** is well-defined and results in continuous application of the ELD to a case of environmental damage. This requires a clarification that preventive measures are not only taken where no damage at all (significant or not) has occurred, but also after the harmful incident has occurred to prevent the damage from becoming "significant" and therefore minimising it.

- measures to prevent damage from becoming significant are taken when there is a "**reasonable belief"** instead of certainty that the damage may be significant.

- legal uncertainties relating to the **application of preventive measures to authorised activities** are resolved. Notably, Article 5 (3) (d) ELD already provides that the NCA may, at any time, take itself the necessary preventive measures. In order to remove any legal uncertainties, it appears necessary to amend the ELD to the effect that it explicitly lists the variation or revocation of a permit by a competent authority as a preventive measure under the ELD.

11.5 Remediation of damage to protected species and habitats

Next to prevention, remediation of environmental damage is the other central objective of the ELD. [418] Remediation, in its broadest sense, refers to all measures to restore, rehabilitate or replace the damaged environment or provide an equivalent to it.[419]

Under the **ELD**, remedial action is required to, on the one hand, contain or limit the damage ("emergency remedial measures")[420] and, on the other hand, to remedy the damage with a view

[418] ELD, Recital 11.
[419] GN Bigham, NW Gard, C Monti and C Pozzi, '*The Remediation Regimes*' in B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (Oxford University Press 2013) 80 [Bigham et al., *The Remediation Regimes*], 95.
[420] ELD, Art. 6 (1)(a). Emergency remedial measures are discussed in Chapter 11.4., *Prevention of damage to protected species and habitats*.

to return to baseline condition ("remedial measures") [421] . To ensure remediation of environmental damage, Articles 6 and 7 in conjunction with Annex II of the Directive set out a detailed framework that has to be followed by the operator and the NCA: Where environmental damage has occurred, the operator must inform the NCA of the situation without delay and take the necessary remedial measures in accordance with Article 7 as well as Annex II of the ELD. [422] Notably, the NCA retains the power to give instructions and to approve of the measures taken by the operator throughout the entire process.[423]

In drafting the ELD, the European Commission used the US Oil Pollution Act (OPA 90) and its natural resource damage assessment regulations as sources of inspiration. Some of the provisions under the ELD are therefore similar with the rules set out under OPA 90.[424]

The subsequent chapters examine the framework for remedial measures outlined under the ELD. **Firstly**, the various types of remedial measures are discussed (11.5.1), along with the methods and criteria for determining the scope and scale of the required measures (11.5.2 and 11.5.3) as well as ECJ case law on options to amend remedial measures if they prove less successful than initially anticipated (11.5.4). **Next**, the role and powers of the National Competent Authority (NCA) in relation to remedial action under the ELD are explored (Chapter 11.5.5). **Subsequently**, the provisions on remedial measures under the ELD are compared with the obligations of MS under the BHD to remediate damage to protected species and habitats (Chapter 11.5.6). **Finally**, the findings are summarised for future reference (Chapter 11.5.7).

11.5.1 The three types of remedial measures under the ELD

The remediation of damage to protected species and natural habitats is to be achieved by way of so-called primary, complementary, and compensatory remediation measures.[425] Each of these measures has a different purpose, which is clearly set out in Annex II of the Directive. Their overall aim is to restore the damaged environment to the condition that would have existed if the environmental damage had not occurred, the so-called "baseline condition".

[421] ELD, Art. 6 (1)(b) in conjunction with Art. 7 and Annex II.
[422] ELD, Art. 6 (1)(b).
[423] ELD, Art. 6(2).
[424] For further reference, see Brans, *Fundamentals of Liability*, 39.
[425] Annex II, para 1. The same criteria apply to damage to water. A different remediation regime applies to damage to land.

Knowing the baseline condition is thus critical for determining the necessary remediation measures.[426]

11.5.1.1 Primary remediation

The actual remediation of "the damaged natural resources and/or impaired services to, or towards, baseline condition" is the preferred method to remediate damage under the ELD and referred to as "primary remediation".[427] The Commission illustrates primary remediation with the example of a damaged wetland.[428] According to the example, the full remediation of a damaged wetland would require

> "the return of the total of pre-existing wetland habitat and species types and their extent or populations, including the "services" that the "resource wetland" provided to the public or to other natural resources, such as recreation, water filtration, food provision, visual amenity, storm buffering, or as habitat hosting wetland birds and other species."[429]

Ideally primary remediation restores the damaged environment to baseline condition. Where primary remediation fails to fully return the damaged site to its baseline condition, **complementary remediation measures** must be undertaken **at another site and/or species** that may be the same or sufficiently similar to the damaged site / species.

11.5.1.2 Complementary remediation

Complementary remediation is defined by the ELD as "any remedial measure taken in relation to natural resources and/or services to compensate for the fact that primary remediation does not result in fully restoring the damaged natural resources and/or services".[430] The **purpose of complementary remediation** is "to provide a similar level of natural resources and/or services, including, as appropriate, at an alternative site, as would have been provided if

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[426] The "baseline condition" is defined in ELD Article 2(14). See also Chapter 11.1., *The evaluation of damage to protected species and habitats*, and more specifically Chapter 11.1.2.1.1. for a discussion of the baseline condition as a critical concept under the ELD and problems with the availability of data on the *status ante*, including further reference to Gard & Desvousges, *Technical and Economic Issues and Practices*, 225*;* Van Den Broek, *Environmental Liability and Nature Protection Areas*, 120.

[427] See Annex II, para 1(a). and para 1.1.1 For a discussion of the issues related to the determination of the baseline, refer to Chapter 11.1., *The evaluation of damage to protected species and habitats*.

[428] See also European Commission: Directorate-General for Environment, *Environmental Liability Directive – Protecting Europe's Natural Resources*, Publications Office of the European Union (2013), [online] [European Commission, *ELD Brochure*], 14.

[429] *Ibid.*

[430] Annex II, para 1(b).

the damaged site had been returned to its baseline condition". [431] Where possible and appropriate, the ELD requires that the alternative site be geographically linked to the damaged site, taking into account the interest of the affected population.[432]

11.5.1.3 Compensatory remediation

Remediating the impacted natural resources and services to their baseline condition takes time. During this time, so-called interim losses occur. "Interim losses" are defined under the ELD as "losses which result from the fact that the damaged natural resources and/or services
are not able to perform their ecological functions or provide services to other natural resources or to the public until the primary or complementary measures have taken effect". [433] Because neither primary nor complementary remediation measures compensate for these interim losses, the ELD provides for "compensatory remediation". "**Compensatory remediation"** is defined as "any action taken to compensate for interim losses of natural resources and/or services that occur from the date of damage occurring until primary remediation has achieved its full effect". [434] The **purpose of compensatory remediation** is set out as "to compensate for the interim loss of natural resources and services pending recovery. This compensation consists of additional improvements to protected natural habitats and species or water at either the damaged site or at an alternative site". [435]

The ELD expressly states that compensatory remediation "does not consist of financial compensation to members of the public".[436]

Moreover, and in addition to remediation costs and interim losses, the responsible operator can be held liable for the **costs of assessing damages** and **other costs incurred in relation to the preventive and remedial action** taken under the ELD. [437]

[431] See ELD, Annex II, para 1.1.2.
[432] See ELD, Annex II, para 1.1.2.
[433] ELD, Annex II, para. l (d).
[434] ELD, Annex II, para. 1(c)
[435] See ELD, Annex II, para. 1.1.3.
[436] ELD, Annex II, paras. 1 (d) and 1.1.1.
[437] ELD, Arts. 8(2), 2(16).

11.5.2 Scope and scale of remedial measures

The scope and scale of the required remediation measures are determined by various methods that are set out in detail in the ELD.[438] In the case of **primary remedial measures**, the prescribed options are comparatively simple, requiring the consideration of "actions to directly restore the natural resources and services towards baseline condition on an accelerated time frame, or through natural recovery".[439]

In the case of **complementary** and **compensatory remediation measures**, the situation is more complex, since both types of measures seek to **replace lost resources**. It is therefore necessary to identify an equivalent for this lost resource. For the identification of **complementary** and **compensatory measures**, Annex II proposes specific **resource equivalency methods**, including **resource-to-resource**, **service-to-service**, **value- to-cost**, and **value-to-value approaches**.[440]

In simple terms, an equivalency analysis identifies which resources and services can be considered to be "sufficiently similar" to the damaged resources and services and quantifies the amount to be remediated ("gains") to be equal to the loss due to damage ("losses").[441]

The methods specified under the ELD, namely the Habitat Equivalency Analysis (HEA) and the Resource Equivalency Analysis (REA) are essentially the same.[442] In a HEA, losses and gains are expressed in units of area of habitat, such as acres of wetland and how much of its services is lost or gained.[443]. The REA is conceptually similar to the HEA, only that the losses and gains are expressed in terms of resource units, such as numbers of fish or birds killed, or

[438] ELD, Annex II, paragraph 1.2.
[439] ELD, Annex II, paragraph 1.2.1.
[440] ELD, Annex II, para. 1.2.1. The methods for determining the scale of the remedial measures necessary to adequately offset environmental damage are worked out in detail by the Commission-sponsored study REMEDE; see J Lipton, E Özdemiroğlu, K Le Jeune and J Peers, *Resource Equivalency Methods in the European Union: A 'Toolkit' for Calculating Environmental Liability* (2018) [Lipton et al, Resource Equivalency Toolkit].
[441] ELD Annex II, para 1.2.1. The methods for determining the scale of the remedial measures necessary to adequately offset environmental damage are worked out in detail by the Commission-sponsored study REMEDE; see http://www.env liability.eu/index.htm, accessed 7 July 2020.
[442] Bigham et al., 100. For further reference, see F. Quétier & S. Lavorel, *Assessing Ecological Equivalence in Biodiversity Offset Schemes: Key Issues and Solutions*, Biological Conservation 144:12 (2011), 2991–2999 [Quétier & Lavorel, *Ecological Equivalence in Biodiversity Offsets*].]
[443] See also example given in European Commission, *ELD Brochure*, 16.

litres of groundwater contaminated. Both methods are widely used in environmental damage assessment.[444]

The ELD mandates that resource-to-resource and service-to-service shall be considered first. Only if it is not possible to use these "first choice equivalency approaches", then alternative valuation techniques such value- to-cost and value-to-value approaches may be considered.[445] These alternative approaches use money as a metric. The value-to-value approach, is based on compensating lost habitats or services with habitats or services of the same monetary value. In a value-to-cost approach the costs of remediation mirror the value of the damage. While these approaches use money as a metric, this does not imply that financial compensation is required. Rather the ELD principle remains that damaged resource and services should be remediated.[446]

The concept of equivalency analysis mandated under the ELD is not a novelty in biodiversity offsetting. The conceptual basis for the HEA was developed in the United States in the early 1990s and initially applied to the assessment of oil pollution damage. Under the HD, similar concepts are applied to determine the scale of compensatory measures for negative effects of a plan or project under Article 6(4) HD.[447] The distinctive feature of the equivalency approach in the ELD compared to the HD is that the ELD explicitly requires to consider the use of specific techniques to determine the scale of compensation, namely Habitat Equivalency Analysis (HEA) and Resource Equivalency Analysis (REA).[448] The HD, in contrast, simply prescribes that the "MS shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected".[449]

11.5.3 Criteria for final selection of remedial measures

Once possible remediation measures have been identified using the methods described above, further criteria come into play for the final selection of the measures to be taken. For the assessment of the various options identified for the remediation of the damage, Annex II sets

[444] For an overview of procedures and methods developed to assess ecological equivalence in different regulatory contexts, see Quétier & Lavorel, *Ecological Equivalence in Biodiversity Offsets*. See also example given in European Commission, *ELD Brochure*, 16.
[445] See ELD, Annex II, paras 1.2.2. -1.2.3.
[446] See also European Commission, *ELD Brochure*, 16.
[447] See G Van Hoorick, Compensatory Measures in European Nature Conservation Law (2014) 10(2) Utrecht Law Review 161–171 [Van Hoorick, *Compensatory Measures*].
[448] See also in this regard Bigham et al., *The Remediation Regimes*,100.
[449] ELD, Art. 6(4)

forth additional criteria.[450] These criteria are listed without hierarchy and include, amongst others:

- the **costs** of implementing the option;
- the **likelihood of success** of each option;
- the extent to which each option **prevents future damage** and **avoids collateral damage**;
- the **length of time** it will take **for the restoration to be effective**;
- and the extent to which each option takes account of **relevant social, economic and cultural concerns** and other relevant factors specific to the locality.

11.5.4 Altering remedial measures previously decided

There is no guarantee that the remedial measures achieve the expected results. Even if carefully selected and approved by the NCA, they may turn out to be less successful than anticipated and fail to achieve the expected results. This was the case in *ERG and others and ENI* (C-379/08 and C-380/08), which concerned damage caused by the operation of numerous industrial activities at a site known as the Augusta Roadstead in Sicily (Italy). The activities led to the contamination of sediments with chemicals. The referring national court sought to clarify whether the ELD permits a substantial change in measures which have already been implemented or begun to be put into effect. The ECJ answered the question in the affirmative and ruled that a NCA is entitled to alter remedial measures previously adopted or to require additional measures.[451] However, unless the urgency of the environmental situation requires immediate action on the part of the NCA, it may not decide remedial measures without first giving the responsible operators and other interested parties,[452] the opportunity to be heard.[453] Furthermore, while the NCA is required to ensure the best results from an environmental point of view, the additional measures should not cause the responsible operator "to incur manifestly disproportionate costs" in comparison to the previously selected option.[454]

[450] ELD, Annex II, paras 1.3.1—1.3.3.
[451] *ERG and others and ENI*, C-379/08 and C-380/08, para. 51.
[452] The persons referred to in ELD, Arts. 7(4), 12(1).
[453] *ERG and others and ENI*, C-379/08 and C-380/08, paras. 55-56;
[454] *Ibid.*, para 64. The full paragraph reads "manifestly disproportionate costs by comparison with those they had or would have had to incur in connection with the first option chosen by that authority. The Court, however, also notes that such considerations are irrelevant where the authority can demonstrate that the option originally chosen was, in any event, inappropriate for the purpose of remediating the damage."

11.5.5 Role and powers of NCA

The NCA remains in control of the remedial measures to be adopted at all time. While it is the duty of the operator to identify the potential remedial measures, it is the duty of the NCA to decide which of the selected remedial options are to be implemented, Article 7 ELD.[455] At any time, the NCA has the power to ask the operator for more information and to give him instructions, or take the necessary remedial measures itself, Article 6 ELD.[456]

In making the decision which remedial measures shall be implemented, Article 7(4) ELD requires the NCA to invite the **persons on whose land any remedial measures would be implemented** as well as the **persons referred to in Article 12(1) ELD** to submit their observations. Their observations must be taken into account. Article 12(1)(a)-(c) of the ELD refers to persons:

- **affected** or **likely to be affected** by environmental damage; or
- with a **sufficient interest** in environmental decision making relating to the damage; or, alternatively
- alleging the **impairment of a right**, where administrative procedural law of a MS requires this as a precondition. [457]

The process of identifying, assessing and selecting remediation options ultimately determines the extent of the operator's financial liability. Financial liability under the ELD is essentially not capped and thus unlimited. [458] However, if the costs of the remedial measures are disproportionate to the environmental benefits, the NCA is entitled to decide that no further remedial measures must be taken.[459]

The implementation of remedial measures is first and foremost the duty of the liable operator. However, there may be cases where the operator fails to comply with its obligations, or cannot be identified or is not required to bear the cost. In such cases, as a "means of last resort", the NCA may take the measures itself.[460] Leaving the decision to remediate the damage at the

[455] *ERG and others and ENI*, C-379/08 and C-380/08, paras 49-50.
[456] ELD, Art. 6(2).
[457] For a discussion of Article 12 ELD, see Chapter 11.8., *Rights of affected persons and environmental organisations*.
[458] Brans, *Fundamentals of Laibility*, 41.
[459] ELD, Annex II, para 1.3.3.(b).
[460] ELD, Art. 6(3).

discretion of the NCA may ultimately result in a situation where no one takes responsibility for remediating the harm done to natural resources—an outcome commonly referred to as the problem of "orphan damage".[461] In the case of damage to protected species and habitats, a duty for MS to take remedial measures may, nonetheless, arise under the BHD. [462] This is explored next.

11.5.6 Remedial measures under the ELD and BHD in comparison

Both, the ELD and the BHD, contain obligations to restore and remediate damage to protected species and habitats. Where the operator fails to comply with its obligations or cannot be identified, a duty for MS to take remedial measures may therefore arise under the BHD, which contain obligations for MS to restore protected species and habitats inside Natura sites under Article 6 HD and Article 4(1) to (2) BD. [463]

In the following, obligations of MS under the BHD to restore or remediate damage in cases where the operator fails to comply with its obligations or cannot be identified are investigated. Next, the remediation regime under the ELD is compared with the requirements set out under the BHD.

11.5.6.1 Obligations under the BHD to restore or remediate damage

Under the **BHD**, several provisions contain requirements for MS to restore or remediate damage to protected species and habitats: **Firstly**, Article 6 (1) HD, which lays down a general conservation regime for protected sites and requires MS to take positive and proactive conservation measures to maintain or restore natural habitats and species at favourable conservation status. [464] **Secondly**, Article 6(2) HD, which, as evolving case law of the ECJ appears to suggest, also imposes a duty on MS to restore and/or remediate damage.[465] **Thirdly**,

[461] The problem of orphan damage is discussed in more detail below, Chapter 10.7., *Orphan Damage*, which addresses Article 6(3) ELD in more detail.
[462] See also discussion of BHD in Part I of this dissertation.
[463] See also discussion of BHD in Part I of this dissertation. As previously noted, the site protection measures under Article 6 (2) to (4) HD also apply to sites protected under the BD, see Article 7 HD.
[464] For further reference, see Chapter 5.2.3.1., *Necessary Conservation Measures, Article 6(1) HD*. As previously noted, Article 6(1) HD does not apply to the management of SPAs, which continues to be governed by Article 4(1) -(2) BD. "These provisions require that the rare and threatened bird species listed in Annex I, as well as regularly occurring migratory species not listed in Annex I of the BD, must be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution."
[465] For further reference, see Chapter 5.2.3.2.6., *Restoration and remediation requirements under Article 6(2) HD*.

Article 6(4) HD, which requires MS to compensate for any damage resulting from plans or projects in a Natura 2000 site that benefit from a derogation.[466]

Article 6(1) HD requires MS to take positive and proactive conservation measures that - in line with the individually determined site-level conservation objectives - contribute to the overall aim of the Directive to maintain or restore natural habitats and species at FCS. [467] While Article 6(1) HD focuses on the maintenance and restoration of FCS, it arguably lays the groundwork for remediation: If an activity causes damage to protected species and habitats, the obligation to manage these sites effectively should translate into a duty to remediate such damage, ensuring the site's conservation objectives are still achieved. Evidently, measures taken to remediate the damage would - unlike the ELD – not aim to restore the damaged natural resources to baseline condition. Instead, any measures taken under Article 6(1) HD in response to the damage would aim to ensure that the site conservation objectives are still being achieved.[468]

Article 6(2) HD appears to primarily require measures of a preventive nature. However, evolving ECJ case law, particularly since the decision in *Grüne Liga Sachsen* (C-399/14), seems to indicate that Article 6 (2) may also require restorative measures, such as measures to remedy a past implementation deficit.[469] The scope of the remedial measures required under Article 6(2) HD is determined by applying Article 6(4) by analogy.[470] While the ECJ may have "modestly open[ed] the door" for a restoration requirement under Article 6(2) HD, the rulings in which the ECJ conclusively held that Article 6(2) mandates active restoration measures remain scarce.[471]

Article 6(4) HD requires MS to compensate for any damage resulting from plans or projects that benefit from a derogation. Since Article 6(4) applies, in principle, only in conjunction with the approval of plans and projects under **Article 6(3)**, it is not suitable as a stand-alone basis

[466] For further reference, see Chapter 5.2.3.4., *Derogation under Article 6(4) HD*.
[467] European Commission, *Managing Natura 2000 Sites (C(2018) 7621 final)*.
[468] For further reference, see Chapter 5.2.3.1., *Necessary Conservation Measures, Article 6(1) HD*.
[469] For further reference, see Chapter 5.2.3.2.6., *Restoration and remediation requirements under Article 6(2) HD*. In the ECJ's preliminary ruling *Grüne Liga Sachsen*, C-399/14, the Court addressed the question whether a plan or project that was approv ed without meeting the requirements under Article 6(3) to 6(4) required remedial action under Article 6(2) HD. See also Schoukens, *Non-Regression and Article 6(2)*, 151; Telesetsky et al., *Ecological Restoration in International Environmental Law*, 244-245.
[470] *Grüne Liga Sachsen*, C-399/14, para.71
[471] Schoukens, *Non-Regression and Article 6(2)*, 151 and 153.

for an obligation on MS to remedy damage caused by a non-compliant or non-identifiable operator. However, based on the recent ECJ rulings discussed above, Article 6(4) could apply in conjunction with Article 6(2) and 6(3), whereby Article 6(2) establishes the primary obligation of MS to remediate damage resulting from a prior implementation deficit. Such a case of application of Article 6(4) in conjunction with Article 6(2) and 6(3) will be analysed in the following, comparing and contrasting the remediation regime established under the ELD with the compensatory measures required under the BHD.

11.5.6.2 Comparing and contrasting BHD compensatory measures with ELD remedial measures

The ELD itself may not impose a subsidiary obligation on MS to remediate damage to protected species and habitats. However, the assessment of recent ECJ case law on the BHD has demonstrated that such a duty may arise from the application of Article 6(2) in conjunction with Articles 6(3) and 6(4) HD, as demonstrated in Part I of this thesis.[472] If such a claim can indeed be pursued against a MS, the question arises as to the extent to which the requirements for compensatory measures under Article 6(4) HD are comparable to those stipulated in the ELD. Obviously, when comparing the offsetting regime under Article 6(4) HD with the remedial regime set out in the ELD, it is important to recognise that these two regimes are designed to apply in fundamentally different contexts: While the compensation obligations under the HD are forward-looking, addressing anticipated damage from planned development projects, the remedial measures under the ELD are reactive, taken in response to damage caused by an activity or incident (*ex ante* vs *ex post*).[473]

This fundamental difference in orientation is also reflected in the distinct aims of the two different regimes. The overall aim of the **remedial measures taken under the ELD** is the "restoration of the environment to baseline condition".[474] It distinguishes between three types of remediation: primary remediation, which seeks to restore the environment to its baseline condition; complementary remediation, which compensates when primary remediation does not fully restore the environment; and compensatory remediation, which compensates for interim losses, that occur from the date of damage occurring until primary remediation has taken has achieved its full effect. Moreover, in order to determine the scope and scale of the

[472] For further reference, see Chapter 5.2.3.2.6., *Restoration and remediation requirements under Article 6(2) HD*.
[473] McGillivray, *Compensating Biodiversity Loss*, 422.
[474] ELD, Annex II, para.1, first sentence

required remedial measures, the ELD prescribes the use of equivalency methods. It prioritises the use of habitat and resource equivalency approaches and if these are not possible, alternative valuation techniques may be considered, such as value- to-cost and value-to-value approaches.

The **complementary measures prescribed under the HD**, on the other hand, focus on offsetting damage caused by a plan or project, rather than direct remediation. They aim to maintain the integrity of Natura 2000 sites, not necessarily to restore the exact site where damage occurred.[475] As McGillivray (2012) notes in his brief comparison, compensatory measures under the HD form part of a sequential approach.[476] They are only considered after the adverse effects of a proposed development have been assessed under Article 6(3) HD and a search for less damaging alternatives has been conducted. To determine the scale of compensatory measures for negative effects of a plan or project under Article 6(4) HD, similar approaches to those under the ELD are applied.[477] However, in contrast to the ELD, the HD does not prescribe specific techniques or a hierarchical order for their use. Indeed, the compensatory measures prescribed under Article 6(4) HD are not further specified or defined in any part of the HD.

Concerning the implementation of the measures, another significant difference is worth highlighting: the **expressly required involvement of the public under the ELD**. In theory, this promises greater transparency and control. NCAs must invite NGOs as well as the persons affected from the damage or on whose land the measures would be implemented to submit their observations and take them into account. The HD, in contrast, does not provide for public participation under Article 6(4). Indeed, several commentators have criticized a lack of transparency in the implementation of compensatory measures under the HD.[478]

In summary, when comparing the two approaches, the ELD's provisions offer significantly more detailed guidance on the expectations for the remediation process, both in terms of the methods to be employed and the outcomes to be achieved, than those of the HD for the compensatory measures. Additionally, the ELD's explicit requirement for compensation for

[475] Article 6(4) HD states the aim of compensatory measures in rather broad terms as to "ensure that the overall coherence of the affected Natura 2000 site is protected".
[476] McGillivray, *Compensating Biodiversity Loss.*
[477] See Van Hoorick, *Compensatory Measures.*
[478] McGillivray, *Compensating Biodiversity Loss*, 417; Krämer, *Article 6(4) Opinions*, 76-77. For further reference, see Chapter 5.2.3.4.4., *Implementation and enforcement of Article 6(4) requirements*.

interim losses clearly broadens the scope of its remedial measures beyond the compensation measures mandated under the HD.

That said, research into the implementation and enforcement of the two different regimes in the MS has revealed shortcomings in the case of both Directives. As demonstrated in Part I of this dissertation, the application of Article 6(4) HD has been critically discussed by several studies with evidence that MS are not properly implementing the requirements for a derogation.[479] Indeed, evidence suggests that MS continue to enjoy a considerable amount of freedom in the implementation of compensatory measures under the HD and that there is little control over whether the announced measures are actually implemented and/or effective,[480] with one main point of criticism concerning the lack of transparency in the process. [481] Overall, the implementation record of Article 6(4) HD appears weak; however, a lack of data complicates the assessment of its effectiveness.

Similarly, in the case of the ELD, the implementation by MS appears to fall behind the remedial regime outlined in the Directive, despite its detailed instructions on achieving the remedial objectives and its emphasis on the role of NCAs in this process. The REFIT Evaluation Report (2016) concludes from the available "haphazard and scarce" data, [482] that out of the three remediation options under the ELD, primary remedial measures were selected far more frequently than complementary and compensatory remedies. [483] Although remediation was overall increasing, the absolute number of complementary and compensatory remediation cases would appear "to remain still very low". This would not suggest a "highly qualitative implementation" of remedial measures in the MS. To improve the situation, the Commission (2016) suggests "more exchange of information among stakeholders" and more transparency in the availability of data.[484]

[479] See Part I, Chapter 5.2.3.4, *Derogation under Article 6 (4) HD*.
[480] For further reference, see Chapter 5.2.3.4.4., *Implementation and enforcement of Article 6(4) requirements*.
[481] Krämer, *Article 6(4) Opinions*, 76-77.
[482] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 32. The report notes that MS were not required under the ELD reporting obligations to deliver detailed information on the three remediation options and that only very few reports included some indications.
[483] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 32.
[484] *Ibid.*, 59.

11.5.6.3 Conclusion on remedial measures under the ELD and BHD and their interplay

Considering the lack of a subsidiary duty of MS under the ELD to remediate damage where the responsible operator fails to comply with its obligations or cannot be identified, this chapter investigated whether such an obligation could be derived from the BHD and if so, the extent to which the requirements for any "remedial measures" carried out within the framework of the BHD are comparable to those stipulated in the ELD. In conclusion, while recent ECJ case law suggests an emerging role for Article 6(2) HD as a basis for an obligation of MS to remediate damage in Natura 2000 sites, it appears that the provisions for compensatory measures under the HD fall short of the remediation regime set out under the ELD, therefore not guaranteeing a restoration of the damaged natural resources to their baseline condition.

11.5.7 Summary of findings on remedial measures under the ELD

Alongside prevention, the remediation of environmental damage is a central objective of the ELD, aimed at restoring damaged resources to their baseline condition. The examination of the ELD's remediation regime has revealed a detailed framework to be followed by both operators and NCAs. This framework distinguishes between primary, complementary, and compensatory remedial measures, each with a clearly defined purpose as outlined in the Directive. In addition, the ELD prescribes specific methods and criteria for determining the scope and scale of the necessary measures. Case law from the ECJ has further clarified options for modifying remedial measures if they prove less effective than anticipated. The role and powers of NCAs in overseeing and enforcing remediation are also clearly defined under the ELD.

However, the examination of the ELD's remediation regime also identified a significant shortcoming: the absence of a subsidiary duty for MS under the ELD to remediate damage when the responsible operator fails to comply with its obligations or cannot be identified or is not required to bear the cost. In the case of protected species and habitats, recent ECJ case law suggests an emerging role for Article 6(2) HD as a potential basis for obliging MS to remediate damage within Natura 2000 sites. However, the provisions for compensatory measures under the HD fall short of the remediation regime established under the ELD, failing to ensure the restoration of damaged natural resources to their baseline condition: Altogether, comparing and contrasting BHD compensatory measures with ELD remedial measures has demonstrated that the ELD's provisions are markedly more comprehensive than the obligations under the BHD, particularly in specifying methods to be used and outcomes to be achieved. Moreover, the

involvement of the public and the role of the NCA in the process suggest better monitoring and follow up under the ELD. That said, while the ELD regime on remedial measures appears superior in a number of aspects to the minimal requirements formulated under Article 6(4) HD, the existing (scarce) data on their implementation in the MS suggests that the ELD regime would substantially benefit from greater transparency, better follow up and far more comprehensive data on their actual implementation in the MS.

Ultimately, the ELD and the BHD share a striking similarity: limited knowledge about the actual implementation and success of their remediation/compensation measures. This underscores the critical importance of robust monitoring and evaluation mechanisms in assessing the effectiveness of EU environmental policies.

11.6 Lack of Mandatory Financial Security

The prevention or remediation of environmental damage can be costly. Major environmental incidents such as the **Aznalcóllar mining disaster** in Spain (1998), which incurred remediation costs of approximately €240 million, and the **Kolontár red sludge spill** in Hungary (2010), with damages exceeding €115 million, illustrate the substantial financial costs that can arise from the prevention and/or remediation of environmental damage.[485]

For cases, where an operator does not have the financial means to cover the costs, and in extreme cases, may threaten an operator's insolvency and thus survival, it was discussed to include an EU wide system of harmonised mandatory financial security in the ELD. The issue was highly contentious not least because it was feared that the required insurance coverage would create disincentives for the prevention and remediation of damage. Ultimately mandatory financial security was not included in the final version of the ELD.[486] The EU-legislator confined itself to encouraging the MS to develop security instruments that enable the operators to cover their responsibilities under Article 14(1) of the Directive and to instruct the Commission to report on the issue of financial security in the MS as well as to "submit proposals for a system of harmonised mandatory financial security" in a report to be presented before 30 April 2010.[487]

[485] For further reference, see Fajardo & Fuentes, *EFFACE Mining Accidents Study;* J Bryce, *Controversial Spanish mine to reopen*, The Guardian, 25 February 2015, [online] [Bryce, *Controversial Spanish Mine*].
[486] Fogleman, *Study on Integrating the ELD*, 53.
[487] ELD, Art. 14(2).

11.6.1 Commission 2010 report and proposal on system of harmonised mandatory financial security

The Commission did not submit such proposals in its **2010 report**, stating that it was premature to do so because "the transposition of the ELD resulted in divergent implementation rules [...] the MS opting for mandatory financial security do not yet have their systems in place, so mandatory approaches cannot be evaluated, and [...] more financial security products are becoming available".[488]

According to a report issued by Milieu & IUCN in 2014, it appears that only eight EU MS had opted for mandatory financial security, including Spain and Bulgaria, whilst others, e.g. France, had opted for reinforcing/improving the availability of insurance coverage the insurance system for environmental damages. [489]

11.6.2 Commission 2016 report on ELD experience

In its **2016 report on the experience gained in the application of the ELD**, mandated under Article 18(2) ELD, the Commission found that in most MS insurance cover was available in order to provide sufficient cover for ELD risks.[490] However, despite these developments in the financial sector, problems would remain in the application of the Directive to major accidents and related insolvencies of liable operators. The European Parliament (2017) related the overall low demand within the ELD financial security market to the small number of ELD cases and noted that the "scarcity and contradictory nature" of the data on ELD cases hindered opportunities to improve the provision of financial guarantees.[491] It stated the average cost of remedial action with EUR 42 000, but noted that in a few significant cases the costs were indeed significantly higher.[492] However, due to the **insolvency of the operator**, in these cases recovery of the remediation costs would not have been possible.

[488] European Commission, *Report on Article 14(2) of Directive 2004/35/EC on Environmental Liability*, COM (2010) 581 final.
[489] Milieu & IUCN, *ELD Biodiversity Damage Report*, 49.
[490] European Commission, Report under Article 18(2) Environmental Liability Directive, COM (2016) 6; See also European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 49.
[491] European Parliament, *2017 ELD Resolution* (26 October 2017), paras.16 - 17.
[492] European Parliament, *2021 Report on Company Liability (6 April 2021)*, para.8.

11.6.3 Commission 2016 REFIT evaluation

As a potential solution the Commission's **REFIT evaluation report from 2016** considered "tailor-made industry funds or risk-sharing facilities". [493] These should, however, not undermine the polluter pays principle and ensure that "'good' players do not foot the bill for 'bad' players" or hinder the further development of the insurance market. The European Parliament (2017), on the other hand, emphasised that financial compensation must be possible regardless of the insolvency of the responsible operator and argued that the costs for both the taxpayer as well as the liable operator could be substantially reduced through the introduction of mandatory financial security instruments.[494]

11.6.4 2020 Commission study on improving financial security

In 2020, another study commissioned by the European Commission revisited the availability and application of financial security for liabilities under the ELD across MS.[495] The analysis distinguished between those jurisdictions in which financial security is mandated (namely, the Czech Republic, Ireland, Portugal, Slovakia, and Spain) and those in which it remains voluntary.

The study still identified **significant discrepancies between MS** in ensuring that operators have the financial capacity to cover environmental liabilities. In many jurisdictions, **operators can avoid liability by entering insolvency proceedings**, leaving public funds to bear the costs of remediation.[496]

Despite the lack of uniform adoption, the study identified a trend toward mandatory financial security among some MS, particularly for liabilities under related directives like Seveso III, the Industrial Emissions Directive, and waste legislation.[497] Nonetheless, the report advised against introducing a harmonised EU-level requirement for mandatory financial security at this stage, citing inadequate insurance market maturity in several MS.[498] Similarly, the establishment of an EU-wide environmental fund was not recommended, as only a few MS (Portugal, Spain)

[493] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*.
[494] European Parliament, *2021 Report on Company Liability (6 April 2021)*, paras.42 – 43.
[495] V Fogleman, Stevens & Bolton LLP and Cardiff University School of Law and Politics, Improving Financial Security in the Context of the Environmental Liability Directive, Study for the European Commission, (May 2020) [online] [Fogleman et al., *Improving Financial Security under the ELD*].
[496] *Ibid.*, 214. For full discussion of the issue, see Chapter 11.5 of the Commission study.
[497] *Ibid.*, 58.
[498] *Ibid.*, 268-269.

have functioning national funds, and most lack the foundational insurance infrastructure to support such a model. [499]

The sole **EU-level** recommendation was to develop an EU-wide training programme aimed at SMEs, brokers, and other stakeholders. [500] This programme should clarify the specific insurance products needed under the ELD and improve corporate environmental risk management.

At the **MS level**, the study suggested: [501]

- Introducing mandatory financial security for high-risk activities (e.g. waste operations), and gradually phasing in broader requirements based on risk assessments (as seen in Poland).
- Adopting best practices from MS with functioning systems.
- Consider establishing national environmental funds to address insolvency-related environmental liabilities and market failures.
- Reforming corporate law to prevent liability evasion.[502] This may involve measures to "capture 'artificial corporate structures' and 'profit-shifting enterprises'" [503] that deliberately avoid their obligations, and to extend liability to affiliated persons where the operator lacks the financial means to remediate environmental damage. Relevant legal models include Austria, France, Spain, and non-EU jurisdictions like Queensland, Australia and Ontario, Canada.

Finally, the study recommended further work in three key areas:[504]

- Improving enforcement of the ELD through clearer delineation of its relationship with pre-existing national legislation. This would include country-specific toolkits to help NCAs decide when and how to apply the ELD.
- Encouraging operator compliance by promoting environmental risk management frameworks (ISO 14001, ISO 31000, EMAS) and incentives for risk-reducing behaviour (e.g. Italy's PdR standard and premium discounts).

[499] *Ibid.,* see in particular discussion in Chapter 15 of the Commission study.
[500] *Ibid.,* 269-270.
[501] *Ibid.,* 270-274.
[502] *Ibid.,* 227-232
[503] *Ibid.,* 227, with further reference to Queensland Government, 'Review of Queensland's Environmental Chain of Responsibility Laws' (2018), 1. https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2018/5618T1713.pdf
[504] *Ibid.,* 275-277

- Protecting the environment and public finances by reviewing how insolvency law, creditor priority, and inadequate financial security instruments affect liability coverage. The study suggests looking to international examples for innovative, effective solutions.

11.6.5 Summary of findings and conclusions

In light of recent studies and the empirical cases, it is evident that voluntary approaches have not delivered the uniform protection intended by the ELD. Without effective financial security mechanisms, the Directive's enforcement is inconsistent, its preventive effect is weakened, and the costs of environmental harm are routinely socialised.

In summary, the current ELD framework continues to suffer from:

- The inability to ensure operator liability where insolvency occurs;
- The absence of effective financial safeguards for taxpayers;
- The lack of incentives for insurers and operators to engage in the environmental liability market.

To address these problems, a future-proof solution should:

- Ensure operators cannot escape environmental liability via insolvency;
- Protect public funds from bearing the costs of environmental harm;
- Promote financial security uptake through improved enforcement, targeted mandatory requirements for high-risk activities, and data transparency.

Until such reforms are realised, criminal (non-monetary) sanctions may be necessary in cases where financial deterrents are insufficient, especially when undercapitalised operators act with gross negligence or intentional harm. These issues are further explored in Part III of this dissertation, which examines the role of criminal liability in strengthening environmental protection.

11.7 Orphan Damage

A major shortcoming under the ELD regime manifests itself in Article 5 (4) ELD and Article 6(3) ELD, which state that if the operator fails to comply with the obligations, or cannot be identified, or is not required to bear the costs under the provisions of the Directive, "the

competent authority **may** take these measures itself".[505] The Commission's proposal for the Directive originally provided for an obligation of the competent authority to prevent and remediate the damage in cases where an operator failed to comply with his obligations under the Directive[506] or where, for different reasons, the operator could not be held financially liable for the prevention and remediation of the damage.[507] In the adopted text of the Directive, this was, however, reduced to a power of discretion.[508] As a result, the Directive in its current form leaves the decision to prevent or remediate the damage to the competent authorities. This raises the problem of "orphan damage", that is damage where ultimately nobody is required to prevent or remedy the damage inflicted on the natural resources.[509]

The European Parliament (2017) recommends that, "subsidiary state liability" should therefore be made mandatory. This would also ensure effective and proactive implementation of the ELD by national authorities who would have an interest to protect themselves from subsidiary liability. [510] Likewise, the Biodiversity Damage Report (2016) by Milieu et al. suggests amending the ELD to ensure that competent authorities carry out preventive and remedial measures in cases where the responsible operator fails to comply with his obligations or cannot be identified. [511] Such measures taken by the competent authorities could be financed by what the report referred to as "polluter pays taxes of Annex III activities", which would avoid transferring the costs from the responsible operator to the taxpayer.

As previously demonstrated, in the case of environmental damage that affects species and habitats protected under the BHD, the two Directives may impose an obligation on MS to restore the damage. [512]

[505] Refer also to Chapters 11.4 *Prevention of damage to protected species and habitats*, 11.5. *Remediation of damage to protected species and habitats*.
[506] European Commission, *Environmental Liability Proposal (COM(2002) 17 final),* Arts. 4-5.
[507] *Ibid.*, Art. 9.
[508] Fogleman, *Enforcing the ELD*, 132.
[509]Krämer, Directive 2004/35 and Environmental Liability, 253; For an illustration of the problem see Milieu & IUCN, *ELD Biodiversity Damage Report*, 53. The study refers to a case in Poland, where the CA failed to establish the causal link and therefore could not hold the operator liable for the damage Ultimately neither the operator nor the CA undertook any measures to remediate the damage.
[510] European Parliament, *2017 ELD Resolution* (26 October 2017), para.33.
[511] Milieu & IUCN, *ELD Biodiversity Damage Report*, 33 and 35.
[512] For further reference, refer to discussion in Chapter 11.5.6., *Remedial measures under the ELD and BHD in comparison*.

However, where preventive or remedial action is carried out under the BHD, it would be limited to the natural resources located or present in designated nature protection areas (Natura 2000).[513] MS" obligations under the BHD are thus not able to fully compensate for the lack of subsidiary state liability under the ELD. Moreover, when invoking the HD instead of the ELD, distinctive features of the ELD, such as the detailed prescription of the necessary remediation measures, the explicit requirement of compensation for interim losses, the involvement of the public in the remediation process[514] and the participation and access to justice rights set out under Articles 12 and 13 ELD do not apply.

In conclusion, in order to ensure that significant environmental is indeed prevented and remedied, the ELD should be amended to include the Commission's original proposal that the competent authority be obliged to prevent and remedy damage where the operator has failed to comply with his obligations under the Directive. Obviously, the costs of such measures would be borne by the tax payer. However, making the MS subsidiary liable does not counter the objective of the ELD to promote the polluter pays principle, since the incentives and obligations for the operator in principle remain intact.

11.8 Rights of affected persons and environmental organisations

Citizens and NGOs are important actors within the EU system of governance for the implementation and enforcement of environmental legislation. They can be powerful agents of EU environmental law enforcement at national and EU level.[515] The inclusion of explicit requirements for participation and access to justice in the ELD certainly represents one of the most progressive and strongest features of the Directive. The following chapters discuss the participation and access to justice rights stipulated under Articles 12 and 13 ELD (Chapter 118.1.) and the problems that arise from the lack of a corresponding right to information under the ELD (Chapter 11.8.2.). Lastly the findings are summarised (Chapter 11.8.3.).

11.8.1 Participation and access to justice rights

An important feature of the ELD is, that it stipulates participation and access to justice rights. Under Articles 12 and 13 ELD, qualified natural and legal persons are entitled to request

[513] As previously noted, in some aspects the protection under the ELD is broader than under the BHD. For further reference, see Chapter 11.1.1., *Scope of biodiversity protected under the ELD*.
[514] ELD, Art. 7(4).
[515] For further reference, see Chapter 5.1.3., *The role of private parties.*

authorities to take action against operators (Article 12) and to challenge the decision or inaction of the authority before a court or tribunal (Article 13).

According to Article 12 (1) ELD, natural or legal persons

> "shall be entitled to submit to the competent authority any observations relating to instances of environmental damage or an imminent threat of such damage of which they are aware and shall be entitled to request the competent authority to take action under this Directive".

Comments and request must be accompanied by supporting information and data.[516] If the comments and the request appear plausible, the competent national authority must consider the observations and the requests for action. The competent authority must also inform the applicant about its decision and the reasons for taking the decision.[517]

In principle, the right to request a competent authority to take action only applies to cases of actual environmental damage to an imminent threat of damage. It remains at the discretion of MS to also apply the rights under Article 12 ELD to an imminent threat of damage.[518] Considering that NGOs often are the first to become aware of a threat of environmental damage, confining the rights granted in Article 12 to actual environmental damage does not appear to act in favour of the prevention aim of the Directive.

The persons who can invoke the rights under Articles 12 and 13 ELD are further specified by the Directive. Only persons that meet one of three alternative criteria stated in Article 12(1) paragraphs (a) –(c) are entitled to the rights stated under Article 12 and 13 ELD. These criteria include that the natural or legal person:

- is "**affected** or **likely to be affected** by environmental damage" or
- has a "**sufficient interest** in environmental decision making relating to the damage" or, alternatively
- alleges the "**impairment of a right**, where administrative procedural law of a MS requires this as a precondition".

[516] ELD, Art. 12(2).
[517] ELD, Art. 12 (3) –(4).
[518] ELD, Art. 12(5).

Article 13 further provides the applicant with the right to challenge the procedural and substantive legality of the decision taken by the CA under the ELD as well as inaction of the CA before a court or tribunal. In this regard, Article 13(1) ELD stipulates that

> "[t]he persons referred to in Article 12(1) shall have access to a court or other independent and impartial public body competent to review the procedural and substantive legality of the decisions, acts or failure to act of the competent authority under this Directive."

The three alternative criteria mentioned in Article 12(1)(a) to (c), which are an essential prerequisite for the exercise of the rights provided for in Articles 12 and 13 of the ELD, are examined in more detail below.

11.8.1.1 Affected or likely to be affected

A limited number of ECJ cases have ruled on Articles 12 and 13 ELD. In *Gert Folk* (C-529/15) the ECJ held that the criterion stated under Article 12(1)(a) ELD, which provides that "the right to a review procedure for those **persons affected or likely to be affected** by environmental damage", does not allow MS the same margin of discretion as the criteria stated under Article 12(1)(b) ("sufficient interest") and (c) ("impairment of a right") ELD. [519] The case concerned the application by an individual who held fishing rights downstream from a hydroelectric power station, which he claimed caused fish to die along extended stretches of the river. The referring court sought to clarify if Articles 12 and 13 ELD preclude a national provision, which prevents persons holding fishing rights from initiating a review procedure for damage relating to their fishing rights. The ECJ first noted that persons holding fishing rights appear to fall within the three categories defined in Article 12(1) ELD.[520] Next the Court observed that by excluding all persons holding fishing rights from the right to a review procedure, national legislation would deprive a very large number of persons who may fall within one of the three categories defined in Article 12 ELD of that right to review procedures. [521] From that, the Court concluded that (the interpretation of) a national law, which would deprive persons directly affected by environmental damage (in that case an increase in the mortality of fish), is incompatible with Article 12 and 13 ELD. [522]

[519] *Gert Folk*, C-529/15, para.47.
[520] *Ibid.*, para.48
[521] *Ibid.*
[522] *Ibid.*

11.8.1.2 Sufficient interest and impairment of a right

The latter two alternatives "sufficient interest" and "impairment of a right" were included in the ELD to allow countries, which follow the subjective system of judicial review of administrative action, to include environmental standing into their administrative court procedure law.[523]

What constitutes a "sufficient interest" and "impairment of a right" is not further defined by the Directive and "shall be determined by the MS", according to paragraph 1 of Article 12 (1) ELD. This discretion, however, does not include environmental NGOs. Regarding environmental NGOs, the ELD expressly stipulates that the interest of "any non-governmental organisation promoting environmental protection and meeting any requirements under national law" shall be deemed sufficient for the purpose of [a sufficient interest and alleging the impairment of a right]", see paragraph 3 of Article 12(1). The reasons for this explicit provision concerning NGOs is stated in Recital 25 of the ELD, according to which:

> "Environmental protection is […]a diffuse interest on behalf of which individuals will not always act or will not be in a position to act. Non-governmental organisations promoting environmental protection should therefore also be given the opportunity to properly contribute to the effective implementation of this Directive."

Studies and reports on the transposition of paragraph (b) of Article 12(1) ELD show that the discretion left to MS regarding the qualifications required for a "sufficient interest" under Article 12(1) has led to substantial differences in MS" transposing legislation.[524] In some MS the transposing legislation is especially broad in respect of persons who may be interested parties (e.g. Hungary, Poland, Greece or Portugal). In other MS, in order to meet the criteria of a "sufficient interest", natural and legal persons have to meet specific requirements.[525] Swedish law, for example, establishes that only "a non-profit association whose rules state that it aims to safeguard nature protection or conservation interests [may appeal a judgment or decision]".[526] Additionally, the association is required to either have 100 members and have been active in Sweden for three years, or "else show public support". Even more stringent criteria existed in Sweden before the ELD was transposed. Prior legislation required, that the

[523] See Rehbinder, *Environmental Liability Directive in Germany*,115. Among the countries that follow the subjective system of judicial review of administrative action are Germany and Austria.
[524] BIO Intelligence Service, *ELD Implementation Report*, 41-42; Fogleman, *Study on Integrating the ELD.*
[525] Fogleman, *Study on Integrating the ELD*, 41-43.
[526] *Ibid.*

"association must have operated in Sweden for at least three years and have at least 2,000 members". However, following a ECJ ruling in *Djurgården-Lilla Värtans Miljöskyddsförening* (C-263/08), which concerned Directive 85/337/EEC (Environmental Impact Assessment Directive),[527] Sweden had to relax this criteria.[528]

There is evidence that the provisions of Articles 12 and 13 ELD are a crucial feature under the Directive and indeed necessary for the ELD procedure to work. According to Milieu et al. (2014) the ELD procedure was in most cases initiated by a request for action from natural and legal persons.[529] In contrast to this, operators of occupational activities, who are primarily responsible under the ELD to notify damage or an imminent threat thereof, do not appear to be fulfilling their duty in practice, the report notes. [530]

11.8.2 Access to information rights

An obvious shortcoming of the ELD is the absence of **access to information rights**. **Access to information rights** are required under the Aarhus Convention and common in other horizontal environmental measures such as the EIA Directive. [531] In order for NGOs and citizens to intervene and make use of their rights under Article 12 and 13 ELD, information on ELD procedures is an essential pre-requisite.

The general lack of information on ELD cases at national level as well as the persistent lack of ELD cases in EU MS demonstrate the importance of improving transparency and access to information under the ELD. As a matter of fact, lack of data on ELD incidents and comparable incidents at national level has been highlighted as one of the "major challenges" for the evaluation of the ELD.[532] In most countries, an ELD database is missing, or if it exists, it is not "of a proper quality".[533] Where MS are reported to provide for a good collection of ELD data, the information is "not directly and fully accessible*"* to the general public, which is e.g. the case in Hungary, Poland or Lithuania or very difficult to access, such as in the Netherlands or

[527] Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment [1985] OJ L 175/40 ff.
[528] *Djurgården-Lilla Värtans Miljöskyddsförening v Stockholms kommun genom dess marknämnd*, C-263/08.
[529] Milieu & IUCN, *ELD Biodiversity Damage Report*, 90.
[530] *Ibid.*
[531] See also in this regard: ClientEarth, *Reviewing the ELD*; COWI et al., *Improving ELD Implementation* (2021).
[532] For further reference, see Chapter 10, *National transposition and implementation of the ELD*
[533] COWI et al., *Improving ELD Implementation* (2021), 23.

Latvia.[534] As ClientEarth (2015) notes, the requirement for public registers is, however, normal under EU law. [535]

Against the background of the observed difficulties created by a lack of (access to) information on ELD data, there are thus good reasons to expressly include access to information rights together with mandatory registers on ELD cases and related data in the Directive.[536] Such mandatory collection and publication of ELD cases would not only inform members of society, but also support the work of different competent authorities working on the implementation of the Directive at different levels of governance. [537]

11.8.3 Summary of findings on rights of affected persons and environmental organisations

Despite their important contribution to law enforcement, the role of private parties and NGOs is still restricted and their limited access to justice in the national jurisdictions of EU MS a persistent problem.[538] So far, EU initiatives to improve access to justice in the MS have only been of limited success. Against this background, the inclusion of explicit requirements for participation and access to justice in the ELD certainly represents one of the most progressive and strongest features of the Directive. The fact that in most cases ELD procedures were initiated by a request from private parties and not from operators is further evidence that the provisions of Articles 12 and 13 ELD are indeed necessary for the ELD procedure to work.

Two main shortcomings have been identified by the above examination of Article 12 and 13 ELD. Firstly, MS have the discretion to exclude cases of an imminent threat of damage from the scope of Articles 12 and 13 ELD. There is no obvious justification for this differentiation and the removal of MS' discretion in this regard would further strengthen preventive action under the ELD. Another important shortcoming is the lack of access to information rights,

[534] *Ibid.*
[535] See also in this regard ClientEarth, *Reviewing the ELD*, 13-14, with reference to the EU's Common Fisheries Policy and pollution laws, which provide for a number of public registers.
[536] COWI et al., *Improving ELD Implementation* (2021), 209. The authors of the report call for national registers that also contain information from EIA procedures. Importantly, these databases should also include environmental damage cases dealt with under pre-existing sectoral legislation to improve an understanding how these are related to ELD cases.
[537] COWI et al., *Improving ELD Implementation (2021)*, 26.
[538] For further reference, see Chapter 5.1.3., *The role of private parties*.

which potentially undermines the ability of NGOs and citizens to intervene and make use of their rights under Article 12 and 13 ELD.

In view of the above examination, it appears that in order to strengthen the effectiveness of the ELD the following issues need amendment under the Directive:

- a provision that expressly states rights of access to information for NGOs and citizens;
- a provision that mandates MS to collect and publish information on national ELD cases and related data in a national ELD register. Such a database should also include environmental damage cases dealt with under pre-existing sectoral legislation to further an understanding how these are related to the application of the ELD.
- Removal of MS' discretionary power to apply the rights granted under Article 12 exclusively to environmental damage (and not to an imminent threat of such damage).

11.9 Enforcement & Sanctions

The ELD does not include an explicit requirement for MS to punish breaches of duties under the ELD. Without penalties, the provisions under the ELD, however, would be unenforceable. Fogleman (2006) observes that such an outcome would contradict the intent of the Directive[539] and in this regard also refers to Recital 15 of the Directive, which states that

> "Since the prevention and remedying of environmental damage is a task directly contributing to the pursuit of the Community's environment policy, public authorities should ensure the proper implementation and enforcement of the scheme provided for by this Directive".

Some but not all MS have enacted varying levels of offences and penalties for breaches of specific duties under the ELD in order to enable public authorities to enforce the ELD regime.[540] The sanctions for breaches of the transposing legislation differ widely; some MS impose relatively low administrative fines; other MS impose criminal sanctions including imprisonment.[541] The incentives to comply with the ELD regime may thus vary between the MS.

[539] Fogleman, *Enforcing the ELD*, 146.
[540] Fogleman, *Study on Integrating the ELD*, 96; BIO Intelligence Service, *ELD Implementation Report*.
[541] BIO Intelligence Service, *ELD Implementation Report*, 12.

12 Discussion of findings and conclusions on effectiveness of ELD in its current design and wording

Against the background of the findings in Part I of this dissertation, this part of the dissertation examined to what extent the ELD, in in its current design and wording, has been able to deliver on its stated aim to prevent and remedy damage to protected species and habitats, thereby improving the implementation and enforcement of the BHD and thus strengthening their effectiveness.

This chapter synthesises the findings, offering a critical analysis and drawing conclusions on the effectiveness of the ELD in its current design and wording. It starts with general observations, followed by observations on the (lack of) integration of the ELD with the BHD, which has resulted in a considerable number of problems in the application of the Directive. Subsequently, the focus narrows down to key issues identified in the examination of the ELD, including most notably the controversial role of permits and the use of vague notions.

12.1 General observations

Overall, one of the main merits of the ELD is that it has drawn the attention of EU MS to the importance of acknowledging the need to prevent and remediate damage to unowned natural resources, also referred to as "ecological damage".[542]

Concerns that the implementation of the Directive would lead to a "race-to-the-bottom", where MS sacrifice environmental standards for a competitive gain, have not materialised. In many cases, MS opted to keep or adopt more stringent provisions and did not make use of some of the more controversial options in the Directive that ultimately curtail the effectiveness of the ELD, such as the permit defence.

The language of the Directive's provisions, however, leaves much of its actual impact to the transposition and implementation in the MS. In addition, difficulties with the interpretation of a number of vague terms and concepts have exacerbated the problem. Among the key issues that need to be resolved in this regard are the interpretation of the **significance threshold** and the interpretation of the **scope of the defences**. The lack of mandatory financial security and

[542] See Chapter 8, *History and evolution of the Environmental Administrative Liability Directive*.

the absence of a subsidiary duty of MS to take preventive and remedial action, where the responsible operator cannot be held liable, further weaken the effectiveness of the Directive. To the extent that there is ambiguity about what the ELD requires, the resulting legal uncertainty is likely to undermine both compliance with and enforcement of the Directive at MS level.

While a directive, in contrast to a regulation, allows for flexibility and thus inevitably leads to differences amongst MS' legislation, granting wide discretion to MS, as is the case under the ELD, risks distorting the level playing field for economic operators in the EU. Such considerations will also weaken the motivation of MS to raise the bar on environmental liability through ambitious and transparent implementation and enforcement of the Directive.

12.2 Observations on integration with BHD

Apart from the above general observations, a considerable number of problems relate to the integration of the ELD with provisions of the BHD. Since the ELD was to become a "tool" to make the polluter pay for the restoration of damage to protected species and habitats, the Commission considered it necessary to align the Directives liability regime with the BHD. [543] The provisions under the ELD are therefore linked to key concepts and provisions of the two Nature Directives. This integration of the ELD with the BHD has a number of implications, including on the **scope of biodiversity protected** by the ELD, the **definition of damage**, i.e. what constitutes damage to biodiversity for the purposes of the ELD, and the granting of an **exception from liability** in cases where the damage is due to an act authorised under the BHD. The latter is related to one of the most pertinent issues under the ELD, namely the **role of permits**.

The following chapters summarise and discuss the most important findings from the examination of the ELD, drawing conclusions on the Directive's effectiveness and highlighting key issues that need to be resolved. In assessing the effectiveness of the ELD, two levels can be distinguished: Firstly, the Member State level and the question whether the introduction of the ELD has indeed improved MS' compliance with their duty under the Treaties to implement and enforce EU environmental legislation. Secondly, the individual level and the question

whether the ELD, through the creation of operator liability and based on the polluter pays principle, has indeed achieved its aim of remedying and preventing environmental damage, in the present context biodiversity damage, in the EU.

12.3 The controversial role of permits under the ELD

One of the most pertinent issues under the ELD concerns **the role of permits**. In the case of biodiversity damage, two provisions are relevant in this regard. First, the exception stated under the second paragraph of Article 2 (1)(a) Article ELD, which provides for a **mandatory exception** to liability for damage caused by an **"act" authorised under the BHD ("authorisation exception")**. Secondly, the **optional defence** available under Article 8(4)(a) ELD, which gives the operator of dangerous activities the right to recover his costs for remedial measures, if the damage was caused by an **emission or event expressly authorised** under **legislation listed in Annex III of the ELD ("permit defence")**. [544]

The **authorisation exception** stated under Article 2 (1)(a) Article ELD and the **permit defence** stated under Article 8(4)(a) ELD have in common that they distinguish between lawful and unlawful damage. Lawful damage takes place within the limits set out under a permit, unlawful damage exceeds the limits established by the permit. While the authorisation exception applies to damage caused by acts authorised under the BHD, the permit defence applies to damage caused by events or emissions authorised under the legislation listed in Annex III of the ELD (and thus to operators of dangerous activities). Notably, the authorisation exception releases the operator from all liability, whereas under the permit defence the operator remains liable to carry out the necessary preventive and remedial measures, but has the right to recover his costs for remedial action ("defences to costs"). [545] Lastly, unlike exceptions, defences need to be raised and proven by the defendant.[546]

The availability of exceptions and defences for damage resulting from authorised acts or events and emissions has a number of repercussions for the protection of biodiversity under the ELD. In the following, first the "**authorisation exception"** and then the "**permit defence"** will be discussed.

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[544] See debate in Chapter 11.3.4.3., *Nature of the defence: Defences to cost or defences to liability*
[545] *Ibid.*
[546] Betlem, *ELD Scope and Defences*, 377.]

The repercussions of the **authorisation exception** stated under Article 2 (1)(a) ELD are potentially more severe. This is because the exception unlike the defence releases the operator from all liability. In other words, under the ELD liability for biodiversity damage depends on decisions taken by national authorities in the context of approval procedures under the BHD, including decisions on the **authorisation** of **plans or projects** that could "adversely affect the integrity of the site" under Article 6(3) HD and on the application of derogations available under Article 6(4) HD.

Against the background of the findings presented in Part I of this dissertation, questions arise as to whether a liability regime that relies on such dependencies is adequately equipped to support the effective implementation and enforcement of the BHD. The analysis of ECJ case law and reports on the implementation and enforcement of the BHD suggests that tensions between economic interests and ecological priorities frequently surface in the context of authorisations granted for plans and projects within Natura 2000 sites under Article 6(3) and (4) HD. Authorisations have been issued without the necessary appropriate assessment or based on an inappropriate assessment ("incorrect application of those assessments").[547] Political pressure,[548] poor understanding of the legal framework[549] and lack of transparency[550] are among the factors that have been identified to influence poor decision-making in the authorisation procedure of projects affecting protected habitats.[551]

In addition, MS appear to have considerable freedom in their implementation of Article 6(4) HD. There is evidence that the requirements for a derogation are not being properly enforced by MS and that the Commission has so far taken only a cursory look at their adequacy.[552] If liability for biodiversity damage is indeed excluded by the existence of an authorisation, the conflict between economic and ecological interests is merely shifted from the BHD to the ELD. At worst, unlawfully issued authorisations turn into a "blank cheque" for operators by legitimising otherwise unlawful harm and in this way acting as a shield against environmental liability under the ELD: Where the exception applies, the operator is no longer obliged to prevent and remediate the damage.

[547] See also ENEC, *Habitat Destruction 2016*, 6.
[548] *Ibid.*, 4-5.
[549] *Ibid*, 5.
[550] *Ibid.*
[551] For further reference, see also discussion in Chapter 16.3.1.1., *The conflict between ecological and economic interests and its repercussions for consideration of administrative dependence in environmental criminal law*.
[552] For further reference, see Chapter 5.2.3.4.4., *Implementation and enforcement of Article 6(4) requirements*.

The question is if such an outcome is aligned with the stated aims of the ELD and the environmental principles that govern the application of the Directive, most notably the precautionary principle and the polluter-pays principle.

As demonstrated, two ECJ's rulings, the preliminary ruling in *Gert Folk* (C-529/15), which concerned the exception for water damage stated under Article 2(1)(b) ELD, and the preliminary ruling in *Naturschutzbund Deutschland* (C-297/19), which concerned the exceptions stated under Article 2(1)(a) ELD (authorised activities) and Annex I ELD (normal management), have provided important points of reference on how to interpret exceptions to liability under the ELD. In both cases the damage was not the result of an accident, but of activities that had been going on for years and had been authorised by national competent authorities.[553]

The judgment in *Naturschutzbund Deutschland* (C-297/19) places a strong emphasis on the precautionary principle, recalling that the liability regime established under the Directive "is based on a high degree of environmental protection and on the precautionary principle and the "polluter-pays" principle".[554] Most notable is the finding of the Court that a strict interpretation of the exceptions under the ELD can only mean that a MS is not empowered to accept measures that are "**excessively harmful**", and thus "liable to endanger or even destroy […][protected] species or habitats […] in breach of the conservation obligations owed by the MS under the Habitats Directive and the Birds Directive".[555] This observation of the Court addressed the exception for the "normal management of sites" listed in Annex I of the ELD. However, in consistent application of these considerations, one should be able to apply the same reasoning to the "authorisation exception" in Article 2 (1)(a) ELD. This means, unlawful authorisations that are in breach of (MS' conservation obligations under) the BHD fall outside the scope of the exception referred to in Article 2(1)(a) ELD and thus do not exempt the operator from liability under the ELD. If one follows this interpretation of the ruling, then unlawfully issued

[553] For further reference, see Chapter 11.3.2, *Exceptions to liability for biodiversity damage*; *Naturschutzbund Deutschland*, C-297/19, moreover addressed the exception stated under the third indent of Annex I of the ELD, which provides, that damage can be exempt from liability when it results from the "normal management" of the site.
[554] See *Naturschutzbund Deutschland*, C-297/19, para.31. The Court refers to *Túrkev ei Tejtermelő Kf*, C-129/16, paras.47, 53 and the case law cited there.
[555] See *Naturschutzbund Deutschland*, C-297/19, para.48.

permits do not protect from liability to prevent and remediate damage to protected species and habitats under the ELD.

Such reading of the judgement in *Naturschutzbund Deutschland* (C-297/19) is also aligned with the Court's preliminary ruling in *Gert Folk* (C-529/15),[556] which is further evidence of the need for a strict reading of the exceptions stated under the ELD.[557] The ECJ held that a national court may review the legality of the authorisation and may deny the exemption if the authorisation was not issued in full compliance with the derogation regime laid down in Article 4(7)(a) to (d) WFD. [558]

Fogleman (2020) concludes from the Court's preliminary rulings in *Naturschutzbund Deutschland* (C-297/19) and *Gert Folk* (C-529/15) that some, probably many, authorised activities affecting Natura 2000 sites will have to be modified or stopped to prevent further damage, and that damage already caused by such activities will have to be remediated.[559] Indeed, considering that habitat destruction authorised by national authorities has been identified as a key issue in most MS, such reading of the Court's rulings has the potential to considerably improve the effectiveness of the ELD. Liable operators who can prove that they rightfully relied on the lawfulness of the permit should be able to claim the costs incurred by them under the ELD within the framework of state liability. Such an outcome should also increase the pressure on NCAs to issue permits only if no significant environmental damage can be expected to occur and thus contribute to the underlying aim of the ELD to improve compliance of MS with EU environmental legislation.

Another of Fogleman (2019)'s investigations is noteworthy in this context and concerns a corollary issue, namely if the variation or revocation of a permit that authorises damaging activities qualifies as a "preventive measure" under the ELD.[560] She argues that this is not the

[556] *Gert Folk*, C-529/15.
[557] The case concerned water damage caused by a hydroelectric power plant that was authorised in 1998 and began operations in 2002. The ruling addressed, inter alia, the exception for water damage stated under Article 2(1)(b) ELD. The ECJ held that a national court may rev iew the legality of the authorisation and may deny the exemption if the autorisation was not issued in full compliance with the derogation regime laid down in Article 4(7)(a) to (d) WFD. For a discussion of *Gert Folk*, C-529/15, refer to Chapter 11.3.2.4, *Discussion of findings on exceptions to liability and the repercussions of the Court's ruling in Naturschutzbund Deutschland*.
[558] *Gert Folk*, C-529/15, paras.35-40.
[559] Fogleman, *Biodiversity Damage from Authorised Activities*, 2, 30. For further discussion of damage resulting from authorised activities, see also Chapter 11.3.4.1, *Permit Defence.*
[560] For further reference, see Chapter 11.4.3., *Duty to prevent damage from authorised activities*.

case. Firstly, because only a competent authority can vary or revoke a permit, whereas the ELD obliges the operator to take the necessary preventive measures. Secondly, if the damage was caused by activities in the past, the revocation/variation of a permit would be a measure taken in response to an act that has caused damage but not to an act that "has created an imminent threat of environmental damage", as required for preventive measures under Article 2(10) ELD.

Fogleman (2019)'s observations certainly deserve further investigation. While the variation or revocation of a permit currently does not appear to qualify as a preventive measure under the ELD, it may sometimes be a necessary measure to prevent damage. In conclusion it appears that the application of preventive measures to a case of environmental damage caused by authorised activities needs further clarification.

Obviously, the controversial **permit defence**, which releases the operator from bearing the costs of remedial action for damage caused by **emissions or events expressly authorised** under **Annex III legislation**, raises similar questions. However, unlike the authorisation exception, the permit defence has been the subject of controversial discussions from the outset, including repeated calls to remove the defence from the ELD.

The most notable points from these discussions concerning the **permit defence** relate to the polluter-pays principle and associated incentives on the side of the operator to minimise the risk of environmental damage. As demonstrated, the **permit defence** contradicts central objectives of the Directive including the application of the polluter-pays principle as well as the aim to prevent damage through the incentives created by operator liability. The main arguments for removing the permit defence are recalled in the following:

- little or no incentive to reduce the impact of activities on the environment and prevent unnecessary damage, when an operator sees its harmful activities covered by a permit;[561]
- erroneous assumption that permit conditions always represent optimal environmental standards; [562]

[561] See Chapter 11.3.4.1., *Permit defence*, and references cited therein: De Sadeleer, *Environmental Principles*, 40; 40; De Smedt, *Environmental Liability in a Federal System*, 156, with further references.
[562] See Chapter 11.3.4.1., *Permit defence*, and references cited therein: De Smedt, *Environmental Liability in a Federal System*, 156, with additional references.

- permit conditions represent minimum requirements: where environmental impact can be further reduced through cost-effective measures, it is efficient to hold an operator liable despite compliance with permit conditions;[563]
- the risk of regulatory capture, whereby a competent authority when issuing a permit, instead of serving the interests of the public, promotes the interests of the regulated industry;
- coherence with handling of permits in civil law/tort law, where a permit does not automatically exempt the permit holder from liability. [564]

Thus, while, as a matter of policy, the permit defence may be highly controversial, from a legal point of view, there is no justification to maintain the permit defence. Operators who benefit from the operation of inherently dangerous activities must be aware that they also bear the associated high risk of environmental damage of these activities. Compliance with a permit is therefore irrelevant. By contrast, releasing the operator of a dangerous activity from financial liability because of compliance with a permit means that instead of the polluter, society at large must pay for the damage or, at worst, the damage is never remediated (where interpreted as defences to liability and not as defences to cost). Such a result obviously undermines the objectives of ELD and the very essence of the polluter-pays principle. [565]

In this context it is important to recall that at some point of the ELD's genesis the permit defence was also constructed as an "exception" as opposed to a "defence" to liability. [566] To ensure that in cases where such an exception applied the damage was nonetheless remediated, the Commission's proposal for the Directive originally provided for a subsidiary obligation of the NCA to remediate the damage. In the final version of the Directive, however, this obligation was reduced to a power of discretion, leaving the decision to remediate the damage to the competent authority.[567] As has been demonstrated, this has created the problem of "orphan damage", a situation where ultimately nobody is obliged to remedy the damage inflicted on the natural resources.[568] Biodiversity damage is no exception to this. Although the BHD may impose an obligation on MS to remediate damage to biodiversity that is not remediated under

[563] See Chapter 11.3.4.1., *Permit defence*, and references cited therein: De Smedt, *Environmental Liability in a Federal System*, 157, with additional references.
[564] De Sadeleer, *Environmental Principles*, 40.
[565] See Chapter 11.3.4.1., *Permit defence*. De Sadeleer, *Environmental Principles*, 40.
[566] See Chapter 11.7., *Orphan damage*, with reference to European Commission, *Environmental Liability Proposal* COM(2002) 17 final, Article 9.
[567] For further reference, see Fogleman, *Enforcing the ELD*, 132.
[568] Krämer, *Directive 2004/35 and Environmental Liability*, 253.

the ELD, this obligation of MS under the BHD falls short of the remediation regime of the ELD.[569] Firstly, the preventive or remedial action required under the BHD is limited to the protected species and habitats located or present in designated nature protection areas (Natura 2000), whereas under the ELD it extends beyond Natura 2000 sites.[570] Secondly, when invoking the HD instead of the ELD, distinctive features of the ELD do not apply, including the detailed prescription of the necessary remediation measures, the explicit requirement of compensation for interim losses, the involvement of the public in the remediation process[571] and the participation and access to justice rights set out under Articles 12 and 13 ELD. In short, MS' obligations under the BHD do not compensate for a lack of subsidiary state liability under the ELD.

As pointed out before, the role of permits is also controversial in the context of the ECD, where it is referred to as the "administrative dependency of environmental criminal law".[572] For a discussion of the role of permits in the context of criminal liability, the reader is referred to Part III.[573] For a final discussion of the role of permits in the context of the ELD and ECD the reader is referred to the final conclusions of this dissertation.

12.4 The use of vague notions and the threshold for liability under the ELD

The analysis of the ELD has also exposed the difficulties that arise when attempting to combine a conservation approach with a liability approach by integrating notions and concepts from a conservation regime into a liability regime. Taking a closer look reveals why. Although both, the BHD and the ELD, aim to protect biodiversity, their approach fundamentally differs. The HD, a classic nature conservation instrument, aims to maintain and restore protected species and habitats. To account for the dynamic nature of ecosystems, such an approach requires flexibility, resulting in the use of terms and concepts that involve a certain vagueness. The ELD, on the other hand, aims to hold operators liable for damage to protected species and habitats. As a liability instrument, the ELD relies on clear definitions to ensure that operators understand their liabilities, thus providing legal certainty. As has been demonstrated, to reconcile these two

[569] See already Brans & Uilhoorn, *Liability for Damage to Natural Resources*.
[570] As previously noted, in some aspects the protection under the ELD is broader than under the BHD. For further reference, see Chapter 11.1.1., *Scope of biodiversity protected under the ELD*.
[571] ELD, Art. 7(4).
[572] See Chapter 11.3.2.4., *Discussion of findings on exceptions to liability and the repercussions of the Court's ruling in Naturschutzbund Deutschland*.
[573] See discussion under Chapter 16.3.1.1., *The conflict between ecological and economic interests and its repercussions for the consideration of administrativ e dependence in environmental criminal law*.

fundamentally different approaches in one instrument is difficult. This becomes particularly evident in the case of the ELD's damage definition. Both, the ELD and the HD, use the concept of FCS as their main point of reference, albeit for different purposes. While the ELD requires significant adverse changes to the FCS to trigger the application of its liability regime, the HD uses the concept of FCS to "guide pro-active actions" towards protecting natural habitats and species from deterioration and disturbance.[574] Thus, while under the HD, the concept may work well for the establishment of management plans and other conservation measures, under the ELD, employing a concept like FCS as a reference point poses significant challenges: As demonstrated, it risks transforming the liability threshold into a constantly shifting target or establishing it at an excessively high level.[575]

The lack of clarity relating to ecological concepts such as "FCS" or "natural range" is further exacerbated by problems with the interpretation of the term "significant", which establishes the threshold for the application of the ELD. The way MS currently interpret the term "significant" does not reflect the high level of protection for protected species and habitats set out in Article 6 of the HD. As a result, the threshold under the ELD is substantially higher than under the BHD and the ELD will not apply in many cases where the BHD does. Obviously, such a result is not aligned with the legislator's intention to implement the polluter-pays principle by ensuring the operator's liability for biodiversity damage that falls within the scope of the BHD.

The assumption of a high significance threshold under the ELD also leads to problems with the application of preventive measures or emergency remediation measures. These measures must be carried out "without delay" in the case of preventive measures, and "immediately" in the case of emergency remediation measures. The assumption of a high significance threshold makes it almost impossible for the operator to determine whether the damage falls within the scope of the ELD - especially if an operator wrongly assumes that preventive measures need only be taken when it is known that the damage will be significant.[576]

As previously demonstrated, the history of the ELD combined with the arguments presented by Fogleman (2020) suggest that the threshold for biodiversity damage under the ELD was indeed

[574]See Milieu & IUCN, *ELD Biodiversity Damage Report*, 8.
[575] See also discussion on legal certainty in the context of the permit defence.
[576] For further reference, see Chapter 11.4.2., *The significance threshold in the context of preventive measures*.

meant to be low and aligned with the threshold requirements under the BHD.[577] The question arises as to how the difficulties in interpreting the term "significant" may be resolved and more clarity achieved in order to ultimately ensure the application of a low threshold in the MS that corresponds to the BHD. The eNGO ClientEarth (2015) suggests to remove the threshold requirement entirely and instead consider any impact to have a "significant adverse effect" - with the exception of de minimis impacts and natural recovery.[578] This approach, however, bears the risk of merely shifting the problem, as it would then become necessary to determine whether an incident of damage has caused "de minimis impacts" or if "natural recovery" can be assumed. Eventually, in the interest of legal certainty, a clearer description of what constitutes "significant" damage and thus triggers liability will remain necessary. Obviously, this is also the approach currently pursued by the Commission (2021). In its recent "Notice on Environmental Damage", the Commission (2021) has listed specific examples of what constitutes significant biodiversity damage, apparently starting from a low threshold.[579] In order to be aligned with the level of protection warranted under the BHD, any remaining uncertainties concerning the threshold requirement under the ELD should be resolved by observing the precautionary principle, as is the case under the BHD.[580]

12.5 Participation and access to justice requirements

One of the most progressive and strongest features of the ELD is the inclusion of explicit requirements for participation and access to justice in Articles 12 and 13 ELD.[581] As demonstrated, citizens and NGOs are important actors for the implementation and enforcement of environmental legislation and powerful agents of EU environmental law enforcement at national and EU level.[582] The fact that in most cases ELD procedures were initiated by a request from private parties and not from operators is further evidence that the provisions of Articles 12 and 13 ELD are indeed necessary for the ELD procedure to work.

Articles 12 and 13 ELD, however, suffer from two main shortcomings. Firstly, MS, in their transposition of the ELD, have the **discretion to exclude cases of an imminent threat** of

[577] For further reference, see Chapter 11.1.2.3.3, *Discussion of findings on divergent threshold requirements in ELD and BHD.*
[578] ClientEarth, *Reviewing the ELD*, 8.
[579] European Commission, Commission Notice on Environmental Damage [2021] OJ C118/1.
[580] See also in this regard Chapter 11.1.2.3.3, *Discussion of findings on divergent threshold requirements in ELD and BHD* with reference to ClientEarth, *Reviewing the ELD*, 8.
[581] For further reference, see Chapter 11.8., *Rights of affected persons and environmental organisations*.
[582] For further reference, see Chapter 5.1.3, *The Role of Private Parties (Citizens and NGOs)*

damage from the scope of Articles 12 and 13 ELD. Considering that NGOs are often the first to become aware of a threat of environmental damage, confining these rights to actual environmental damage does not appear to act in favour of the prevention aim of the Directive. There is no obvious justification for this differentiation and the removal of MS' discretion in this regard would further strengthen preventive action under the ELD. Secondly, another important shortcoming is the **lack of access to information rights**, which potentially undermines the ability of NGOs and citizens to intervene and make use of their rights under Article 12 and 13 ELD.

12.6 Lack of data on ELD cases and access to information rights

The general lack of information on ELD cases at national level is well documented and has been highlighted as one of the "major challenges" for the evaluation of the ELD.[583] The persistent lack of ELD cases in EU MS highlights the importance to increase transparency on ELD cases and further empower private citizens and eNGOs by improving access to information under the ELD.

Against the background of the observed difficulties created by a lack of (access to) information on ELD data, there are thus good reasons to expressly include access to information rights together with mandatory registers on ELD cases and related data in the Directive.[584] Such mandatory collection and publication of ELD cases would not only inform members of society, but also support the work of different competent authorities working on the implementation of the Directive at different levels of governance. [585]

Availability of data and improved access to information could be achieved by a provision that mandates MS to collect and publish information on national ELD cases and related data in a national ELD register. Such a database should also include environmental damage cases dealt with under pre-existing sectoral legislation to further an understanding how these are related to the application of the ELD.

As will be demonstrated a lack of data on environmental damage and related procedures is also a prominent issue under the ECD. Ideally, in the case of biodiversity damage, information on

[583] For further reference, see Chapter 10, *National Transposition and Implementation of the ELD*.
[584] COWI et al., *Improving ELD Implementation* (2021), 209.
[585] COWI et al., *Improving ELD Implementation* (2021), 26.

cases should be made public in such a way that the application of the BHD on the one hand and the ELD and ECD on the other hand can be easily traced back in a central register.

12.7 Lack of mandatory financial security and the problem of orphan damage

Two issues that emerged in the examination of the ELD and are somewhat related are the absence of mandatory financial security within the ELD and the problem of orphan damage, [586] i.e. a situation where ultimately nobody is required to prevent or remedy the damage. Especially problematic are cases where poorly capitalised operators with a high risk of insolvency cause the damage or even deliberately behave in an environmentally harmful manner. Due to the lack of financial means, the costs for prevention and remediation cannot be borne by the operator. The ELD risks losing its desired preventive effect and the costs of preventing and remedying the damage cannot be recovered from the operator. In cases where the operator fails to comply with the obligations, or cannot be identified, or is not required to bear the costs under the provisions of the Directive, due to a lack of subsidiary state liability there is no obligation on MS to take the necessary measures.

Both issues were highly contentious in the discussions leading to the adoption of the ELD. Ultimately, neither mandatory financial security nor subsidiary state liability were included in the final version of the ELD.

To ensure that significant environmental is indeed prevented and remedied, the ELD should therefore be amended to include the Commission's original proposal that the NCA be obliged to prevent and remedy damage where the operator has failed to comply with his obligations under the Directive. Obviously, the costs of such measures would be borne by the tax payer. However, making the MS subsidiary liable does not counter the objective of the ELD to promote the polluter-pays principle, since the incentives and obligations for the operator in principle remain intact.

To tackle cases where poorly capitalised operators with a high risk of insolvency deliberately behave in an environmentally harmful manner and where therefore the prospect of financial liability cannot act as a disincentive, criminal (non-monetary) sanctions may serve as a deterrent

[586] Krämer, *Directive 2004/35 and Environmental Liability*, 253.

and ensure accountability of the responsible operator in the form of criminal liability. The use of criminal sanctions for environmental damage are discussed in PART III of this dissertation.

In conclusion, the examination of the ELD has revealed significant shortcomings in its current design and wording, undermining its ability to deliver on its stated aim of preventing and remedying damage to protected species and habitats. Throughout the examination of the ELD, proposals for amendments have been made. They are revisited and summarised in Part VI of this dissertation, which further discusses if **amendments in the design or wording** of the Environmental Administrative Liability Directive and the Environmental Criminal Liability Directive could improve their ability to deliver on their stated aims.

PART III The Environmental Criminal Liability Directive

Four years after the adoption of the ELD, the **Environmental Criminal Liability Directive** (short: ECD) was adopted in 2008.[1] The Directive had to be transposed by MS by December 2010. On 15 December 2021, the Commission issued a proposal for a Directive replacing the existing ECD (Directive 2008/99/EC). [2] In November 2023 and following several months of discussion, the European Council and the European Parliament reached a provisional agreement on a proposal for a new Directive replacing Directive 2008/99/EC. On 27 February 2024, the European Parliament adopted the ECD.[3] The Council then formally adopted the New Directive on 26 March 2024. At the time of writing, the new Directive is due to be published in the Official Journal of the EU and will enter into force on the twentieth day following its publication. EU MS will have two years to transpose the new rules into their national laws.

Part III of the dissertation discusses the ECD as adopted in 2008. Based on the findings of this discussion, Part VI of the dissertation proposes amendments that are compared with the Commission's 2021 amendment proposal and the final version of the recently adopted ECD from 2024, critically assessing whether the newly adopted ECD promises to remedy shortcomings identified in its predecessor.

In the following, PART III of this dissertation examines the role and contribution of the **Environmental Criminal Liability Directive** (Directive 2008/99/EC) towards better implementation and enforcement of the BHD and thus better protection of biodiversity, in other words exploring

> to what extent the ECD, in in its current (2008) design and wording, has been able to deliver on its stated aims, thereby improving the implementation and enforcement of the BHD and thus strengthening the effectiveness of the BHD in achieving their aim "to

[1] Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law, OJ L 328, 6 December 2008.
[2] European Commission, *Proposal on Environmental Crime Directive* COM(2021) 851 final. Based on the findings resulting from its evaluation of the ECD in 2019/2020, the Commission decided to revise the Directive and consequently scheduled a legislative proposal in its Work Programme for the year 2021.
[3] 499 votes in favour, 100 against and 23 abstentions.

contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora" in the EU[4].

In contrast to the ELD, the **Environmental Criminal Liability Directive (ECD)**, states its primary aim in rather broad terms as "to ensure a more effective protection of the environment".[5] To this end, the ECD establishes a criminal law regime that provides for **minimum standards of criminal liability for serious breaches of EU environmental legislation** at MS level. National authorities are required to enforce a large number of EU environmental law provisions through criminal law and the use of "effective, proportionate and dissuasive" criminal penalties. Two of the offences listed under the ECD directly relate to the BHD, namely "the killing, destruction, possession or taking of specimens of protected wild fauna or flora species[6], and the other is the significant deterioration of a habitat that form part of the Natura 2000 network[7].

Chapter 13 sets the stage by outlining the primary aims and main provisions of the ECD. It explores the Directive's underlying rationale of addressing environmental harm through criminal law. Moving on to **Chapter 14**, we embark on a journey through the background, history, and evolution of the ECD. The final version of the ECD is in many ways the result of years of institutional conflict between the Council and the Commission over the powers of the European legislator in the field of environmental criminal law, which left the ECJ with a decisive role in defining the limits of Community competence in the field of environmental criminal law. Exploring the origins, path and institutional conflicts that preceded its final adoption in December provides valuable insights into the directive's development, contextualizing its current framework. **Chapter 15** shifts focus to the theoretical foundations and underlying rationale of environmental criminal law, laying the foundations for the subsequent analysis of the ECD. It explores distinctive features of environmental criminal law, aims of environmental criminal liability and how environmental criminal law provisions are typically designed to achieve these aims. It addresses the strong dependence of environmental criminal law on administrative law and how this dependence is reflected under the ECD"s model of criminalisation. **Chapter 16** delves into the offences related to breaches of the BHD.

[4] HD, Art. 2(1).
[5] ECD, Recital 14.
[6] ECD, Art. 3(f).
[7] ECD, Art. 3 (h).

Based on the typology of crimes presented in the previous chapter, the analysis of the offences focuses on three elements: the scope of biodiversity protected under the offences, the model of criminalisation and the threshold criteria that triggers criminal liability. **Chapter 17** explores key questions relating to the liability of legal persons and outlines the provisions that establish liability of legal persons under the ECD. Environmental crimes are often committed in the interest of or for the benefit of companies or other legal entities. Since criminal law systems have traditionally evolved as a response to the conduct of natural persons, the application of criminal liability to companies and other legal entities raises a couple of questions. Continuing the discussion, **Chapter 18** examines the penalties for both natural and legal persons, as outlined in Article 5 and Article 7 of the ECD. Inadequate penalties imposed in practice have been identified to remain one of the Directive's main implementation challenges in the MS. This Chapter delves into the penalties prescribed by the directive, their transposition into the national law of the MS and their actual application to date. It also examines to what extent measures to further harmonise sanctions under the ECD are compatible with the EU's current competences in the field of environmental criminal law. Moving on to **Chapter 19**, we assess the practical relevance of environmental criminal law and persisting challenges with the enforcement of EU environmental criminal law in the MS. It starts with an exploration of the main actors and institutions in the enforcement chain (19.1) and available data on enforcement levels in the MS (19.2). It then moves on to examine problems with the investigation and prosecution of environmental crime and the much-complained lack of expertise and knowledge in the enforcement chain (19.3). Next, reported problems with the cooperation and communication between the different levels of the law enforcement chain are further investigated (19.4). Finally, the lack of political will and prioritisation of environmental crime (19.5) in the MS is addressed and conclusions are drawn (19.6). The dichotomy between administrative and criminal penalties for environmental offences is the focus of **Chapter 20**. This section explores the advantages and disadvantages of each approach, shedding light on the complexities of the enforcement mechanisms.

Finally, **Chapter 21** presents a critical discussion of findings and conclusions on the effectiveness of the ECD in its current design and wording. Here, we reflect on the overarching themes and challenges identified throughout this exploration, offering insights into potential avenues for amendment.

13 Aim and main provisions of the Environmental Criminal Liability Directive

13.1 Aim of the Environmental Criminal Liability Directive

The aim of the Environmental Criminal Liability Directive is

> "to ensure a more effective protection of the environment". [8]

To this end, the Directive sets out a number of criminal law measures[9] and requires MS to punish certain environmental offences, which constitute a breach of EU environmental law, with "effective, proportionate and dissuasive" penalties. [10]

The Directive argues the need for a more effective protection of the environment through criminal law with a worrying "rise in environmental offences and […] their effects, which are increasingly extending beyond the borders of the States in which the offences are committed".[11] Experience with existing systems of penalties would have shown that these were insufficient to achieve "complete compliance with the laws for the protection of the environment". [12] Compliance could and should therefore be strengthened with the availability of criminal penalties, which would demonstrate a "social disapproval of a qualitatively different nature compared to administrative penalties or a compensation mechanism under civil law". [13] Moreover, common rules on criminal offences would make it possible "to use effective methods of investigation and assistance within and between MS". [14] In order to achieve effective protection of the environment, there would be a "particular need for more dissuasive penalties for environmentally harmful activities, which typically cause or a likely to cause substantial damage to the air, including the stratosphere, to soil, water, animals or plants, including the conservation of species". [15]

The Commission, in its 2007 proposal for the Directive, stated another noteworthy argument in support of criminal law, namely the independence of the investigating authorities: By entrusting

[8] ECD, Recital 14; see also Recital 5.
[9] ECD, Art. 1.
[10] ECD, Recital 5.
[11] ECD, Recital 2.
[12] ECD, Recital 3.
[13] *Ibid.*
[14] ECD, Recital 4.
[15] ECD, Recital 5.

judicial authorities, rather than administrative authorities, with the task of imposing sanctions, "responsibility for investigating and enforcing the respect of environmental regulations [would fall] to authorities which are independent of those which grant exploitation licences and discharge authorisations".[16] This recital, however, was not included in the final version of the Directive.

The Directive explicitly states that it is without prejudice to other systems of liability for environmental damage under EU law or national law.[17] Furthermore, the Directive makes it clear that it only provides for minimum rules and that MS are free to adopt or maintain more stringent measures for the effective criminal law protection of the environment. [18]

13.2 Main provisions

The ECD sets out minimum requirements relating to criminal law in the MS. These exclusively relate to substantive criminal law; rules on criminal law procedure are not included in the Directive.

Article 3 of the ECD lists nine general types of conduct that must be considered criminal offences by all MS if "**unlawful"** and committed "**intentionally"** or with "**serious negligence"**.[19] Two of the offences listed under Article 3 directly relate to the BHD, namely

[16] European Commission, *Proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law*, COM(2007) 51 final, Brussels, 9 February 2007., Recital 5.
[17] ECD, Recital 11.
[18]ECD, Recital 12.
[19] Article 3 of the Directive lists nine general types of conduct that must be criminalized by MS, when unlawful and committed intentionally or with at least serious negligence:
(a) the discharge, emission or introduction of a quantity of materials or ionising radiation into air, soil or water, which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants;
(b) the collection, transport, recovery or disposal of waste, including the supervision of such operations and the after-care of disposal sites, and including action taken as a dealer or a broker (waste management), which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants;
(c) the shipment of waste, where this activity falls within the scope of Article 2(35) of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste and is undertaken in a non-negligible quantity, whether executed in a single shipment or in several shipments which appear to be linked;
(d) the operation of a plant in which a dangerous activity is carried out or in which dangerous substances or preparations are stored or used and which, outside the plant, causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants;
(e) the production, processing, handling, use, holding, storage, transport, import, export or disposal of nuclear materials or other hazardous radioactive substances which causes or is likely to cause death or serious injury to

- **Article 3(f)** which refers to the **killing, destruction, possession or taking of specimens of protected wild fauna or flora species;** and
- **Article 3 (h)** which refers to the **significant deterioration of a habitat within a protected site**.

The unlawfulness requirement is further defined in Article 2 of the Directive. Pursuant to Article 2 ECD, a conduct is considered "**unlawful**", when it infringes the legislation adopted pursuant to the EC Treaty and listed in **Annex A** to the Directive, the legislation adopted pursuant to the Euratom Treaty and listed in **Annex B** to the Directive **or** when it infringes a **national law**, an **administrative regulation** of a MS or a **decision** taken by a national competent authority of a MS that gives effect to the aforementioned EU legislation. There is in other words a strong dependency between the criminal offences and the pieces of EU environmental legislation specified in Annexes A and B to the Directive. The two Annexes cover a large number of EU environmental directives and regulations. Both, the BD and the HD, are included in Annex A of the Directive.

As stated above, the offences must be committed **intentionally** or with at least **serious negligence**. A definition of these mental elements is not provided for by the ECD and its interpretation therefore left to the national law of the MS.

Pursuant to Article 4 of the Directive, **inciting, aiding and abetting** the conduct referred to under Article 3 is also punishable as a criminal offence.

The Directive does not determine the **type** and the **level of penalties**. Both are left to the discretion of the MS with the only requirement that the sanctions must be "**effective, proportionate and dissuasive**".[20] The Commission's proposal for the Directive, still included provisions on the minimum levels of maximum penalties. [21] Following the ECJ Judgment of 23 October 2007 ("Ship-Source Pollution"), these had to be removed from the final text. [22]

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any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants;
(i) the production, importation, exportation, placing on the market or use of ozone-depleting substances.

[20] See ECD, Art. 5 (natural persons) and Art. 7 (legal persons).

[21] European Commission, *Proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law*, COM(2007) 51 final, Brussels, 9 February 2007.

[22] *Commission of the European Communities v Council of the European Union*, C-440/05 [*Ship-Source Pollution*]. For a discussion of the history and evolution of the Directive, including ECJ landmark rulings on the competence

Environmental crimes are often committed in the interest of or for the benefit of companies or other legal entities. [23] The EU legislator was therefore interested in ensuring liability of legal persons for environmental offences, which is addressed in Articles 6 and 7 of the Directive. Article 6 (1) ECD requires MS to ensure that legal persons can be held liable for the offences referred to in Article 3 and 4

> "where such offences have been committed for their benefit by any person who has a leading position within the legal person, acting either individually or as part of an organ of the legal person, based on:
>
> (a) a power of representation of the legal person;
>
> (b) an authority to take decisions on behalf of the legal person; or
>
> (c) an authority to exercise control within the legal person."

Article 6(2) ECD further requires MS to ensure that legal persons can be held liable

> "where the lack of supervision of control, by a person referred to in paragraph 1 [in a leading position], has made possible the commission of an offence referred to in Articles 3 and 4 for the benefit of the legal person by a person under its authority."

Finally, Article 6(3) ECD clarifies that liability of legal persons under Article 6 (1) and (2) ECD "shall not exclude criminal proceedings against natural persons who are perpetrators, inciters or accessories in the offences referred to in Articles 3 and 4".

As with sanctions against natural persons, sanctions against legal persons must also be "effective, proportionate and dissuasive", see Article 7 ECD. In contrast to penalties for natural person, however, Article 7 does not require the penalties for legal persons to be of a criminal nature.

Apart from the requirement to communicate to the Commission the text of the transposing national legislation, [24] the Directive does not contain any reporting requirements. Notably, the Commission's proposal for the Directive still provided for the MS to send the Commission

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of the EU legislator in the field of environmental law, refer to Chapter 14, *Background, history and evolution of the Environmental Criminal Liability Directive 2008/99/EC*.

[23] For further reference, Fajardo T, *Organised Crime and Environmental Crime: Analysis of EU Legal Instruments* (2015, University of Granada) [online] [Fajardo, EFFACE Study on Organised Crime].

[24] ECD, Art. 8(3).

information on the implementation of the Directive every three years.[25] This reporting provision was removed from the final text of the Directive on the grounds that it was "no more than unnecessary red tape" since the Commission would have the appropriate means to ensure compliance.[26] This finding is noteworthy, given the contrast to the regular reporting requirements in EU Directives.[27]

As the Directive provides for minimum rules, MS are free to adopt or maintain more stringent measures regarding the effective criminal law protection of the environment, see recital 12 of the Directive.

Recital 11 of the Directive expressly clarifies that criminal liability should not exclude civil liability.

14 Background, history and evolution of the Environmental Criminal Liability Directive 2008/99/EC

The final version of the ECD is in many ways the result of years of institutional conflict between the Council and the Commission over the powers of the European legislator in the field of environmental criminal law, which left the ECJ with a decisive role in defining the limits of Community competence in the field of environmental criminal law. This Chapter discusses the history and evolution of the ECD, describing the origins, path and institutional conflicts that preceded its final adoption in December 2008 against the background of an increasing Europeanisation and internationalisation of criminal. The historical outline starts with two instruments negotiated within the framework of the Council of Europe: Resolution(77)28 on the Contribution of Criminal Law to the Protection of the Environment from 1977 (Chapter 14.1.1.) and Convention on the Protection of the Environment through Criminal Law from 1998 (Chapter 14.1.2.). It then traces back the path leading to the adoption of the EU ECD (Chapter 14.2), reviews its adoption and subsequent transposition (14.3) and finally ends with an overview of the evaluations of the Directive carried out from 2019-2020 (14.4), the resulting

[25] European Commission, *Proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law*, COM(2007) 51 final, Brussels, 9 February 2007.
[26] European Parliament, *Report on the Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law* (COM(2007)0051 – C6-0063/2007 – 2007/0022(COD)) (15 April 2008) [online] [European Parliament, *Report on Environmental Criminal Law Proposal, COM(2007)0051* (15 April 2008)].
[27] See also K Meßerschmidt, *Europäisches Umweltrecht* (2011, Beck München) [Meßerschmidt, *Europäisches Umweltrecht*],72.

proposal for a revision of the Directive published by the Commission in December 2021 and the adoption of the new ECD, which came into force on 20 May 2024 and is discussed separately in Part VI of this dissertation.

14.1 Council of Europe

14.1.1 Council of Europe Resolution (77) 28 on the contribution of criminal law to the protection of the environment (1977)

Early efforts to combat environmental crime and to harmonise environmental criminal law standards at EU level as well as internationally date back several decades. At the European regional level, the Council of Europe Resolution (77) 28 on the contribution of criminal law to environmental protection ("Resolution") marks the early beginnings of the debate about the role of criminal law in a common policy for effective environmental protection. More than 40 years later, the proposed measures of the Resolution, a short document consisting of no more than 4 paragraphs and a number of subparagraphs, still appear remarkably comprehensive and timely. It is notable that the imperative to address the environmental challenges arising from industrialisation and the increasing exploitation of natural resources was already articulated with striking clarity several decades ago. Furthermore, the necessity of employing the stringent measures of criminal law as a tool to confront these challenges was acknowledged at an early stage.

The Resolution emphasises the need to protect the "health of human beings, animals and plants and the beauty of landscapes […] by all possible means" and in this regard particularly emphasises the dangers to the "community" caused by pollution, especially from industrial development. It would be in the interest of the Council of Europe to develop a "common policy directed towards effective protection of the environment" and to carefully consider the measures proposed by the Resolution. The measures address both substantive and procedural criminal law, including *inter alia*:

- the introduction of different types of penalties and measures. Next to traditional forms of penalties such as fines and imprisonment, the Resolution sets out quite remarkable measures, such as the **allocation of proceeds from pecuniary penalties to environmental uses** or the **restoration of the former state of the environment** possibly ordered in connection with a suspended custodial penalty;

- the re-examination of the principles of criminal liability, with a view, in particular, to the possible introduction in certain cases of the **liability of corporate bodies**, public or private;
- the re-examination of **criminal procedures in matters of environmental protection**, including
    - the creation of **specialist branches of courts** and **offices of public prosecution** to deal with environmental cases; and
    - means of giving persons or groups the **right to become associated with criminal proceedings** for the defence of the interests of the community.

The Resolution also suggests that certain MS may benefit from gradually compiling, in a **single collection**, the criminal provisions relating to environmental protection, with a view to an eventual future harmonisation of all legislation of the MS of the Council of Europe in this field.

The progressive character of the Resolution will become clearer with the subsequent examination of the scope and content of the ECD. Recommendations such as the **restoration of the environment** or the **allocation of proceeds from pecuniary penalties to environmental uses**, the **specialisation of courts and prosecutors**, or the **right of individuals and groups to become associated with criminal proceedings** for the defence of the interests of the community all address issues that neither the EU nor its MS on their own initiative have been able to address in an appropriate way. At the same time, however, it is important to note that "recommendations" by the Council of Europe are not legally binding. Rather they serve as mere "guidelines" for national legislation or administrative practice proposing a common course of action to be followed. [28] Their non-binding nature makes them very different from EU Directives, which in contrast to the here discussed recommendations are legally binding as to the results to be achieved. Moreover, EU legislative measures are underpinned by a very different, far more effective institutional framework for their implementation and enforcement than any measures agreed at international level. This may explain why the Council of Europe has succeeded in formulating a number of comparatively ambitious measures in its resolution.

[28] A Vercher, *The Use of Criminal Law for the Protection of the Environment in Europe: Council of Europe Resolution (77) 28* (1990) 10(3) Northwestern Journal of International Law & Business 442–459 [online] [Vercher, *Criminal Law and Environment in Europe*], 444.

14.1.2 Council of Europe Convention on the Protection of the Environment through Criminal Law of 4.11.1998

More than 20 years later, on 4 November 1998, the Council of Europe adopted the **Convention on the protection of the environment through criminal law**.[29] It has the distinction of being the first international agreement that pursues the criminalisation of conduct, which causes or is likely to cause damage to the environment. [30] The Convention aims to harmonise environmental criminal law in Europe and, to this end, formulates environmental offences to be transposed into national law. It is a non-self-executing treaty, which means that, in order to be considered national law, the parties to the Convention need to adopt implementing legislation in their countries.[31]

The preamble to the Convention reiterates some of the considerations already stated in the 1977 Resolution, such as the need to protect "life and health of human beings, environmental media and fauna and flora" "**by all possible means**" or the risk of "**unregulated industrial development**", which may give rise to a degree of pollution that poses risks to the environment. In addition, the Convention mentions the "**uncontrolled use of technology"** and the "**excessive exploitation of natural resources"**, which would entail serious environmental hazards and which must be overcome by appropriate and concerted measures.

The Convention asserts (makes it clear) that while "the prevention of environmental damage must be achieved primarily through other measures, criminal law has an important role to play in protecting the environment". Environmental violations with serious consequences should be established as criminal offences and be subject to appropriate sanctions. It should also be ensured that perpetrators of such acts do not escape prosecution and punishment and to this end international cooperation should be fostered. Furthermore, the Convention highlights **criminal or administrative sanctions for legal persons** and the important role they may play in the prevention of environmental violations, noting a growing international trend in this regard.

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[29] Council of Europe Convention on the Protection of the Environment through Criminal Law (ETS No 172, adopted 4 November 1998, not yet in force) [COE Convention].
[30] J.L. Collantes, *The Convention on the Protection of the Environment through Criminal Law: Legislative Obligations for the States* (2001) *Revista electronica de derecho ambiental* 2001:6 [Collantes, Protection of the Environment through Criminal Law] http://huespedes.cica.es/gimadus/collantes.html accessed 7 July 2020.
[31] *Ibid.*

The Convention concerns both **substantive** and **procedural criminal law**. Regarding substantive criminal law, the Convention distinguishes between intentional and negligent offences. Offences to be established under domestic law as intentional offences are listed under Article 2, while offences categorised as negligent are listed under Article 3 of the Convention.

Offences listed under Article 4 ("Other criminal offences or administrative offences") may be established as either criminal or administrative offences, liable to sanctions or other measures under its domestic law. The offences listed in **Article 4** include offences related to protected species and habitats, including

- the "unlawful causing of changes detrimental to natural components of a national park, nature reserve, water conservation area or other protected areas";[32]
- the "unlawful possession, taking, damaging, killing or trading of or in protected wild flora and fauna species".[33]

"**Unlawful**" is defined in Article 1(a) as "infringing a law, an administrative regulation or a decision taken by a competent authority, aiming at the protection of the environment." Notably, unlawfulness is required for all offences listed under the Convention, apart from the most serious forms of crime, listed under Article 2 (a), which "causes death or significant injury or creates a significant risk of causing death or serious injury to any person".[34]

The **criminal sanctions** for the offences listed under Article 2 and 3 include imprisonment and pecuniary sanctions; [35] Article 7 also mentions confiscation measures. In addition, the Convention provides in Article 8 that each party to the Convention may, at any time, declare that it will provide for **reinstatement of the environment** in relation to the offences listed under the Convention, which includes the offences listed under Article 4. For this matter, the

- "competent authority may order the reinstatement of the environment in relation to an offence established in accordance with this Convention. Such an order may be subject to certain conditions", lit.a;

[32] see COE Convention, Art. 4 (f).
[33] see COE Convention, Art. 4 (g).
[34] see COE Convention, Art. 2 (a), concerning 'the discharge, emission or introduction of a quantity of substances or ionising radiation into air, soil or water which causes death or significant injury, or creates a significant risk of causing death or serious injury, to any person'.
[35] see COE Convention, Art. 6.

- "where an order for the reinstatement of the environment has not been complied with, the competent authority may, in accordance with domestic law, make it executable at the expense of the person subject to the order or that person may be liable to other criminal sanctions instead of or in addition to it", lit.b.

Remarkably, these provisions remind of provisions familiar from the Environmental Administrative Liability Directive (ELD), which was adopted 6 years after the 1998 Convention with similar provisions in Articles 6 to 8 ELD ("remedial action").

Article 9 addresses **corporate liability** and requires each party to the Convention to "adopt the measures necessary to impose criminal or administrative sanctions". Corporate liability is confined to the offences listed under Artt. 2 and 3 of the Convention, excluding thereby the offences listed under Article 4, which relate to protected species and habitats. Lastly corporate liability shall not exclude criminal proceedings against natural persons.[36]

Rights for groups to participate in proceedings are addressed in Article 11. Each party to the Convention may, at any time, declare that it will grant any group, foundation or association which, according to its statutes, aims at the protection of the environment, the right to participate in criminal proceedings concerning offences established under the Convention.

So far, the Convention has been signed by 14 of the 47 members of the Council of Europe, including Austria on 7 May 1999 and Germany on 4 November 1998. Only one member of the Council, namely Estonia, has by now ratified the Convention. The minimum number of three ratifications for entry into force has therefore not been reached, meaning that the Convention has not yet entered into force.

Pereira (2015) has assessed a number of possible reasons for the Convention's lack of success.[37]

These include a more generalised aversion by states to ratify international conventions or protocols that focus on the **harmonisation of liability standards**. He highlights the failure of

[36] see COE Convention, Art. 9(2).
[37] R Pereira, *Environmental Criminal Liability and Enforcement in European and International Law*, Queen Mary Studies in International Law, Brill (2015) [Pereira, *Environmental Criminal Liability*], 20-21.

ratification processes concerning **environmental civil liability conventions or protocols**.[38] According to Pereira (2015), states generally lack the political will to implement provisions of multilateral environmental agreements that call for the introduction of environmental (civil) liability regimes, observing that they regularly turn into "dead letter".

Another important reason Pereira (2015) states for the failure of the Convention is that since the early 2000s, negotiations among EU MS started on the adoption of an EU instrument to fight environmental crime. [39]

The Convention may not have entered into force. Nonetheless the **Convention on the protection of the environment through criminal law** has influenced the further development of national environmental criminal law and, as will be demonstrated next, served as a model for subsequent EU legislation on the (partial) harmonisation of the environmental criminal law of the EU MS.

At the time of writing, the COE is in the process of "elaborating a new Convention on the Protection of the Environment through Criminal Law".[40]

14.2 The path leading to the adoption of the ECD

Efforts to create an instrument for the harmonisation of environmental criminal law in the EU date back to 2000. An initiative of the Kingdom of Denmark for a Framework Decision on environmental crimes in February 2000[41] resulted in an institutional conflict between the Council of the European Union ("Council") and the Commission over the powers of the European legislator in the field of environmental criminal law.

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[38] See Pereira, *Environmental Criminal Liability*, 20-21. Pereira gives as examples the Liability Protocol to the Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal (1999) (not yet in force); the Nagoya-Kuala Lumpur Protocol on Liability and Redress (2000) (not yet in force at the time of Pereira's publication, entered into force on 5 March 2018); and the Council of Europe Lugano Convention on Civil Liability for Environmental Damage (1993) (not yet in force).

[39] Pereira, *Environmental Criminal Liability*, 20-21.

[40] For further reference, see: Council of Europe, *Council of Europe to draft a new global convention to protect the environment through criminal law*, available at: https://www.coe.int/en/web/cdpc/-/council-of-europe-to-draft-a-new-global-convention-to-protect-the-environment-through-criminal-law, accessed 30 April 2025.

[41] Initiative of the Kingdom of Denmark with a view to adopting a Framework Decision on combating serious environmental crime (2000/C 39/05) [2000] OJ C 39/5 (adopted 11 February 2000). The initiative was based on the EU's third pillar. At the time, the EU still had a three-pillar structure: the European Community ("first pillar"), the Common Foreign and Security Policy ("second pillar"), and Justice and Home Affairs / police and judicial cooperation ("third pillar").

The initiative was based on the EU's third pillar. At the time, the EU was still based on a three-pillar structure: the European Community ("first pillar"), the areas of Common Foreign and Security Policy ("second pillar") and Justice and Home Affairs / police and judicial cooperation ("third pillar").

Both, the European Commission as well as the Council, strongly contested the appropriate legal basis for the harmonisation of environmental criminal law in the EU, which subsequently became the subject of two ECJ rulings,[42] before Directive 20008/99/EC on the protection of the environment through criminal law was finally adopted by the European Parliament and the Council of the EU on 19 November 2008.

The final version of the ECD is not least the result of years of institutional conflict between the Council and the Commission over the powers of the European legislator in the field of environmental criminal law, which left the ECJ with a decisive role in defining the limits of Community competence in the field of environmental criminal law. The following chapters further examine the competence and mandate of the EU to harmonise the environmental criminal laws of EU MS as defined by the rulings of the ECJ. The 2008 Directive in its final version will be explained and critically assessed thereafter.

14.2.1 First Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law (2001)

After the Kingdom of Denmark's initiative for a Framework decision in 2000, the European Commission published a rival proposal for a Directive on the protection of the environment through criminal law in 2001 ("first proposal"), [43] which was based on ex-Article 175 TEC (Article 192 TFEU) and justified the need for EU action by stating that the existing national sanctions of the MS were insufficient to ensure compliance with Community environmental law.

[42] *Commission of the European Communities v Council of the European Union*, C-176/03; *Ship-Source Pollution,* C-440/05.

[43] European Commission, Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law COM(2001) 139 final, Brussels, 15 March 2001.

14.2.2 Council Framework Decision of 27 January 2003 on the protection of the environment through criminal law

The Council rejected the Commission's proposal for a directive by an overwhelming majority, citing existing reservations of competence.[44] Instead, the Council, on 27 January 2003, adopted - based on the 2000 initiative of Denmark-, Framework Decision 2003/80 / JHA on the protection of the environment through criminal law, which entered into force on 6 February 2003.[45] The Framework Decision of the Council was based on Title VI of the former EU treaty on police judicial cooperation in criminal matters ("third pillar").

In Recital 7 of the Framework Decision, the Council made it clear that although it shared the Commission's objective of harmonisation across the EU, it did not consider harmonisation as an annex competence to Community environmental policy within the meaning of Article 174 TEC, stating that the proposal went beyond the powers attributed to the Community by the Treaty establishing the European Community and that the objectives could be reached by adopting a Framework- Decision on the basis of Title VI of the Treaty on European Union.

The content of the Framework Decision largely mirrored the Council of Europe Convention. It defined a total of seven environmental crimes that, if committed intentionally or at least through gross negligence, were punishable with effective, proportionate and dissuasive sanctions. Furthermore, despite its rejection of the proposed Directive, the Council incorporated into the Framework Decision a number of the proposed Directive's substantive provisions (contained in the rejected proposed Directive), in particular those defining the conduct which MS must establish as criminal offences under their domestic law and the provision on penalties. However, unlike the proposed Directive, the Framework Decision did not define environmental offences by reference to pieces of EC environmental legislation. Instead, the **definition of offences was tied to aggravated breaches of national legislation**. As with the COE Convention, apart from one exception, the offences listed require the unlawfulness of the conduct. "Unlawful" is defined in Article 1(a) as "infringing a law, an administrative regulation or a decision taken by a competent authority, aiming at the protection of the environment", and thus directly mirrors the definition under the COE Convention Similarly, as in the COE

[44] Council Framework Decision 2003/80/JHA of 27 January 2003 on the protection of the environment through criminal law [2003] OJ L 29/55 (annulled 13 September 2005), Recital 7: "proposal went beyond the powers attributed to the Community by the Treaty establishing the European Community".
[45] Council Framework Decision 2003/80/JHA of 27 January 2003 on the protection of the environment through criminal law [2003] OJ L 29/55 (annulled 13 September 2005).

Convention, the unlawfulness requirement is removed in one case, which concerns the most serious forms of crime, "causing death or serious injury to any person".[46]

The approach, which was based on the third pillar (police and judicial cooperation), had the advantage that harmonisation took place outside the scope of Community law. Thus, as with international treaties, the control over what happens remained with the governments of the MS.[47] As long as the minimum harmonisation of criminal law took place within the third pillar of the EU, the Commission's powers of control were limited and the ECJ's competence depended on individual MS' approval. The EU MS thus remained in charge of the process and were able to determine the "if and how" of the harmonisation of criminal law in Europe without any cooperation requirements of the Commission or substantial co-decision powers of the Parliament. [48]

14.2.3 Commission's annulment action against Council Framework Decision 2003/80 / JHA

The Commission did not agree with the Council's approach. It took the view that the aims and content of Framework Decision 2003/80 / JHA fell within the European Community competences provided for by the EC Treaty in the field of the environment and could therefore not be based on the provisions of Title VI of the former EU treaty on police judicial cooperation in criminal matters ("third pillar"). On 15 April 2003, the Commission therefore brought an action for the annulment of the Framework Directive before the European Court of Justice (ECJ). Thus, the ECJ was required for the first time to decide on the criminal law competence of the Community legislature.

14.2.4 ECJ Judgment of 13 September 2005

The ECJ supported the Commission's view and decided in *Commission v Council* (C-176/03) to annul the Framework Decision on the protection of the environment through criminal law.[49]

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[46] see Council Framework Decision 2003/80/JHA, Art. 2 (a), concerning the "discharge, emission or introduction of a quantity of substances or ionising radiation into air, soil or water which causes death or serious injury to any person".

[47] See M Heger, *Die Europäisierung des deutschen Umweltstrafrechts* (2009, Mohr Siebeck) [Heger, *Europäisierung des Umweltstrafrechts*],75, citing Jour/Schröder/Wasmeier, in: von der Groeben/Schwarze, EU-/EG-Vertrag, Vorbem. Zu Art.29-42 EU EU Rn.3 ff.: "Bei Maßnahmen innerhalb der dritten Säule bleibt das "Heft des Handelns" wie bei internationalen V erträgen bei den Regierungen der Mitgliedstaaten."

[48] See Heger, *Europäisierung des Umweltstrafrechts*.75, citing J Vogel, *Harmonisierung des Strafrechts in der Europäischen Union* in: GA 2003, 314-334.

[49] *Commission of the European Communities v Council of the European Union*, C-176/03.

In its ruling, the ECJ states that criminal law and criminal procedure law in principle do not fall within the competence of the Community. This, however, would

> "not prevent the Community legislature, when the application of effective, proportionate and dissuasive criminal penalties by the competent national authorities is an essential measure for combating serious environmental offences, from taking measures which relate to the criminal law of the MS which it considers necessary in order to ensure that the rules which it lays down on environmental protection are fully effective". [50]

Since

> "on account of both their aim and their content, Articles 1 to 7 of the framework decision have as their main purpose the protection of the environment […] they could have been properly adopted on the basis of Article 175 EC. [51]

With this landmark ruling, the ECJ recognized for the first time a criminal annex- competence of the European Community (EC). According to the ECJ, the Council Framework Decision on the Protection of the Environment encroached upon the competence of the EC under the first pillar and therefore had to be annulled. [52]

14.2.5 Second proposal for a Directive of the Commission of 9 February 2007

Under the impression of the ECJ ruling of 13 September 2005 on the Council Framework Directive on the protection of the environment through criminal law, the Commission withdrew its first proposal for a Directive from 2001 and, on 9 February 2007, issued a new proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law with provisions that corresponded, inter alia, with the content of Articles 1 to 7 of the annulled Council Framework Decision. [53]

14.2.6 ECJ Judgment of 23 October 2007 (Ship-Source Pollution)

A second ground-breaking judgment on the criminal-law competence of the European Community institutions was issued by the ECJ two years later. The case concerned the Council Framework Decision to strengthen the criminal law-framework relating to Ship-Source

[50] *Ibid.*, para. 48.
[51] *Ibid.*, para. 51.
[52] *Ibid.*, para. 53: "the entire framework decision, being indivisible, infringes Article 47 EU as it encroaches on the powers which Article 175 EC confers on the Community."
[53] Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law, COM (2007) 51final, 9 February 2007.

Pollution on 23 November 2005.[54] With its judgment of 23 October 2007, the ECJ annulled the Framework Decision of the Council and referred to the Community competence in the field of transport policy (ex-Article 70 et seq., Art. 90 et seq. TFEU). [55] The Court's decision further strengthened the powers of the Community legislature in the field of criminal law. However, the ECJ also clearly stated in its judgment that "the determination of the **type and level of the criminal penalties** to be applied" would not fall within the "Community's sphere of competence",[56] thus setting a clear limit to the powers of the European legislature.

The two ECJ judgments of 2005 and 2007 are fundamental decisions concerning the powers of the Community legislature in the field of criminal law, which not only apply to the specific areas of environmental protection and transport policy but also to all other Community policies.[57]

14.3 Adoption of the Directive on the Protection of the Environment through Criminal Law on 24 October 2008 (ECD)

Finally, after years of dispute over the competence of the European institutions in the field of criminal law, the Council, following an agreement with the European Parliament on the final compromise text at first reading, adopted the amended Directive on the Protection of the Environment through Criminal Law by unanimous vote of the MS represented in the Council on 24 October 2008. The Directive was published in the Official Journal of the EU on 6 December 2008 and entered into force on 26 December 2008.[58] The deadline for transposing the ECD into national law was 26 December 2010. In 2013 a study commissioned by the European Commission reported a number of problems with the transposition of the Directive in the MS. [59] As a result, 18 MS had to change their definitions of environmental crime and/or the level of sanctions, as the Commission considered them not to be deterrent. [60]

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[54] See Council Framework Decision 2005/667/JHA of 12 July 2005 to strengthen the criminal-law framework for the enforcement of the law against ship-source pollution [2005] OJ L 255/164.
[55] *Ship-Source Pollution*, C-440/05.
[56] *Ibid.*, para. 70: "the determination of the type and lev el of the criminal penalties to be applied does not fall within the Community's sphere of competence."
[57] B Hecker, *Europäisches Strafrecht* (5th ed, 2015, Springer Berlin Heidelberg) [Hecker, *Europäisches Strafrecht*], 271.
[58] Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law, OJ L 328, 6 December 2008.
[59] Milieu, *Evaluation Study on the Implementation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law by Member States*, study commissioned by the European Commission (2014), [online] [Milieu, *Evaluation Study on Directive 2008/99/EC*].
[60] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 25.

14.4 Evaluations of the Environmental Criminal Liability Directive (ECD) from 2019-2020

From 2019-2020, several EU institutions carried out a comprehensive evaluation of the Environmental Criminal Liability Directive, resulting in the following publications, which also inform the analysis of the ECD within the scope of this dissertation:

- The Finnish Presidency report on the state of Environmental Criminal Law in the European Union, published on 4th October 2019. [61] This short report discusses the adequacy of the current EU criminal law framework for environmental crime to "better identify, whether there are cases where further approximation of the MS' criminal law could be essential, in accordance with Article 83(2) TFEU". [62] The findings of the report are based on answers of MS to a questionnaire with questions relating to environmental crime and environmental criminal law and on a subsequent discussions with the MS.
- The Final Report of the Eighth round of mutual evaluations on environmental crime by the Council of the European Union, published on 5th December 2019[63], concerning primarily the illegal trafficking of waste and the illegal production or handling of dangerous materials;
- The information report of the European Economic and Social Committee on the evaluation of the ECD, including its technical annex, published on 3rd January 2020[64];
- The European Commission's recent evaluation of the ECD, published on 28th October 2020. [65] The evaluation included, *inter alia*, data collection on the scale of environmental crime, a wide public consultation as well as targeted consultations with experts and practitioners.

Based on the findings of its evaluation, the Commission decided to revise the Directive and issued a proposal for a Directive replacing the existing ECD. [66] Two years later, on 16 November 2023, the European Parliament and the Council reached political agreement on the

[61] Council of the EU, EU Environmental Criminal Law - Presidency Report 12801/19.
[62] *Ibid.*,3
[63] Council of the EU, Final Report on Environmental Crime (14852/19)
[64] European Economic and Social Committee, Evaluation on the Environmental Crime Directive (Information Report) NAT/767-EESC-2019-01597, adopted 11 December 2019, Brussels [EESC, Evaluation on Environmental Crime Directive].
[65] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final.
[66] European Commission, Proposal on Environmental Crime Directive COM(2021) 851 final. Based on the findings resulting from its evaluation of the ECD in 2019/2020, the Commission decided to revise the Directi e and consequently scheduled a legislative proposal in its Work Programme for the year 2021.

Commission's proposal. The Directive came into force on May 20, 2024.[67] The nECD replaces Directive 2008 in its entirety.[68]

The nECD is evaluated in Part VI of this dissertation, where the revised Directive is compared against the need for amendments identified under ECD 2008.

15 Theoretical foundations and underlying rationale of environmental criminal law

This Chapter lays the foundations for the subsequent analysis of the ECD. To this end it recalls some of the theoretical foundations and distinctive features of environmental criminal law, the aims of environmental criminal liability and how environmental criminal law provisions are typically designed to achieve these aims.

A particular feature of environmental criminal law is its strong dependence on administrative law. Damage to or pollution of the environment is generally not prohibited in absolute terms, but dependent on environmental administrative law requirements. For the most part, environmental criminal law protects the environment only to the extent it is required and defined under administrative law. It is thus confined to punishing violations of administrative norms and does not punish harm to the environment as such. Such a violation can be the lack of a permit or the violation of environmental standards established under administrative law. Stand-alone crimes, which punish damage or pollution of the environment without requiring the violation of an administrative norm, are the exception.[69] The reason for this is that, unlike fraud or manslaughter, activities that may be harmful to the environment - such as operating a factory - are also considered, within certain limits, to be beneficial to society as a whole.[70] The conditions under which harm to or pollution of the environment are permitted are usually established by provisions of environmental administrative law, for example by means of a permit. To determine the conditions under which harm or pollution are permitted, the economic

[67] According to Article 29 of the nECD will come into force on the twentieth day following that of its publication in the Official Journal of the European Union.
[68] nECD, Art. 26.
[69] An example of such a stand alone crime is Section 330 a Subsection 1 of the German Criminal Code which states that: "Whoever diffuses or releases substances which contain or can produce poisons, and thereby causes the danger of another person's death or serious damage to another person's health, or the danger of damage to a large number of people's health, incurs a penalty of imprisonment for a term of between one year and 10 years."
[70] See Mandiberg & Faure, *Graduated Punishment Approach*, 2.

analysis of environmental law employs a cost-benefit analysis. In order to determine a so-called optimal level of protection of the environment from harm and pollution (from an economic point of view), a cost-benefit analysis of the activity is carried out. Such cost-benefit analysis or analysis of the advantages and disadvantages of a measure are not uncommon in practice. [71] For example, fatal accidents on motorways could be largely avoided by limiting the speed to 50 km / h. [72] However, society considers the costs of such a measure to be too high. The same applies to the environment: in theory, any kind of damaging or polluting activity could be avoided. The problem, however, is that such activities also have significant social or individual benefits (so-called positive externalities). Reducing environmental damage and pollution to zero would mean that most economic activities would have to stop. For the obvious reasons, such an outcome is unwanted. However, such a cost-benefit analysis is not without problems. The challenges of balancing economic and ecological interests and the politics involved are vividly illustrated by the problems encountered in implementing and enforcing Article 6 HD (as well as by the case law resulting from it).[73] The designation of an area as a Natura 2000 site does not mean that all economic activity is excluded there. Activities such as agriculture or forestry can still be carried out, as can large-scale development projects, provided they comply with the requirements set out in administrative permits or national administrative law implementing Article 6 HD.

This dependence of environmental criminal law on administrative law is expressed in formulations such as for example the following from the German Criminal Code ("German StGB"): "in violation of obligations under administrative law" under section 329 on damage to Natura 2000 sites or "without being authorised to do so" under section 324 German StGB ("water pollution") or "without the required permit" under section 326 German StGB ("unauthorised operation of facilities").

The administrative dependence of environmental criminal law varies. Based on research into the national environmental criminal law of the EU MS, *Faure (2009-2017)* has established four different models of criminalisation in environmental criminal law:

- Abstract endangerment crimes;

[71] Illustration of cost-benefit-analyses from C Gerstetter et al, *Status quo und Weiterentwicklung des Umweltstrafrechts und anderer Sanktionen: Instrumente zur Verbesserung der Befolgung von Umweltrecht (Compliance), Abschlussbericht für das Umweltbundesamt* (2019), [online] [Gerstetter et al, *Status quo Umweltstrafrecht*], 66.

[72] Ibid., 66.

[73] For further reference, see Part I of this dissertation.

- Concrete endangerment crimes;
- Concrete harm crimes;
- Autonomous Crimes. [74]

They are discussed in the following.

15.1 Abstract endangerment crimes

The dependence of environmental criminal law on administrative law is most pronounced in the case of abstract endangerment crimes. Instead of punishing damage to or pollution of the environment directly, abstract endangerment crimes confine themselves to the punishment of non-compliance with requirements of environmental administrative law (such as the violation of permit conditions). The provisions of abstract endangerment crimes are therefore first and foremost designed to ensure compliance with decisions taken under administrative law. The actual damage or pollution of the environment or a concrete endangerment thereof is not required. An example of an abstract endangerment crime is the operation of a facility without a permit, such as it can be found under Section 327 of the German Criminal Code ("Unauthorised operation of facilities").[75]

Abstract endangerment crimes essentially operate as additions ("annexes") to environmental statutes of a mostly administrative character. In the past, the criminal law provisions were therefore often directly added to the administrative environmental statute and as a result scattered across a range of sectoral environmental laws. It also meant that the provisions did not take a very prominent place in the criminal law system. For both practitioners and laymen alike, it was difficult to keep track of the criminal law that applied to a case of environmental damage or pollution. Commentators expressed concern that practitioners, such as prosecutors

[74] Faure, *Evolution of Environmental Criminal Law*, §3; See also: M Faure, The Revolution in Environmental Criminal Law in Europe (2017) 35(2) Virginia Environmental Law Journal 321–356 [Faure, *Revolution in Environmental Criminal Law*]; Faure, *Development of Environmental Criminal Law*, 143; MG Faure, *Effective, Proportional and Dissuasive Penalties in the Implementation of the Environmental Crime and Shipsource Pollution Directives: Questions and Challenges* (2010) *European Energy and Environmental Law Review* 256–278 [Faure, *Effective Penalties*]; Mandiberg & Faure, *Graduated Punishment Approach.* Note well, that the classification of crimes by Faure is heavily influenced by German environmental criminal law, but does not necessarily correlate with the classification of crimes in German law into "abstrakte Gefährdungsdelikte", "konkrete Gefährdungsdelikte" and "Verletzungsdelikte".

[75] Section 327, Subsection 1 states:" (1) Whoever
1. operates a nuclear facility, possesses an operational or decommissioned nuclear facility or in whole or in part dismantles such a facility or substantially modifies its operation or
2. substantially modifies a plant in which nuclear fuels are used or its location *without the required permit* or *contrary to an enforceable prohibition* incurs a penalty of imprisonment for a term not exceeding five years or a fine."

or judges, would tend to neglect criminal law provisions listed outside core criminal legislation and primarily focus on prosecuting crimes listed in core criminal law.[76]

The place of environmental criminal law in EU MS has changed considerably over the last 40 years. Numerous MS have by now consolidated their environmental criminal law provisions by either adding key provisions of environmental criminal law to their national Criminal Codes (such as Germany in 1980 or the Netherlands in 1989) or by incorporating them into a code or special environmental law (such as Denmark in 1991 or Sweden in 1998).[77]

15.2 Concrete endangerment crimes

In the case of so-called concrete endangerment crimes, punishment requires the violation of administrative provisions and in addition a **concrete endangerment** of the environment. This means that the protected interest must have been endangered by a concrete threat to the environment. [78] In such cases, the abstract danger that results for example from the operation of an unauthorised facility is not enough to justify criminal liability. It has to be demonstrated that the conduct resulted in a threat of harm to the environment. As a result, concrete endangerment crimes are generally harder to prove than abstract endangerment crimes.

15.3 Concrete harm crimes

Concrete harm crimes go beyond an actual threat. [79] They require both the violation of an administrative requirement as well as evidence of an actual harm to the environment. Concrete harm crimes also require that a causal link can be established between the harm and the activities of the defendant in a criminal trial.

[76] See Faure, *Development of Environmental Criminal Law*, 141, citing Tiedemann, K. (1980) *Die Neuordnung des Umweltstrafrechts: Gutachterliche Stellungnahme zu dem Entwurf eines Sechzehnten Strafrechtsänderungsgesetzes (Gesetz zur Bekämpfung der Umweltkriminalität)*, De Gruyter, p.18
[77] For further reference, see Faure, *Development of Environmental Criminal Law*, 142.
[78] M Faure, *The Evolution of Environmental Criminal Law in Europe: A Comparative Analysis* in A Farmer, M G Faure and G M Vagliasindi (eds), *Environmental Crime in Europe* (2017, Hart Publishing) Oxford; Portland, Oregon [online][Faure, *Evolution of Environmental Criminal Law*], §3.3.1.
[79]For further discussion of the concept of concrete harm crimes, see Mandiberg & Faure, *Graduated Punishment Approach*; Faure, *Effective Penalties*.

15.4 Autonomous crimes

In the case of autonomous crimes, the criminal provision directly punishes cases of very serious harm to a protected legal interest. The linkage between criminal law and administrative law is completely removed and criminal liability applies irrespective of whether requirements under administrative law were formally met. The "veil of the dependency" [80] is pierced and "the permit shield no longer applies". [81] Unlawfulness, i.e. the violation of administrative rules, is no longer a requirement for criminal liability. The underlying rationale for breaking the link between provisions of environmental criminal law and administrative law in these cases is that the seriousness of the harm is beyond what any administrative rule could have ever permitted.[82]

An example of an autonomous environmental crime often cited in legal literature is Section 330a of the German Criminal Code ("Causing severe danger by releasing poisons").[83] Section 330a of the German Criminal Code punishes anyone "who diffuses or releases substances containing or producing poisons, thereby causing a **risk of death** or **severe damage to another person's health** or a **risk of damage to the health of a large number of people**".[84]

Obviously, the protection in this case applies rather to the human interest ("anthropocentric") than to the environment [85] German authors have also commented on the "systemfremde Sonderstellung" of the provision, noting that unlike the other environmental crime provisions in the German Criminal Code, Section 330a does not follow the principle of dependency of environmental criminal law on administrative law ("Prinzip der Verwaltungsakzessorietät").[86]

[80] Faure, *Criminal Liability for Exploitation of Natural Resources*, 439.
[81] Faure, *Evolution of Environmental Criminal Law*, §3.4.1.
[82] Faure, *Criminal Liability for Exploitation of Natural Resources*, 439.
[83] Faure, *Evolution of Environmental Criminal Law*, §3.4.2, also referring to Heine, G. (1986) *Aspekte des Umweltstrafrechts im internationalen Vergleich* Goldthammer's Archiv für Strafrecht, pp.67-88; J Saurer, Die Verwaltungsakzessorietät des Umweltstrafrechts – Eine Koordinationsstrategie im Wandel, *Die Verwaltung* 3 (2017), 339–365 [online] [Saurer, *Verwaltungsakzessorietät des Umweltstrafrechts*], 341.
[84] The original wording reads: "Wer Stoffe, die Gifte enthalten oder hervorbringen können, verbreitet oder freisetzt und dadurch die Gefahr des Todes oder einer schweren Gesundheitsschädigung eines anderen Menschen oder die Gefahr einer Gesundheitsschädigung einer großen Zahl von Menschen verursacht". Notably, the 1998 Council of Europe Convention contains a similar crime. Under Article 2(1)(a), the Convention provides punishment for "The discharge, emission or introduction of a quantity of substances or ionising radiation into air, soil or water, which:- causes death or serious injury to any person, - or creates a significant risk of causing death or serious injury to any person".
[85] Faure, *Evolution of Environmental Criminal Law*, §3.4.2.
[86] Saurer, *Verwaltungsakzessorietät des Umweltstrafrechts*, 341, citing Saliger (2016) in: Satzger/Schluckebier/Widmaier (Eds.), StGB, 3rd edition, Section 330a, §1.

In summary it appears that in the national law of the MS, only very few cases of truly "autonomous environmental crimes" exist. Faure (2017) cites a number of autonomous provisions from the Spanish Criminal Code and a provision from the French penal code, noting, however, that the French crime of "ecological terrorism" in Article 421-2 rather aims at punishing acts of terrorism than pollution.[87]

15.5 Model of criminalisation under the ECD

Under the ECD, criminal liability is expressly limited to cases where the offender has acted "unlawfully". This is formally expressed in Article 3 ECD, which stipulates that in order to be considered a criminal offence under the Directive, the conduct listed therein must be "**unlawful"**. What is considered "unlawful", is further clarified in Article 2 ECD, which states that a conduct is considered "unlawful", when it infringes

- the **legislation** adopted pursuant to the EC Treaty and **listed in Annex A** to the Directive; or
- the **legislation** adopted pursuant to the Euratom Treaty and **listed in Annex B** to the Directive; or
- a **national law**, an **administrative regulation** of a MS or a **decision** taken by a competent authority of a MS that gives effect to the aforementioned EU legislation.

The criminalisation of the conduct listed under the ECD thus depends on the infringement of either EU environmental legislation or of national environmental laws or acts implementing the said EU legislation. This creates an absolute dependency between the criminal offences listed in the ECD and the pieces of EU environmental legislation specified in Annexes A and B to the Directive.

While this approach is in line with the overall objective of the ECD, which is to strengthen the implementation of EU environmental law, the employed reference technique has been criticised in the light of the lex certa requirement (Bestimmtheitsgebot). The lex certa requirement follows from the legality principle in criminal law (*nullum crimen, nulla poena sine lege)* and provides that criminal offenses should be described with a sufficient degree of certainty,

[87] See Faure, *Evolution of Environmental Criminal Law,* §3.4.2., citing, for example, Article 328 (1) of the Spanish Criminal Code, which punishes "*whoever establishes deposits or landfills of solid or liquid waste or residues that are toxic or hazardous and may seriously damage the balance of natural systems or the health of individuals*") or Article 328 (3), which punishes whoever, "*when assembling, transporting, recycling, eliminating or recycling waste, including omission of the duty of surveillance of such procedures, seriously endanger the life, integrity or health of persons, or the quality of the air, ground or water, or animals or plants*".

so that it is clearly predictable for the individual, through which behaviour it is liable to criminal prosecution.[88] Critical commentators argue that the ECD, with its long chains of references, would in practice force national legislators to incorporate those references into their national penal codes. The resulting multiple references between national law and EU law would render an understanding of the legal situation difficult, possibly even unfeasible, not least considering different rules of interpretation and different language versions of EU law.

Alternatively, the offences resulting from the chain of references could be translated into numerous individual offences under national law. In practice, however, such an approach would prove virtually impossible for the national legislator, in some cases even illegal, especially in the case of references to EU law with direct effect, which cannot simply be repeated in national legislation. In addition, this approach would entail the risk of overlooking a combination of references and thus of violating the obligation to fully transpose the Directive. However, this criticism overlooks that the punishable conduct is separately defined and thus also confined to the nine types of conduct listed under Article 3 ECD. The "unlawfulness" requirement does not create an offence, it is a condition for the ECD and thus for criminal liability to apply.

Referring to the *principle of ultima ratio*, which can be derived from the (European) principle of proportionality, the same commentators have also alluded to the risk of criminalizing wrongdoing of a merely formal character.[89] As an example, they cite Article 3 lit. c of the Directive, under which it already constitutes an illegal shipment of waste if the shipment effects without notification to all competent authorities concerned[90] or in a way which is not specified materially in the notification or movement documents [91] . Such a criminalisation of administrative offences, however, would ultimately constitute a violation of the European principle of proportionality as stated under Article 5 paragraph 4 TFEU and as it finds its expression in the ultima-ratio principle.

[88] H Satzger et al. (European Criminal Policy Initiative), *Manifest zu Europäischen Kriminalpolitik*, Zeitschrift für Internationale Strafrechtsdogmatik ZIS 12 (2009), 691-706 [Satzger et al., Manifest zu Europäischen Kriminalpolitik], 704.
[89] Satzger et al., *Manifest zu Europäischen Kriminalpolitik*, 704; H Satzger et al. (European Criminal Policy Initiative), A Manifesto on European Criminal Policy, *Zeitschrift für Internationale Strafrechtsdogmatik (ZIS)* 12 (2009), 707–716 [online] [Satzger et al., Manifesto on European Criminal Policy],711.
[90] See Article 2 no.35 (a) of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste, OJ L 190, 12 July 2006.
[91] See Article 2 no. 35 (d) and (g) (iii) of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste, OJ L 190, 12 July 2006.

The European Parliament has suggested several amendments to further clarify the criminal offences under the ECD, such as the "import and export of illegally harvested timber or biomass" or the "circulation of "rustbucket" single-hull vessels".[92] The suggested amendments were, however, not included in the final version of the Directive.

The crimes listed under the ECD contain **abstract** and **concrete endangerment crimes** as well as **concrete harm crimes.** Given that the "unlawfulness" requirement extends to all offences listed in Article 3 ECD, an independent protection of the environment in the sense of an autonomous crime is not granted under the Directive. All crimes under the ECD thus depend on the infringement of an administrative norm.

Based on the above analysis of the different models of criminalisation in environmental criminal law, the following chapter discusses the two offences relating to infringements of the BHD, namely Article 3 (f) and 3(h) ECD.

16 Offences related to the BHD under the ECD

There are two offences under the ECD that directly relate to the BHD, namely:

- **Article 3(f)** which refers to the killing, destruction, possession or taking of specimens of protected wild fauna or flora species **("wildlife crime");** and
- **Article 3 (h)** which refers to the significant deterioration of a habitat within a protected site **("habitat crime")**.

As previously noted, any conduct listed in Article 3 ECD must be considered a criminal offence if "**unlawful"** and committed "**intentionally"** or with "**serious negligence"**.

The following chapters further explore the content of Article 3 (f) and 3(h), their interplay with the BHD and experiences with their implementation and enforcement in the EU MS to date. To begin with, a brief introduction to each provision is provided and the scope of the habitats and species protected under each provision is examined (Chapters 16.1 and 16.2), after which they will be examined in more detail and their model of criminalisation analysed based on the

[92] European Parliament, Report on Environmental Criminal Law Proposal, COM(2007)0051 (15 April 2008).

typology of crimes discussed in the previous chapter (Chapters 16.1.1 and 16.2.1). Next the threshold criteria under both provisions and their implementation in the MS is examined (Chapters 16.1.2.2/3 and 16.2.2/3) and the findings for each provision are briefly summarised (Chapters 16.1.4 and 16.2.4). Finally, based on the findings for the model of criminalisation and the threshold criteria established under the two provisions, the effectiveness of Article 3 (f) and (h) is critically discussed (Section 16.3).

16.1 Killing, destruction, possession or taking of specimens of protected wild fauna or flora species, ECD Article 3 (f)

Article 3(f) of the ECD requires MS to ensure that the following conduct constitutes a criminal offence, when **unlawful** and committed **intentionally** or with at least **serious negligence**,

> "the killing, destruction, possession or taking of specimens of protected wild fauna or flora species, except for cases where the conduct concerns a **negligible quantity** of such specimens and has a **negligible impact** on the **conservation status of the species**;"

16.1.1 Species of wild fauna and flora protected under Article 3(f) ECD (scope of biodiversity protected)

The offence under Article 3 (f) of the ECD directly relates to the BHD. In this regard, **Article 2 (b) (i) ECD** specifies that [**emphasis added**]

> "'**protected wild fauna and flora species'** are for the purposes of Article 3(f), those listed in:
>
> - **Annex IV** to Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [HD],[93]
> - **Annex I** to, and referred to in **Article 4(2)** of, Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds [BD];"[94]

Protection from killing, destruction, possession or taking as defined under Article 3(f) of the ECD is thus confined to:

- the animal and plant species of Community interest that are **in need of strict protection** listed in **Annex IV** to the **HD**; and

[93] Annex IV to the HD lists the animal and plant species of Community interest in need of strict protection.
[94] Annex I to the BD lists 194 species and sub-species that are particularly threatened. Article 4(2) refers to regularly occurring migratory species not listed in Annex I.

- the **194 species and sub-species of wilds birds** that are **particularly threatened** listed in Annex I to the **BD**; and
- regularly occurring **migratory species** referred to in **Article 4(2)** of the **BD**.

The following chapters compare the scope of biodiversity protected under ECD with the scope of biodiversity protected under the Birds Directive on the one hand and the Habitats Directive on the other hand. Finally, conclusions from the comparison are drawn.

16.1.1.1 Species protected under the Birds Directive

The species of wild birds protected under the Birds Directive are listed in various annexes of the Directive. Article 4(f) ECD applies to the wild bird species listed under **Annex I** of the **Birds Directive** as well as to all regularly occuring migratory species referred to in Article 4(2) of the **Birds Directive**. They must not be killed, destroyed, possessed or taken.

Under the Birds Directive, the **general system of protection** established under Article 5, which also prohibits killing and capture of wild bird species, is not confined to **Annex I** species. It applies to **all naturally occurring wild bird species** present in the EU. [95] While Article 7 of the Directive allows hunting for certain species listed in Annex II, it bans all hunting during the period of reproduction and rearing and during the return of migratory birds to their breeding grounds. Furthermore, Article 8 prohibits any form of non-selective and large-scale killing of all **naturally occurring wild bird species**.[96] Exceptions for negligible quantities or negligable impacts do not apply.

Comparing the scope of bird species protected under the ECD to that of the Birds Directive shows the difficulties inherent in this endeavour. To begin with, not all practices prohibited under the Birds Directive are punished under the ECD and the wording of Directives differs in almost all cases. The ECD punishes the killing, destruction, possession or taking of specimen of protected wild bird species. Under the Birds Directive, the prohibition most similar to this is the killing and capture of wild bird species. As noted above, this prohibition generally extends to all naturally occuring wild bird species present in the EU. Even if one accounts for the exception stated under Article 7 Birds Directive, which allows the hunting of certain species listed under Annex II, this exception only applies during certain times of the year. During the

[95] BD, Art. 5.
[96] BD, Art. 8 (1).

breeding and rearing season and during the return of migratory birds to their breeding grounds, the killing and capture remains prohibited for all wild bird species. The ECD, on the other hand, only punishes such conduct in the case of Annex I species and migratory birds. In conclusion, while under the Birds Directive the killing and capture of all wild bird species is prohibited when they are most at risk, i.e. during the period of reproduction and rearing, under the ECD this prohibition only applies to Annex I species.

16.1.1.2 Species protected under the Habitats Directive

The protection from killing, destruction, possession or taking under Article 3(f) ECD also applies to the animal and plant species **in need of strict protection and** listed in **Annex IV** to the **Habitats Directive**. Under the **Habitats Directive**, the plant and animal species listed under **Annex IV** of the Directive are protected by a **strict system of protection**, which applies both inside and outside Natura 2000 sites. Similar to the Birds Directive, it also prohibits the killing and capture of protected animal species, among a number of other practices.[97] In the case of strictly protected plant species, the Habitats Directive prohibits, among other things, the deliberate picking, colleting, cutting, uprooting or destruction of these species.[98] Exeptions to negligible quantities or negligable impacts as such do not apply.

In the case of the Habitats Directive and the ECD, the scope of protected plant and animal species is more closely aligned. In both cases it is confined to the plant and animal species listed in Annex IV of the Habitats Directive. Again, not all practices prohibited under the Habitats Directive are punished under the ECD. The wording of the conduct punished under the ECD differs from the wording of the prohibitions stated under the Habitats Directive in nearly all cases. In order to determine the scope of protection for different plant and animal species, one can therefore only try to find prohibitions under the Habitats Directive that are most similar to the killing, destruction, possession or taking of specimen of protected species punished under the ECD and then determine to what extent these adress a similar scope of biodiversity.

In conclusion, the comparison between the ECD on the one hand and the BHD on the other hand, revealed one remarkable difference, which is that the hunting of Annex II wild bird species during their most vulnerable period is not penalised under the ECD, while it is

[97] HD, Art. 12.
[98] HD, Art. 13.

prohibited under the BD. Other remarkable differences in the protected biodiversity under the ECD on the one hand and the BHD could not be identified.

16.1.2 Model of Criminalisation under Article 3 (f) ECD

Article 3(f) **punishes various types of behaviour**, ranging from the **killing** and **destruction** of specimens of protected fauna or flora species to the **possession** and **taking of protected** specimens of protected fauna or flora species. This chapter seeks to classify the offence based on the previously presented typology of crimes by. Faure (2009-2017), which distinguishes between abstract endangerment crimes, concrete endangerment crimes and concrete harm crimes on the one hand and autnomous crimes on the other hand**.**[99]

As already established, the "unlawfulness" requirement in Article 3 ECD means that the offences under the ECD depend on the violation of an administrative norm and thus do not grant an independent protection of the environment in the sense of an autonomous crime. Next it is examined whether the offence under Article 3(f) constitutes an **abstract endangerment or** a **concrete endangerment** or a **concrete harm crime.**

While the types of conduct listed in Article 3(f) ECD may not all fit into the same category, it is clear that they all require more than just the mere violation of an administrative norm. The "**killing**" and "**destruction**" of specimens goes beyond the endangerment of the protected interest - it is the **concrete harm** to the protected interest in the form of "**killing**" or "**destruction**" that is punished under the ECD.[100] The alternatives "**possession**" or "**taking**" of specimens are more difficult to classify, since one could argue that in some cases a restoration of the protected wild fauna or flora specimens may still be possible.[101]*Faure (2011)* therefore suggests classifying these as concrete endangerment crimes. [102] The classification of the latter two alternatives as concrete endangerment crimes and thus a differentiation from the more serious first alternatives appears justified. For in the case of "killing" and "destruction", the

[99] See discussion in Chapter 15, *Theoretical foundations and underlying rationale of environmental criminal law*, and references cited there. Faure, *Evolution of Environmental Criminal Law*, §3; See also: Faure, *Revolution in Environmental Criminal Law*; Faure, *Effective Penalties*; Mandiberg & Faure, *Graduated Punishment Approach*.
[100]See also M.G. Faure, *The Implementation of the Environmental Crime Directives in Europe* (2011) Ninth International Conference on Environmental Compliance and Enforcement Brussels [Faure, *Implementation of Environmental Crime Directives*], 364.
[101]*Ibid*, 364. Faure classifies the latter two alternatives—i.e. the "possession" and the "taking" of specimens—as concrete-endangerment crimes and differentiates them from the former two alternatives, "killing" and "destruction", which both require a specific consequence and therefore go beyond mere endangerment.
[102] Faure, *Implementation of Environmental Crime Directives*, 364.

specimens are irretrievably lost. This difference in the seriousness of the offences stated under Article 3(f) should also be reflected in different levels of sanctions. [103]

16.1.3 Threshold criteria under Article 3(f) ECD

A threshold applies under Article 3(f) ECD: The provision excludes criminal liability when the "**killing, destruction, possession** or **taking**" concerns a **negligible quantity** of specimens of protected wild fauna or flora species and has a **negligible impact** on the **conservation status of the species**. [104] What constitutes a "**negligible quantity**" or a "**negligible impact**" is not further defined under the Directive. The threshold criteria thus remain rather vague.

Notably, the vague formulation of the threshold criteria was intended. The Commission, in its 2007 proposal for the Directive, explicitly stated that vague terms such as "substantial damage" or "serious damage" were not further defined to leave their appraisal "to each MS to interpret in the light of its traditional and legal system".[105] The following chapters therefore examine the transposition of the threshold criteria under Article 3(f) ECD into the national laws of four EU MS, namely **Austria**, **Germany**, **Italy** and **Spain**.

16.1.4 Threshold criteria in the implementing laws of the EU MS

The selection of **Austria**, **Germany**, **Italy** and **Spain** for further investigation of the threshold under Article 3(f) ECD was mainly determined by the fact that information on the implementation of Article 3(f) ECD in EU MS is not easily available. As previously noted, the Directive contains no reporting requirements. Studies carried out on the Directive's implementation and enforcement tend to focus on specific provisions of the Directive or on a

[103] See Faure, *Effective Penalties*, 272, who cites the differing seriousness of the offences listed in article 3(f) ECD as an argument for differentiated penalties.

[104] As proposed by Council Working Group on Substantive Criminal Law, Draft Council Framework Decision on the Protection of the Environment through Criminal Law 5587/08 DROIPEN 3 ENV 30 CODEC 78 (28 January 2008) 5, as cited in Pereira, *Environmental Criminal Liability*, 251. The 2007 Commission proposal contained no quantitative thresholds and defined the offence as "the unlawful possession, taking, damaging, killing or trading of or in specimens of protected wild fauna and flora species, or parts or derivatives thereof". In the final text of the ECD, "trading in" specimens was separated into a distinct offence and now appears in Art. 3(g) ECD. Arts. 3(f) and 3(g) refer to different EU instruments that provide separate definitions and levels of protection for wild fauna and flora. For Art. 3(g), "protected wild fauna and flora species" means those listed in Annex A or B to Council Regulation (EC) 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein [1997] OJ L 61/1 (Art 2(b)(ii)).

[105] European Commission, *Proposal for a Directive on the protection of the environment through criminal law*, COM(2007) 51 final. While the references to a "non-negligible quantity" and a "non-negligible" impact were introduced into the draft directive by the European Parliament at the amendment stage, it is reasonable to infer that the Commission would have applied the same rationale to the threshold criteria in article 3(f). For further reference, see European Parliament, *Report on Environmental Criminal Law Proposal, COM(2007)0051* (15 April 2008).

number of selected MS. Some information on the implementation of the Directive can be gained from the EFFACE research project, which issued country reports for some MS.[106] Mostly, the information for the following analysis of threshold criteria in EU MS had to be obtained from the MS national criminal codes directly.

16.1.4.1 Threshold criteria in Austria

In Austria, Article 3(f) ECD was transposed into national law under Section 181f (1) of the Austrian Criminal Code, which states that

> "Anyone who **kills, possesses or destroys specimens** of a **protected wild animal species** contrary to a legal regulation or an official order or who **destroys, possesses or removes specimens** of a **protected wild plant species** from nature is subject to [punishment], unless the conduct affects only a negligible **number of the specimens** and has only a **negligible impact on the conservation status of the species**."[107]

The threshold criteria under Austrian law mirror the exact wording of Article 3(f) ECD. What constitutes a "**negligible quantity**" or a "**negligible impact**" is not further defined.

16.1.4.2 Threshold criteria in Germany

In Germany, the criminal offences transposing Article 3(f) ECD are spread across various environmental laws where they essentially supplement provisions of German environmental administrative law. [108]

Section 71 and Section 71a of the Federal Nature Conservation Act (Bundesnaturschutzgesetz, BNatSchG) both criminalize certain **acts against protected species,** including the **killing, capture, or destruction** of **strictly protected wild fauna or flora species**. Both provisions contain **threshold criteria**, stating that the conduct listed therein is not punishable if it only concerns a **negligible quantity of a protected specimen** and only has a **negligible impact on**

[106] EFFACE - short for "European Union Action to Fight Environmental Crime" - was a 40-month EU funded research project, available online via: https://www.efface.eu/publications, accessed 1 May 2025.

[107] The section reads in the German original version as follows: „Wer Exemplare einer geschützten wildlebenden Tierart entgegen einer Rechtsvorschrift oder einem behördlichen Auftrag tötet, besitzt oder deren Entwicklungsformen zerstört oder aus der Natur entnimmt oder Exemplare einer geschützten wildlebenden Pflanzenart zerstört, besitzt oder aus der Natur entnimmt, ist [...] zu betrafen, es sei denn, dass die Handlung eine nur unerhebliche Menge der Exemplare betrifft und auf den Erhaltungszustand der Art nur unerhebliche Auswirkungen hat."

[108] S Sina, *Fighting Environmental Crime in Germany: A Country Report*, Study in the framework of the EFFACE research project, Berlin: Ecologic Institute (2015) [online] [Sina, *Fighting Environmental Crime in Germany*], 32 with reference to André-M. Szesny/Laura Görtz, Das neue Umweltstrafrecht – Kritisches zur Umsetzung der Richtlinie Umweltstrafrecht, *ZUR* 2012, 405-411.

the conservation status.[109] Again the wording of the threshold criteria mirrors the wording of Article 3(f) ECD. And again, the terms "**negligible quantity**" and "**negligible impact**" are not further defined. German scholars have criticised the threshold criteria, noting that it is difficult to implement without expert evidence.[110] Furthermore compliance of the vague threshold criteria with the *lex certa* principle has been questioned, an issue that is discussed in Chapter 16.3.2.2 below.

Another act implementing Article 3(f) ECD is the **German Federal Hunting Act** (Bundesjagdgesetz, BJagdG). Section 38 BJagdG criminalizes the **unauthorised killing and hunting of certain wild animals** – a threshold does not apply. Section 38a BJagdG criminalizes the **unauthorised possession** of **protected and strictly protected wild animals**. Here a threshold applies and paragraph 5 of Section 38a specifies that the conduct is not punishable if it only concerns a **negligible quantity** of such specimen and has a **negligible impact** on the conservation status of the species. The terms "**negligible quantity**" and "**negligible impact**" are not further defined. As a matter of interest, German scholars have identified the primary legal interest protected under the above provisions to be the "physical integrity of animals and plants".[111]

In summary, the wording of the German provisions does not further clarify the threshold criteria either.

16.1.4.3 Threshold criteria in Italy

In Italy, the transposing law for Article 3(f) ECD is Article 727-bis of the Italian Criminal Code, which states that [**emphasis added**]

> "Unless the act constitutes a more serious crime, anyone who, **outside the permitted cases**, kills, captures or possesses specimens belonging to a **protected wild animal species** is punished […], except in cases in which the action concerns a **negligible quantity of such specimens** and has a **negligible impact on the conservation status of the species**.

[109] See Section 71 para.6 and Section 71a para.5 BNatSchG: "Die Tat ist nicht […] strafbar, wenn die Handlung eine unerhebliche Menge der Exemplare betrifft und unerhebliche Auswirkungen auf den Erhaltungszustand der Art hat."
[110] Sina, *Fighting Environmental Crime in Germany*, 33, with reference to André-M. Szesny/Laura Görtz, Das neue Umweltstrafrecht – Kritisches zur Umsetzung der Richtlinie Umweltstrafrecht, *ZUR* 2012, 405-411.
[111] *Ibid.*

> Anyone who destroys, removes or holds specimens belonging to a **protected wild plant species outside** the **permitted cases** is punished […], except for cases where the conduct concerns a **negligible quantity of such specimens** and has a **negligible impact on the conservation status of the species**."[112]

Again, the threshold criteria under Italian law mirror the exact wording of Article 3(f) ECD and there is no further definition of the terms **"negligible quantity"** and **"negligible impact"**. Similarly to their German colleagues, Italian commentators have observed that the determination of the threshold criteria in practice can be difficult. [113] For assessing the "impact on the conservation status of the species", Italian commentators suggest that the "genus and age of animal[s] and the reproduction possibilities of the species should be taken into account". [114]

The expression "unless the fact constitutes a more serious crime" refers to the application of similar legal provisions, which are punished more severely. If in consideration of the facts a more serious offence applies, the more severe sanction applies. A court case settled by the Court of Turin is illustrative of this provision.[115]In the case concerned, a theft had also taken place. The offender was therefore not punished according to the above stated Article 727-*bis*, but pursuant to Articles 624 and 625 of the Italian Criminal Code, which criminalizes theft.

16.1.4.4 Threshold criteria in Spain

In Spain, Article 3(f) ECD is transposed under Article 334 and Article 332 of the Spanish Criminal Code (CrimC).[116]

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[112] The original Italian text reads: "Salvo che il fatto costituisca più grave reato, chiunque, fuori dai casi consentiti, uccide, cattura o detiene esemplari appartenenti a una specie animale selvatica protetta è punito […], salvo i casi in cui l'azione riguardi una quantità trascurabile di tali esemplari e abbia un impatto trascurabile sullo stato di conservazione della specie. Chiunque, fuori dai casi consentiti, distrugge, preleva o detiene esemplari appartenenti a una specie vegetale selvatica protetta è punito […], salvo i casi in cui l'azione riguardi una quantità trascurabile di tali esemplari e abbia un impatto trascurabile sullo stato di conservazione della specie."

[113] F Bianco, A Lucifora and GM Vagliasindi, *Fighting Environmental Crime in Italy: A Country Report* (2015, University of Catania) [online] [Bianco, Lucifora & Vagliasindi, *EFFACE Country Report (Italy)*], 23.

[114] *Ibid.*, 23, with reference to C Ruga Riva, *Il decreto legislativo di recepimento delle direttive comunitarie sulla tutela penale dell'ambiente: nuovi reati, nuova responsabilità degli enti da reato ambientale* (2011) [online] [Ruga Riva, *Decreto legislativo di recepimento*].

[115] For further reference see: N Torres Rosell & M Marquès Banqué, *Study on the Implementation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law* (2016) [online] [Torres Rosell & Marquès Banqué, *Implementation of Directive 2008/99/EC*], 42 – 45.

[116] See T Fajardo, J Fuentes, I Ramos and J Verdú, *Fighting Environmental Crime in Spain: A Country Report* (2015, University of Granada) [online] [Fajardo et al, EFFACE Country Report (Spain)], 33. It is not clear from the report whether there are any other, additional provisions, that also relate to the transposition of Article 3(f).

Article 332 CrimC concerns **endangered species of wild <u>flora</u>** and states that [**emphasis added**]:

> "Whoever, in violation of the laws or other provisions of a general nature, cuts, tails, uproots, collects, acquires, possesses or destroys protected species of wild flora, […][will be punished], unless the conduct affects an **insignificant number of specimens** and **does not have relevant consequences for the conservation status of the species**."[117]

The threshold terms "**insignificant**" or "**relevant**" are not further specified, but overall the provision on protected wild flora seems to correctly transpose the requirements under Article 3(f) of the ECD.

Article 334 (1) CrimC concerns **protected species of wild <u>fauna</u>** and requires punishment for:

> "whoever, in violation of the laws or other general provisions:
> a) hunts, fishes, acquires, possesses or destroys protected species of wildlife;
> b) […]; or,
> c) carries out activities that prevent or hinder their reproduction or migration."[118]

From the above it follows that in the case of protected wild fauna "**negligible quantities**" or "**negligible impacts**" on the protected species of wild fauna are not exempted from criminal liability and consequently a threshold does not apply. Since MS are allowed to provide for stricter measures, such transposition of Article 3(f) is not in violation of the ECD. One can of course question, whether it is proportionate to criminalize conduct that is only causing "negligible impacts".

The EFFACE report, however, lists other conduct against flora and fauna that is criminalised under the Spanish CrimC but not listed in the ECD.

[117] The original Spanish language wording reads as follows: „El que, ***contraviniendo las leyes u otras disposiciones de carácter general***, corte, tale, arranque, recolecte, adquiera, posea o destruya especies protegidas de flora silvestre, […], salvo que la conducta ***afecte a una cantidad insignificante*** de ejemplares y ***no tenga consecuencias relevantes para el estado de conservación*** de la especie, será castigado con la pena […]."

[118] The original Spanish language wording reads as follows: "Será castigado […] quien, ***contrav iniendo las leyes u otras disposiciones de carácter general***:
a) cace, pesque, adquiera, posea o destruya especies protegidas de fauna silv estre;
b) […]; o,
c) realice activ idades que impidan o dificulten su reproducción o migración."

16.1.5 Summary of findings on Article 3(f) ECD

From the above examination, the following findings can be summarised:

- Protection under Article 3(f) ECD does not extend to all wild fauna or flora species, but is confined to the species protected under the BHD, which are further specified in Article 2(b)(i) ECD. Application of the ECD to an incident of killing, destruction, possession or taking thus depends on the protection of the concerned species under the BHD.
- As far as the model of criminalisation is concerned, the crimes listed under Article 3(f) ECD can be classified as both concrete endangerment crimes as well as concrete harm crimes.
- The threshold criteria in Article 3(f) ECD excludes conduct which concerns a "**negligible quantity**" or has a "**negligible impact**". The vague wording of the threshold criteria was directly transposed into MS legislation without any further guidance on their interpretation. The use of vague notions in criminal law, such as "**negligible quantity**" or "**negligible impact**", is discussed in more detail below, after a discussion of Article 3(h) ECD, which, as will be demonstrated next, raises similar issues.

16.2 Significant deterioration of habitat within protected site, Article 3 (h)

The second ECD offence that directly relates to provisions of the BHD is Article 3(h), which criminalises

> "any [unlawful] conduct which causes the **significant deterioration of a habitat within a protected site**".

16.2.1 Habitats protected under Article 3 (h) (scope of biodiversity protected)

The ECD clearly confines the scope of protection for habitats of species or natural habitats within a protected sited. The meaning of "habitat within a protected site" is further specified in Article 2(c) of the ECD, which states that [emphasis added]

> "Habitat within a protected site means any habitat of species in an area which is classified as a **special protection area pursuant to Article 4 (1) or (2) of the BD** (Directive 79/409/EEC), or **any natural habitat or a habitat of species** in relation **to which a site is designated as a special area of conservation pursuant to Article 4 (4) of the HD** (Directive 92/43/EEC)."

The scope of protection of species habitats and natural habitats from significant deterioration under Article 3(h) ECD is thus limited to habitats within a protected area, which is also the case under Article 6(2) HD. Compared to the ELD, however, which also covers damage to habitats of species and natural habitats outside protected areas, the scope of application is narrower.[119] Moreover, under the ELD a MS may decide to protect additional habitats , thus further extending the scope of protected biodiversity.[120]

As with Article 3(f), the model of criminalisation and the threshold criteria for Article 3(h) are analysed next.

16.2.2 Model of Criminalisation under Article 3 (h) ECD

Article 3 (h) ECD punishes "**any** [unlawful] **conduct which causes** the **significant deterioration of a habitat within a protected site**". Again, the unlawfulness requirement creates a strong dependency between the offence stated under Article 3(h) ECD and the provisions implementing the BHD.

The provision requires the "**significant deterioration of a habitat"**, which clearly constitutes a concrete harm. The offence stated under Article 3(h) ECD can thus be classified as a **concrete harm crime**. [121]

The origins of Article 3(h) can be traced back to the Commission's 2001 and 2007 proposals for the Directive.[122] The offence appeared for the first time in the Commission's 2001 proposal for the Directive [123] and was restated in the 2007 proposal, where criminalisation simply required "**the unlawful significant deterioration of protected habitat**". The additional requirements of "**any conduct**" and "**which causes**", which appear in the final version of Article 3(h), were later inserted through an amendment by the European Parliament.[124]

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[119] See Chapter 11.1.1., *Scope of biodiversity protected under the ELD.*
[120] ELD, Art. 2(3)(c).
[121] See Faure, *Effective Penalties*, 272.
[122] In this regard, Article 3(h) differs from most of the other offences introduced under the ECD. Whereas the offences in the 2001 and 2007 Commission drafts largely echoed the definitions found in the Council of Europe Convention and in Framework Decision 2003/80/JHA, the offence later codified in Article 3(h) was introduced for the first time by the Commission itself and has no direct counterpart in those earlier instruments.
[123] European Commission, *Environmental Protection through Criminal Law Proposal* COM(2001) 139 final.
[124] European Parliament, *Report on Environmental Criminal Law Proposal (COM(2007)0051)* (15 April 2008).

The addition of **"which causes",** as Pereira (2015) points out, suggests "that MS are not required to criminalise endangerment activities (i.e. conduct which **"is likely to cause"** environmental damage)". Pereira (2015) also concludes that the additional requirement of "**any conduct**" leads to the exclusion of omissions.[125] Since the European Parliament did not add any justification (explanation) to its proposed amendments, it is difficult to clearly identify the intention behind the proposed amendments. It appears, however, that the European Parliament (the Environment Committee in that case), was primarily interested in further clarifying the offence, since it also proposed adding "**including through building work, stone clearance, deforestation, grubbing and planting work, and arson**" to the wording of the offence – an addition that was not included in the final wording of the Directive.

In summary, it is clear that the offence in its final wording requires both a **concrete harm** (i.e. "significant deterioration of a habitat") and the **establishment of a causal link** between the conduct of the perpetrator and the harm. An endangerment crime, i.e. a conduct that is likely to cause the harm, is not covered by Article 3(h) ECD. The German translation of the ECD translates "conduct" with "Verhalten". This suggests that the offence also covers omissions.

16.2.3 Threshold criteria under Article 3(h) ECD

Article 3(h) confines criminal liability to the "**significant deterioration**" of a protected habitat. This means that in order to trigger the application of Article 3(h) ECD, the environmental damage caused by the perpetrator needs to meet a specific threshold. What constitutes a "**significant deterioration**" of a habitat is not further defined under the Directive and the appraisal of the notion is, as in the case of "negligible quantity" and "negligible impact" again left "to each MS to interpret in the light of its traditional and legal system".[126]

The following chapters examine the implementation of Article 3(h) into the national law of a few selected MS (as before **Austria**, **Germany**, **Italy** and **Spain**), to determine whether the domestic law of the (selected) MS further specifies the threshold criteria.

[125] Pereira, *Environmental Criminal Liability*, 253.
[126] For further reference, see Chapter 16.1.3, *Threshold criteria under Article 3(f) ECD*.

16.2.4 Threshold criteria for the deterioration of habitat in the implementing laws of the MS

16.2.4.1 Threshold criteria for the deterioration of habitat in Austria

The threshold under the Austrian transposing law requires a "**significant damage** to the protected habitat". The term "**significant**" is not further defined. Section 181 (h) of the Austrian Criminal Code simply states that

> "Anyone who, contrary to a legal regulation or an official order, **significantly damages** a habitat within a protected area is punished […]."[127]

16.2.4.2 Threshold criteria for the deterioration of a habitat in Germany

In Germany, the transposing law for Article 3(h) ECD is Section 329 (4) StGB, which stipulates that:

> "Whoever, in **violation of duties under administrative law**, causes **significant damage** in a Natura 2000 area
>
> 1. to the habitat of a species listed in Article 4(2) or Annex I of [the BD] or in Annex II of [the HD] or
> 2. to a type of natural habitat listed in Annex I of [the HD]
>
> **which is of relevance to the conservation aims or the protection aims of the site,** incurs a penalty of […]"[128]

The German law establishes the threshold criteria as "**significant damage […], which is of relevance to conservation aims or protection aims of the site**". While the term "significant" is not further defined, the German wording seems to add some precision to the otherwise vague

[127] In the original German wording the provision reads as follows: (1) Wer entgegen einer Rechtsvorschrift oder einem behördlichen Auftrag einen Lebensraum innerhalb eines geschützten Gebiets erheblich schädigt, ist mit Freiheitsstrafe bis zu zwei Jahren zu bestrafen.
(2) Lebensraum innerhalb eines geschützten Gebiets ist jeder Lebensraum einer Art, für die ein Gebiet durch Gesetz oder Verordnung zu einem Schutzgebiet gemäß Art. 4 Abs. 2 oder Anhang I der Richtlinie 2009/147/EG über die Erhaltung der wildlebenden Vogelarten erklärt wurde oder jeder natürliche Lebensraum oder Lebensraum einer Art, für die ein Gebiet durch Gesetz oder Verordnung zu einem besonderen Schutzgebiet gemäß Art. 4 Abs. 4 der Richtlinie 92/43/EWG zur Erhaltung der natürlichen Lebensräume sowie der wildlebenden Tiere und Pflanzen erklärt wurde."

[128] In the original German wording the provision reads as follows: "Wer *unter Verletzung verwaltungsrechtlicher Pflichten* in einem Natura 2000-Gebiet einen *für die Erhaltungsziele* oder den *Schutzzweck dieses Gebietes* maßgeblichen 1. Lebensraum einer Art, die in Artikel 4 Absatz 2 oder Anhang I der [Vogelschutzrichtlinie] oder in Anhang II der [Habitatrichtlinie], aufgeführt ist, oder 2. natürlichen Lebensraumtyp, der in Anhang I der [Habitatrichtlinie], aufgeführt ist, *erheblich schädigt*, wird mit Freiheitsstrafe bis zu fünf Jahren oder mit Geldstrafe bestraft."

notion of **significance** by stating that it needs to be **significant** in relation to the "**conservation aims or protection aims of the site"** – a requirement that doesn't exist under Article 3(h) ECD. Relating the significance to the relevance of the **"conservation aims or protection aims of the site"** specifies **at what level** the damage should be assessed -, in other words the impact and therefore the significance of the damage should be assessed at site level. This is an important specification, if one considers the difficulties that arise with the determination of the threshold for the application of the ELD regime, where the territorial scope of the assessment is not further specified.[129]

16.2.4.3 Threshold criteria in Italy

In Italy, Article 733-bis of the Italian Criminal Code states [**emphasis added**]

> "whoever, except in permitted cases, **destroys a habitat within a protected site** or **otherwise deteriorates it compromising the state of conservation** shall be punished with […]".[130]

The provision criminalizes two different types of environmental damage, namely on the one hand **the destruction of a habitat within a protected site** and on the other hand the **deterioration of a habitat within a protected site** that **compromises the state of conservation of a habitat** within a protected site.

The criteria in the first alternative set the threshold very high, since criminal liability requires the destruction of the habitat. Such wording of course removes the necessity to determine the meaning of "significance", since a threshold element is no longer required. As a standalone crime this first alternative would arguably not correctly transpose Article 3(h) of the Directive, since the criminal law would only intervene once a habitat is destroyed, setting the threshold too high.

In the second alternative, the requirement is the **deterioration of a habitat within a protected site** that **compromises the state of conservation of a habitat**. Here the threshold for criminal liability is that the deterioration compromises the state of conservation of a habitat – a

[129] see Chapter 11.1.2., *The significance threshold under the ELD*.
[130] See F Bianco, A Lucifora & GM Vagliasindi, *EFFACE Country Report (Italy)*, 23. The original English language translation provided by Bianco et al. states "preservation" instead of "conservation". The original Italian wording of the provision could not be retrieved online.

"significance" threshold is not required. This again appears to be a rather vague formulation. In theory it sets the threshold lower for a significance of the deterioration is not required. Indeed, in the case of the second alternative, Italian authors have pointed out, that it's "more difficult" to establish that the requirements have been met. They suggest that useful indicators can be retrieved from the case law concerning the offence of "damage" (Article 635 of the Italian Criminal Code), where the relevant conduct also includes the act of "deteriorating" property. However, even without detailed knowledge of the relevant criteria in Article 635 of the Italian Criminal Code, it seems questionable how the provisions on property damage could provide workable criteria for assessing damage to protected habitats.

16.2.4.4 Threshold criteria for the deterioration of habitat in Spain

In Spain, Article 3(h) of the ECD is transposed under Articles 332 and 332 of the Spanish Criminal Code.

The **destruction** or **serious alteration** of a **habitat of protected wild <u>flora</u>** is punishable under Article 332 of the Spanish Criminal Code, which states that

> "whoever, in contravention of the laws or other provisions of a general nature, **destroys** or **seriously alters** their habitat […] [shall be punished]." [131]

The **destruction** or **serious alteration** of a **habitat of protected wild <u>fauna</u>** is punishable under Article 334 of the Spanish Criminal Code, which states that

> "whoever, in contravention of the laws or other provisions of a general nature, **destroys** or **seriously alters** their habitat […] [shall be punished]." [132]

While the criteria in the first alternative sets the threshold very high ("**destruction**"), the criteria in the second alternative seems ambiguous ("**serious alteration**"). As a stand-alone crime, the first alternative would certainly not transpose the Directive correctly, since the threshold for the application of Article 3(h) is set too high. Given the lack of any further clarification in the second alternative, i.e. of what constitutes a **"serious alteration"**, it is hard to determine whether this threshold requirement is in compliance with Article 3(h) of the ECD.

[131] In the original Spanish wording, Article 332 CrimC reads as follows: "quien, contraviniendo las leyes u otras disposiciones de carácter general, destruya o altere gravemente su hábitat."
[132] In the original Spanish wording, Article 334 CrimC reads as follows: "quien, contraviniendo las leyes u otras disposiciones de carácter general, destruya o altere gravemente su hábitat."

Articles 332 and 334 CrimC restrict their protection to habitats of protected wild fauna and flora. This, however, seems to exclude the protection of habitats that are protected in their own right, which would constitute a straightforward violation of the ECD. Article 3(h) ECD in connection with Article 2(i) ECD clearly requires the protection of "**any natural habitat** or a habitat of species in relation to which a site is designated as a special area of conservation pursuant to Article 4 (4) of the HD".

Notably, Articles 332 and 334 CrimC are not confined to "protected sites", in other words in this regard the scope is broader than under the ECD, which only applies to habitats within a protected site.

If the damage affects a protected natural site, the general aggravating factor set out under Article 338 CrimC applies: "When the conducts defined in this Title affect a protected natural site, higher penalties shall be imposed to the extent previously provided for".[133]

16.2.5 Summary of findings on Article 3(h) ECD

From the above examination, the following findings can be summarised:

- The scope of protection from significant deterioration under Article 3(h) ECD is limited to natural habitats and habitas of species within a protected area, which is notably also the case under Article 6(2) HD.
- Compared to the ELD, which also covers damage to habitats of species and natural habitats outside protected areas, the scope of application is narrower.[134] Moreover, under the ELD a MS may decide to protect additional natural habitats under Article 2(3)(c) ELD, thus further extending the scope of protected biodiversity.
- The offence of habitat crime under Article 3(h) ECD can be classified as a concrete harm crime. A likelihood of harm is therefore not enough and in order for Article 3(h) ECD to apply. Moreover, as for all other crimes under the ECD, the violation of an administrative norm is required.

[133] The original Spanish wording reads: "Cuando las conductas definidas en este Título afecten a algún espacio natural protegido, se impondrán las penas superiores en grado a las respectivamente previstas."
[134] See Chapter 16.2.1., *Habitats protected under Article 3 (h) (scope of biodiversity protected).*

- The threshold criteria applied under Article 3(h) ECD is vague ("significant") with MS largely incorporating the ECD wording directly into their national legislation[135] and not providing for any further guidance on what is to be considered "significant". Germany and Italy have arguably added some precision by clarifying that the deterioration needs to "compromise" the **"state of conservation"** of the habitat (Italy) or that it needs to be significant in relation to the "**conservation aims or protection aims of the site"** (Germany). The findings are further discussed next.

16.3 Discussion of findings on model of criminalisation and threshold criteria under Article 3(f) and 3(h) ECD

The above analysis of the two offences relating to breaches of the BHD focused on three elements: the **scope of biodiversity protected** under the offences, the **model of criminalisation** and the **threshold criteria** that triggers criminal liability.

Concerning the **scope of biodiversity protected** under the ECD and comparing it with the scope under the BHD, there is one remarkable difference, which is that the hunting of Annex II wild bird species during their most vulnerable period is not penalised under the ECD, while it is prohibited under the BD. Other remarkable differences in the protected biodiversity under the ECD on the one hand and the BHD were not identified.

Based on the findings for the **model of criminalisation** and the **threshold criteria** established under the two offences, the following chapters further discuss:

- The design of and the relevant links between the definitions of the **two offences** and the **BHD**.
- The interplay of the **two offences** and the **BHD**: overlaps, gaps and/or inconsistencies that may hamper the effectiveness of the ECD in achieving its stated aims;
- The issues that have emerged or may emerge with the implementation of the two offences.

[135] Notably, Spain is an exception in that it has, in the case of article 334(1) of the Criminal Code (concerning protected species of fauna), not established any threshold criteria.

16.3.1 Model of criminalisation under Article 3(f) and 3(h)

The offences under Article 3(f) ECD ("wildlife crime") and Article 3(h) ECD ("habitat crime") are mainly designed as "concrete harm" crimes, meaning that they do not simply require the endangerment of the protected natural resources, but instead a concrete result such as the "**killing or destruction"** of specimens of protected wild fauna or flora or the "**significant deterioration**" of a habitat.

As Faure (2020) observes, the design of the crimes as concrete harm crimes may be due to the nature of typical natural resource crimes, including illegal deforestation or illegal hunting. [136] These crimes typically result in a concrete harm to the protected natural resource. Using a concrete harm model instead of an endangerment model has certain consequences. First of all, it makes criminal liability dependent on the outcome of an act (or omission) – the mere (abstract or concrete) endangerment is not enough. Secondly, concrete harm crimes require the establishment of a causal link between the harm and the act (or omission) of the accused. However, proving a causal link is often difficult and time-consuming, especially in environmental cases.

Criminal liability under Article 3(f) and Article 3(h) depends on the **unlawfulness** of the conduct. The extent of the protection granted under provisions implementing Article 3(f) and 3(h) is therefore in many ways dependent on decisions made in national environmental administrative law, including decisions to grant permits for the hunting or fishing of protected species of wild flora and fauna or permits for the cutting of trees or carrying out of construction works in Natura 2000 areas. In other words, the protection granted to the protected natural resources under EU environmental criminal law is not absolute but depends on decisions made by national authorities in administrative law. Thus, for the ECD to fulfil its role and ensure compliance with environmental law, the competent national authority must first and foremost act in accordance with environmental law when issuing permits. [137] If they fail to do so, the unlawful permit directly affects the effectiveness of the ECD: The conduct is no longer considered unlawful and thus falls outside the scope of the ECD. The reason for this is that permits, even if granted unlawfully, have a legitimising effect under the ECD.

[136] Faure, *Criminal Liability for Exploitation of Natural Resources*.
[137] See also T Fajardo and J Fuentes, *The Aznalcóllar and the Kolontár Mining Accidents: A Case Study on Mining Accidents and the Criminal Responsibility of Operators and Administrations* (2014, University of Granada and University of Jaén) [online] [Fajardo & Fuentes, EFFACE Mining Accidents Study], 8.

16.3.1.1 The conflict between ecological and economic interests and its repercussions for consideration of administrative dependence in environmental criminal law

The question arises to what extent a model of criminalisation that creates such a dependency between administrative decision-making and criminal liability is designed to effectively ensure compliance with the BHD and secure their proper implementation and enforcement. Looking at the causes of habitat destruction, this must be called into question. On the contrary, it appears that the dependency created between administrative decision-making and criminal liability under the ECD has paved the way for the conflict between economic and ecological interests, which became evident during the analysis of the BHD, to become directly incorporated into the ECD. Reports from MS confirm that the destruction of or adverse effects on habitats is often the result of plans or projects that were unlawfully authorised by national authorities: **unlawfully authorised habitat destruction** has been identified as a key issue in most MS.[138] Permits are either issued without the necessary appropriate assessment or based on an inappropriate assessment ("incorrect application of those assessments"). [139] Political pressure, [140] poor understanding of the legal framework[141] and lack of transparency[142] are among the factors identified to influence poor decision-making in the permitting procedure of projects affecting protected habitats. Evidently, making criminal liability dependent on the existence of such permits, means that the ECD, in its current design, is not in a position to address the conflict between economic and ecological interests discussed in the context of the BHD and any poor decisions by national authorities resulting from it. Instead, the unlawfully issued permit turns into a "blank cheque" by legitimizing the otherwise unlawful harm to the environment and acting as a shield against criminal liability.

It is therefore not surprising that the dependence of environmental criminal law on administrative law has been the subject of much debate and criticism among academics and practitioners alike, also referring to it as "self-disempowerment" by the legislature in matters

[138]For further reference, see ENEC, *Habitat Destruction 2016*, 1 and 7. The assessment drew on input from NGO representatives from several selected MS. See also, on unlawfully issued permits: J L Fuentes Osorio, Environmental Criminal Law in Spain in A Farmer, M G Faure and G M Vagliasindi (eds), Environmental Crime in Europe (2017, Hart Publishing) Oxford; Portland, Oregon [online] [Fuentes Osorio, Environmental Criminal Law in Spain]; Fajardo & Fuentes, *EFFACE Mining Accidents Study*, 9; Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 30: [Administrative agencies] might knowingly tolerate environmental offences, because they do not want to act against local business interests."
[139] ENEC, *Habitat Destruction 2016*, 6.
[140] *Ibid.*, 4 and 5.
[141] ENEC, *Habitat Destruction 2016*, 5.
[142] *Ibid.*

of environmental crime.[143] Ultimately, it provides the administration and thus national authorities with the possibility to legitimise criminal acts in the pursuit of economic interest thus avoiding the application of criminal law and hence the ECD.

16.3.1.2 Striking a balance between legal certainty and justice

The solutions to this problem are not obvious. On the one hand, attaching criminal liability to an activity that has been authorised under a permit undermines legal certainty for the permit holder who relied on the lawfulness of the permit. On the other hand, upholding a permit that legitimises unlawful conduct and infringes environmental law undermines justice. Any attempt at a solution must therefore aim to strike a balance between these two fundamental values, i.e. the value of legal certainty on the one hand and the value of justice on the other. In German and Austrian literature, the prevailing opinion is that where a potential perpetrator complies with the conditions of a permit, there is no breach of administrative law and he cannot be held criminally liable – even when the permit was issued unlawfully.[144] Notably, exceptions apply when the issuance of the permit was achieved through threats, taking and giving of bribes or collusion, or was obtained by deception by supplying incorrect or incomplete information.[145]

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[143] See, for example, Fuentes Osorio, *Environmental Criminal Law in Spain*, § 4.2, Under the heading "Administrative Tolerance of Environmental Crime", he refers to this phenomenon "active toleration", quoting A. Vercher, 'Some Reflections on the Use of Criminal Law for the Protection of the Environment, Social Defence and Criminal Law for the Protection of Coming Generations in View of the New Risks', in Proceedings of the XIVth International Congress on Social Defence (Cahiers de Défense Sociale 2002) 113 (Lisbon, 17–19 May 2002), who defines it as "when the administration, in the general pursuit of economic growth, declines to discipline one who breaches pollution regulations. Toleration is thus postulated to legitimise such offences and to avoid sanctions". Fuentes Osorio calls this a "global problem associated with a neo-liberal perspective of the environment" and also cites Nigel South, 'Green Criminology and Brown Crime: Despoliation, Disposal and Demanufacturing in Global Resource Industries', in Tanya Wyatt (ed), Hazardous Waste and Pollution (Springer 2016) 23, who argues that "states may not be the parties responsible for particular harms but may (for various reasons) be less than diligent in pursuit of justice when faced with pressure or financial deals (or both) from those that are responsible". See also Heger, *Europäisierung des Umweltstrafrechts*, 179-183; For further references on the debate in Germany, see S Sina, *Environmental Criminal Law in Germany*, in: A Farmer, M G Faure & G M Vagliasindi (Eds.), *Environmental Crime in Europe*, Oxford; Portland, Oregon: Hart, Modern Studies in European Law (2017) [online] [Sina, Environmental Criminal Law in Germany], § 3.2. referring to M Kloepfer and M Heger, Umweltstrafrecht, 3rd edn (München, CH Beck, 2014), para 76; F Saliger, "Grundfragen des heutigen Umweltstrafrechts" in M Kloepfer and M Heger (eds), Das Umweltstrafrecht nach dem 45. Strafrechtsänderungsgesetz (Berlin, Duncker & Humblot, 2015) 9, 16–19; F Saliger, Umweltstrafrecht (München, Vahlen, 2012), para 134 with further references.

[144] For further references and a discussion of different case constellations, see, for Austria: S Reindl-Krauskopf & F Salimi, *Umweltstrafrecht: Eine systematische Darstellung des gerichtlichen Umweltstrafrechts*, Verlag Österreich (2013) [Reindl-Krauskopf & Salimi, *Umweltstrafrecht*], 17 et seq.; For Germany: Saurer, *Verwaltungsakzessorietät des Umweltstrafrechts*, 358 et seq.

[145] See Section 330 d (1)(5) German Criminal Code: "acting without a permit, planning approval or other permission" also means acting on the basis of a permit, planning approval or other permission which was effected by threats, taking and giving of bribes or collusion, or which was obtained by deception by supplying incorrect or incomplete particulars."

The question inevitably arises, whether a public official, who knowingly issues an unlawful permit, that legitimises the criminal act, may be held criminally liable. Criminal liability of public officials is a highly contentious issue in environmental criminal law. As will be demonstrated next, significant criminal liability gaps exist in the prosecution of unlawfully issued permits and other conduct that may qualify as participation by public officials in an environmental crime.

16.3.1.3 Criminal liability of public officials for issuance of unlawful permits

Discussions on the criminal liability of public officials for environmental offences are usually linked to two alternatives of punishable action or omission: Firstly, issuance of an unlawful permit which legitimises otherwise unlawful behaviour. Secondly, failure to act despite knowledge of (possible) non-compliance with permit conditions. In the context of the present discussion, only the first alternative is of interest and discussed in the following.

Apart from a few exceptions, the national environmental criminal law of the EU MS does not address criminal liability of public officials for participation in environmental offences. Faure et al. (2015) report that from the seven MS that participated in the EFFACE research project, only one, namely Spain, provided for such provisions.[146]

Thus, it must be expected that criminal liability of public officials in the field of environmental crime is, if at all, determined by reverting to the general provisions of the criminal codes. The shortcomings of such an approach are demonstrated next, using the situation in Austria and Germany as an example. In both, Austrian and German environmental criminal law, granting of an unlawful authorisation by a public official does not in itself constitute an environmental criminal offence.

Austria

In Austria, Reindl-Krauskopf & Salimi (2013) have examined criminal liability of public officials for unlawfully issued permits, examining on the one hand criminal liability for "abuse

[146] M Faure, C Gerstetter, S Sina & GM Vagliasindi, *Instruments, Actors and Institutions in the Fight Against Environmental Crime* (2015) Study in the framework of the EFFACE research project, Berlin: Ecologic Institute [online] [Faure, Gerstetter, Sina & Vagliasindi, *Instruments, Actors and Institutions*], 77-99. The report was part of the EFFACE research project on European Union Action to fight Environmental Crime. The seven MS were, amongst others, selected for the project to represent all parts of the EU (North/South, old/new members, common law/civil law countries).

of office" ("Strafbarkeit wegen Amtsmissbrauchs") and, on the other, criminal liability for the environmental offence ("Strafbarkeit wegen des Umweltdelikts"). [147]

Firstly, the authors examine criminal liability for "abuse of office". Abuse of office is a general offence and its application thus not confined to the area of environmental crime. It is punishable under Section 302 of the Austrian Criminal Code: A public official is liable to prosecution if he abuses an "authority to perform in the name of the Federation, a Land, [...] a municipality [...] as its organ in the execution of the law".[148] This includes the issuing of permits. The exercise of power must be in breach of duty. Such breach of duty may also take place in the case of discretionary decisions, namely if the official does not comply with discretionary criteria or exceeds the limits of the discretionary powers.[149]

Concerning the mental element (*mens rea*), the public official must act knowingly with regard to the breach of duty and, in addition, with a contingent intent ("Eventualvorsatz") to harm a third party (a private person or also the state) in a "concrete right"("einen anderen an seinen Rechten zu schädigen").[150] As Reindl-Krauskopf & Salimi (2013) demonstrate, the correct assessment of "intent to harm" is highly controversial. [151] Court rulings have long extended the scope of application of the provision to include abstract rights such as the right to compliance of the administration with regulations. Recent case law, however, has clarified that purely abstract rights, such as the right to correct administration, are not sufficient. [152] Inevitably, the question arises to what extent "harm to the environment" qualifies as harm to a third party in a "concrete right". Interestingly, Reindl-Krauskopf & Salimi (2013) conclude from their observations of recent case law that harm to the environment may in any case be regarded as a "suitable connecting factor" ("Anknüpfungspunkt") to which the necessary intent to harm a third party (a private person or also the state) in a "concrete right" may be attached.[153] Considering the persistent problems that individuals face in the context of access to justice in

[147] Reindl-Krauskopf & Salimi, *Umweltstrafrecht*, 32 et seq.
[148] The first paragraph of Section 302 states in full (German original): "(1) Ein Beamter, der mit dem Vorsatz, dadurch einen anderen an seinen Rechten zu schädigen, seine Befugnis, im Namen des Bundes, eines Landes, eines Gemeindeverbandes, einer Gemeinde oder einer anderen Person des öffentlichen Rechts als deren Organ in Vollziehung der Gesetze Amtsgeschäfte vorzunehmen, wissentlich missbraucht, ist mit Freiheitsstrafe von sechs Monaten bis zu fünf Jahren zu bestrafen."
[149] Reindl-Krauskopf & Salimi, *Umweltstrafrecht*, 33 with further references.
[150] *Ibid.*
[151] *Ibid.*
[152] *Ibid.*
[153] *Ibid.*

environmental matters, this assumption, which the authors do not further explain or substantiate, is questionable. As is well documented, "harm to the environment" as such will usually not qualify as harm in a "concrete right" and proof of individual harm will thus always require evidence that the environmental damage resulting from the unlawfully authorised project adversely affects the property or health of a person.[154] On the whole, it must therefore be assumed that environmental damage as such is not sufficient ground to establish harm in a "concrete right". Consequently, a prosecution under section 302 for abuse of office will only be successful if it can be proven that by the environmental damage a concrete right has been violated, which is likely to be difficult outside of damage to property and health.

Criminal liability for commission of or participation in an environmental offence is the other alternative investigated by Reindl-Krauskopf & Salimi (2013).[155] For this purpose, various possibilities of commission and participation in an environmental offence by a public official are examined. In summary, if one follows the prevailing opinion in Austrian literature, the issuance of an unlawful permit neither qualifies as commission nor as participation in the offence. Commission of the offence as principle perpetrator is ruled out because the public official does not harm the environment itself.
Participation, on the other hand, fails because there is no principle offence: For as long as the conditions of the unlawfully issued permit are complied with, there is no breach of environmental law and thus no principle offence. This is, as previously demonstrated, the prevailing opinion in German and Austrian literature.[156]

In summary, the above examination suggests that under Austrian criminal law a public official who knowingly issues an unlawful permit cannot be held criminally liable for the environmental harm resulting from it.

Germany

Similarly, German case law and the discussions in German literature illustrate the limitations of holding public officials criminally liable in the context of environmental crime and do not provide for satisfactory answers.[157] German environmental criminal law, like that of Austria

[154] See also discussions on acces to justice in Part I and II of this dissertation.
[155] Reindl-Krauskopf & Salimi, *Umweltstrafrecht,* 33.
[156] For further reference, see Saurer, *Verwaltungsakzessorietät des Umweltstrafrechts*, 358 et seq.; Heger, *Europäisierung des Umweltstrafrechts*,177-184.
[157] For an overview, see Heger, *Europäisierung des Umweltstrafrechts*, 183-184.

and most MS, does not contain any special provisions on criminal liability of public officials. Issuing of an unlawful permit by a public official thus does not in itself constitute a criminal offence under German environmental criminal law.

Criminal liability of the public official fails in Germany essentially for the same aspects as have already been discussed for Austria. As Heger (2009) demonstrates, criminal liability for participation in the offence by aiding or abetting is ruled out for two reasons: Firstly, the unlawfully issued permit legitimises the otherwise unlawful behaviour. Secondly, where the principal offender acts under a mistake of fact (Irrtum), he will not be liable for commission of the crime, because, although he has committed the *actus reus* of the offense, the mistake of fact means that he lacks the required *mens rea*. As a result, in both cases there is no principal offence to participate in. [158]

Heger (2009) illustrates his findings with the ruling in the "*Alkem case*".[159] In its ruling, the Hanau Regional Court found a preliminary approval concerning the operation of a factory to be unlawful and therefore the operation of the factory itself unlawful. However, it acquitted the accused Alkem managing directors of the charge of aiding (Beihilfe) due to their lack of knowledge of the unlawfulness of the preliminary approval and the public officials (Behördenvertreter) due to the lack of a principal offence capable of participation.

As Heger (2009) further states, there are considerations in case law as to whether a public official who intentionally grants an unlawful permit and thereby legitimises unlawful conduct by a permit holder relying on the lawfulness of the authorisation may be held liable as principal by proxy (mittelbarer Täter). [160] However, this solution is equally controversial from the point of view of criminal law dogma.[161]

In summary, the exemplary examination of the situation in Austria and Germany suggests that significant criminal liability gaps exist in the prosecution of unlawfully issued permits and other conduct by public officials that facilitates environmental crime.

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[158] See Heger, *Europäisierung des Umweltstrafrechts*, 183.
[159] *Ibid.*, with reference to LG Hanau: Unerlaubtes Betreiben von Anlagen - Alkem-Urteil, Urteil vom 12.11.1987 - 6 Js 13470/84 KLs Hanau, NJW 1988, 571.
[160] Heger, *Europäisierung des Umweltstrafrechts*, 184, with reference to BGH 39, 381 and OLG Frankfurt, NJW 1987, 2753;
[161] Heger, *Europäisierung des Umweltstrafrechts*, 184, with reference to: M Grunert, *Grenzen normativer Tatherrschaft bei mittelbarer Täterschaft*, 234 seq.

16.3.1.4 Dependency between the criminal offences listed in the ECD and the pieces of EU environmental legislation specified in Annexes A and B to the Directive

Article 2 further specifies that the required infringements must be infringements of law must be infringements of legislation adopted pursuant to the pieces of EU environmental legislation specified in Annexes A and B to the Directive. While this approach is in line with the overall objective of the ECD, which is to strengthen the implementation of EU environmental law, the employed reference technique has been criticised in the light of the *lex certa* requirement (Bestimmtheitsgebot).[162] As has been demonstrated, critical commentators argue that the ECD, with its long chains of references, would in practice force national legislators to incorporate those references into their national penal codes.

However, as noted before, this criticism overlooks that the punishable conduct is clearly defined and thus also confined to the nine types of conduct listed under Article 3 ECD. The "unlawfulness" requirement does not create an offence, it is a condition for the ECD and thus for criminal liability to apply.

16.3.1.5 Conclusion on model of criminalisation under Article 3(f) and (h)

From the above findings, it can be concluded that the criminal law provisions of the ECD are not very effective in the case of unlawfully authorised habitat destruction, which after all appears to account for a significant proportion of habitat destruction and degradation in EU MS. The same considerations on the legitimising effect of authorisations apply, of course, to Article 3(f) on wildlife crime. For as long the "veil of dependency" is not removed and the "permit shield" applies, the provisions of the ECD are, at least in the case of unlawfully issued permit, of little avail.

16.3.2 Use of vague notions in the threshold criteria under Article 3(f) and 3(h)

Another issue that arises under the ECD is the use of vague notions in defining the threshold criteria under Article 3(f) and 3(h). The threshold criteria are important since they determine whether a conduct falls within the scope of Article 3(f) and 3(h) and consequently triggers

[162] For further reference, see discussion in Chapter 15.5., *Model of criminalisation under the Environmental Criminal Liability Directive*

criminal liability. As previously demonstrated, criminal liability is excluded when, in the case of Article 3(f), the conduct "**concerns a negligible quantity of such specimens and has a negligible impact on the conservation status of the species**" or, in the case of Article 3(h), the deterioration of a habitat is not "**significant**". A prosecutor therefore must demonstrate that the quantities and impacts are not "**negligible"** or that the deterioration of a habitat is indeed "**significant**". Since the MS have not further clarified these terms, their interpretation is left to the national courts.

The use of vague and subjective notions in the environmental law of the EU MS is no novelty, as *Faure* (2010) demonstrates in his overview of environmental criminal law in the EU MS.[163] MS obviously find it acceptable that further "guidance and interpretation" is provided through the case law of their national courts.[164] The European Economic and Social Committee (EESC) in its opinion on the Commission's 2007 proposal for an ECD has discussed the use of vague notions and identified some of the key issues that arise with the use of vague notions under the ECD.[165] The EESC's reflections on the problems that may arise from the use of vague terms under the ECD are examined and discussed in more detail in the following chapters.

16.3.2.1 The European Economic and Social Committee on the use of vague notions

The following quotes from the opinion of the EESC expressly discuss the underlying rationale for the use of **vague notions**, their **keeping with the general principle of law nulla poena sine lege**, and how **discrepancies in the national transposition** should be addressed through regular monitoring. [166] In its opinion the Committee stated *inter alia*, that [**emphasis added**]

> "3.2 The definition of environmental offences subject to criminal sanctions, such as "**significant deterioration**", has not yet been interpreted when being incorporated into domestic law or in the criminal case law of the various MS.
>
> […]

[163] M G Faure, *Vague Notions in Environmental Criminal Law (Part 2)* (2010) 18(5) *Environmental Liability* 163–170 [Faure, *Vague Notions (Part 2)*]164 et seq.
[164] *Ibid.*
[165] European Economic and Social Committee (2007) Opinion on the "Proposal for a Directiv e of the European Parliament and of the Council on the protection of the environment through criminal law", COM(2007) 51 final 2007/ 0022 (COD).
[166] European Economic and Social Committee, Opinion on the Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law COM(2007) 51 final, 2007/0022 (COD), Brussels, 26 September 2007.

3.4 The broad character of the incrimination has prompted one British tabloid newspaper to wonder whether simply picking wild flowers could lead to private individuals being imprisoned, if the bunch happened to contain a protected species. It should be emphasised that criminal sanctions are to apply only in "serious" cases and must remain effective, proportionate and dissuasive. The **national criminal court judge** responsible for applying the sanctions must retain full **discretion to gauge the seriousness of the offence** and set an appropriate sentence in each individual case, in order to comply with the **independence of the judiciary**.

3.5 For its part, the Committee is satisfied with the fact that **the proposed Directive (article 3) clearly details the unlawful acts** covered, in **keeping with the general principle of law Nulla poena sine lege**, a general principle that requires criminal legislation to be clear and precise, so that the individuals concerned unambiguously aware of the rights and obligations entailed, or in other words: no sanction without specific legal basis.

[…]

3.8 According to the Commission's impact assessment, however, the MS would enjoy considerable leeway with regard to implementation. In the Committee's view, **regular monitoring of national practices must take place**, because **discrepancies in transposition** are such that the **effective approximation of criminal law** on the environment could be **hampered**. The MS' usual **margin of discretion should** in general **avoid** the creation of **areas where it is "cheaper" to pollute**. In this regard, the Committee agrees with the proposed legal basis (Article 175 TEC).

[…]

3.11 However, the Commission considers that **setting limits to MS' discretion with regard to transposition is contrary to the aim of the directive**; there is a conflict between the Committee's preferred approach to criminal law and that of the Commission. In the light of how application actually takes place, it will probably be necessary to opt for one approach rather than another if the aims of the proposal are to be met.

3.12 The EESC is aware that **at the present stage** of the Community integration process, **a regulation on this subject is not possible**. Concern is however felt about the **need for a clear distinction between administrative sanctions and crime**, and to

ensure that transposition does not give rise to major differences in MS legislation – it would not be logical for certain behaviour to be punishable in one MS and not in another."

In short, the Committee thus:

- considered the definitions of the environmental offences in the proposal for the ECD to be sufficiently clear and precise to be aligned with the *nulla poena sine lege* principle;
- emphasised that criminal sanctions should only apply in "**serious**" cases and in this regard underlined the responsibility of the **national criminal courts to gauge the seriousness of the offence** and to set an appropriate sentence in each individual case;
- called for regular monitoring of national practices to ensure the **effective approximation of criminal law on the environment.**

16.3.2.2 Admissibility of vague notions in criminal law

The question remains to what extent the use of vague notions in criminal law is acceptable and aligned with the **nulla peona sine lege** and **lex certa principle,** which requires the legislator to define the punishable conduct with sufficient certainty.

As previously demonstrated, the use of vague notions is not uncommon in environmental criminal law and, as Faure (2010) has pointed out, may even be unavoidable, depending on the model of criminalisation used.[167]

Abstract endangerment crimes, which criminalize the breach of administrative obligations, normally don't need to use vague notions. The criminal conduct is described by reference to specific administrative duties, such as emitting without a permit or failure to comply with permit conditions, which the criminal law enforces.

Concrete endangerment and concrete harm crimes, on the other hand, aim for a more autonomous protection of the environment, such as the unlawful "significant deterioration of a habitat". Under this model of criminalisation, the mere breach of administrative duties is not sufficient. It therefore becomes necessary to further define what type of conduct should be

[167] M G Faure, *Vague Notions in Environmental Criminal Law (Part 1)*, (2010) 18(4) *Environmental Liability* 119–133 [Faure, Vague Notions (Part 1)], 120.

criminalised. [168] In these cases, the legislature is basically presented with two choices. [169] It can either specify in detail which kind of conduct is criminalised. Such specification increases legal certainty but also risks excluding other endangering or harmful conduct that falls outside the scope of the specification. Or alternatively, the legislature can choose to use rather vague definitions of harmful or endangering conduct, leaving it to the courts to provide for further guidance and interpretation of these vague notions in their case law. [170] This legislative technique, however, risks violating the *nulla poena sine lege principle* ("legality principle") and more particularly the *lex certa principle.*

As Faure (2010) has pointed out, there are good legal technical reasons to avoid "over-strong" normative specifications. [171] Given the wide range and diversity of environmental harms, which can have totally different causes, it is not really possible to define them all with the clarity and precision traditionally required under criminal law. Therefore, in order to capture the diversity of different forms of environmental damage, it may be necessary to leave the interpretation of certain terms to the courts to decide on the criteria for application to individual cases of environmental damage, while ensuring sufficient clarity and precision in light of the principle of lex certa.

Faure (2010) suggests that in some cases vague notions may perhaps become more specific by reference to the legislation provided in annex A of the ECD, which specifies the unlawfulness requirement. [172] In the present context, the question is therefore if the interpretation of provisions under the BHD could guide the interpretation of the above identified vague notions under the ECD. This question will be examined next.

16.3.2.3 Interpretation of vague notions by reference to the BHD

In the present context, the relevant vague notions under the ECD that need further clarification are "**negligible quantity**" and "**negligible impact**" under Article 3(f) and "**significant deterioration of a habitat**" under Article 3(h).

[168] *Ibid.,*
[169] *Ibid.*
[170] *Ibid.*
[171] *Ibid.*,121.
[172] Faure, *Vague Notions (Part 1)*, 123.

Regarding Article 3(f), neither the Habitats nor the BD contain an exception for the **killing, destruction, possession or taking of strictly protected wild fauna or flora species**, if it only concerns a "**negligible quantity"** and has a "**negligible impact"** on the conservation status of the protected species. It is therefore not evident how meaningful criteria for the clarification of these terms may be derived from the BHD.

In the case of Article 3(h) ECD, which punishes any conduct causing the "**significant"** deterioration of a habitat, case law or guidance provided under Article 6 HD may be useful in guiding the interpretation and scope of the protection offered under Article 3(h) ECD.

Under the HD, Article 6(2) aims to avoid the **deterioration of habitats** and the **significant disturbance of species**. The threshold that triggers application of Article 6(2) HD is a "significant" disturbance in the case of species, but not further specified for the deterioration of habitats. MS are simply required to "take appropriate steps to avoid […] the deterioration of natural habitats and the habitats of species".

ECJ case law has not directly addressed threshold requirements for the application of Article 6(2) in the case of habitat deterioration. The most authoritative information on a threshold criteria for the deterioration of habitats comes from the Commission, which states that under the HD, deterioration is **any form of degradation affecting a habitat**.[173] To assess the deterioration of a habitat, the MS would have to consider "all the influences on the environment hosting the habitats (space, water, air, soils)". If these influences resulted in **making conservation parameters for the habitat worse** than they were before, the deterioration could be considered to have occurred.[174]

Applying the Commission's interpretation of Article 6(2) HD to Article 3(h) ECD, meeting the threshold requirement would thus require that the conduct has resulted in making the conservation parameters of the habitat worse. Still the question remains if one would want to accept, that any form of degradation of the conservation status suffices to be considered "significant" within the meaning of a provision that triggers criminal penalties. Since in keeping with the principle of proportionality the "sharp weapon" of criminal law should only apply to

[173] European Commission, Managing Natura 2000 Sites, C(2018) 7621 final, §3.
[174] *Ibid.*

serious cases. Moreover, unlike under the ELD, there is no indication that the threshold under the ECD was meant to be aligned with the BHD.

In conclusion, an examination of the BHD shows that no further clarification of the above identified vague notions under the ECD can be gained from the BHD. It is indeed for the national courts of the MS to provide for further clarification of the meaning of the vague notions employed under Article 3(f) and 3(h) through application of the criteria to individual cases in the MS.

16.3.2.4 Application of vague threshold criteria by National Courts

It is beyond the scope of this dissertation to further investigate the application of Article 3(f) and 3(h) ECD in national courts. With regard to Article 3(h) ECD, a study published in 2016 and carried out for the European Network against Environmental Crime (ENEC) reports very few court cases in the 14 MS that were examined for the study.[175] Cases cited in the study include a case of illegal logging (Hungary), the irreversible change of a river bed and the surrounding landscape (Lithuania), farming that destroyed habitats of endangered species (Spain), the illegal draining of a ditch in a nature wetland reserve and the building of a jetty in a protected area (both Sweden).

A brief research conducted in the context of this dissertation into national court cases in Germany and Austria also revealed very few cases.

In Austria, a national court applied **Article 3(f)** to a case concerning the killing of a lynx. In the ruling of the District Court of Steyr of 28 June 2016, the defendant was found guilty killing a lynx male with the designation "B 7" with a Blaser brand ball rifle, cal. 30-06. [176] The lynx is a protected species under Annex IV lit a) of the HD. The defendant was sentenced to a fine of 240 daily rates of EUR 8 each for the offense of wilful damage to the animal and plant

[175] Torres Rosell & Marquès Banqué, *Implementation of Directive 2008/99/EC*, 65. The study is based on information gathered through questionnaires from 14 MS, including Bulgaria, Czech Republic, Germany, Greece, Hungary, Italy, Lithuania, Luxembourg, Malta, Portugal, Netherlands, Spain, Sweden and the United Kingdom.

[176] The original decision of the District Court of Steyr could not be retrieved. The information on the District Court's decision derives from the decision of 22 December 2016 of the Court of Appeal (Revisionsgericht), GZ 6Ob229/16v, on the appeal of the plaintiff against the decision of the Regional Court of Steyr as Court of Appeal of 30 August 2016, GZ 1 R 173/16h-15, whereby the decision of the District Court of Steyr of 28 June 2016, GZ 9 C 140/16a-11, was amended. The appeal was upheld to the effect that the decision of the District Court was restored.

population in accordance with Section 181f (1) of the Austrian Criminal Code, which transposes Article 3(f) ECD, and 120 days" imprisonment for non-recovery, as well as compensation for the costs of the criminal proceedings.

The killed lynx "B 7" came from the lynx population of the Kalkalpen National Park.[177] The origin of the now limited lynx population in the Kalkalpen National Park is a reintroduction project carried out in recent years, in the course of which individual lynx were purchased and released in the National Park. The direct effect of killing the lynx "B 7" on the population size is a reduction of 1/6. The actual probability of survival of the population was reduced by the shooting of the lynx "B 7" by 14% in the case of low growth and by 6% in the case of strong growth with an overall uncertain outlook. After the loss of the "B 7" lynx, the continued reintroduction project can only be secured by again purchasing a male lynx.

It follows that the direct effect of killing the lynx "B 7" on the population size, which led to a **reduction of 1/6** as well as to a **reduced probability of survival** of the population **by 14%,** in the case of low growth and **by 6%** in the case of strong growth with an overall uncertain outlook, was found to meet the threshold criteria under Article 181f Austrian Criminal Code and thus to have a non-negligible impact on the conservation status of the species.[178]

Since the original ruling from the original decision from the District Court of Steyr could not be retrieved, the Court's reasoning for its decision on the threshold criteria is unfortunately not available. The decision therefore merely serves as an illustration of a national case to which Article 3(f) ECD has been applied.

16.4 Summary of findings on the offences related to the BHD

The analysis of the two offences relating to breaches of the BHD focused on three elements: the **scope of biodiversity** protected under the offences, the **model of criminalisation** and the **threshold criteria** that trigger criminal liability. The findings that have emerged from the investigation are summarised in the following.

[177] This information and the information in the subsequent paragraphs is directly retrieved from Decision of 22nd December 2016 of the Court of Appeal (Revisionsgericht), GZ 6Ob229/16v, cited above.
[178] As stated above, the decision of the District Court of Steyr of 28 June 2016, GZ 9 C 140/16a-11, could not be retrieved from the internet. The conclusion is therefore based on the summarised version of the District Court's legal assessment of the case as contained in the decision of the Court of Appeal.

16.4.1 Scope of protected species and habitats

Concerning the scope of biodiversity protected under the ECD, one remarkable difference emerged, which is that the hunting of Annex II wild bird species during their most vulnerable period is not penalised under the ECD, while it is prohibited under the BD. Other remarkable differences in the protected biodiversity under the ECD on the one hand and the BHD could not be identified.

16.4.2 Requirement of establishing a causal link

The offences under Article 3(f) ECD ("wildlife crime") and Article 3(h) ECD ("habitat crime") are mainly designed as "concrete harm" crimes, meaning that they do not simply require the endangerment of the protected natural resources, but instead a concrete result such as the "killing or destruction" of specimens of protected wild fauna or flora or the "significant deterioration" of a habitat. Using a concrete harm model instead of an endangerment model has certain consequences. **Firstly**, it makes criminal liability dependent on the outcome of an act (or omission) – the mere (abstract or concrete) endangerment is not enough. **Secondly**, concrete harm crimes require the establishment of a causal link between the harm and the act (or omission) of the accused. However, as the discussions in PART II of this dissertation on the "Requirements for establishing the causal link" under the ELD has shown, proving a causal link is often difficult and time-consuming, especially in environmental cases.

16.4.3 Model of criminalisation and the problem of unlawfully issued authorisations

The protection granted to the protected natural resources under the ECD is not absolute, but is instead largely determined by decisions made in national administrative law. This linkage means that the problems of unlawfully granted permits feed directly through to the ECD:

- criminal liability for wildlife crime under Article 3(f) and habitat crime under Article 3(h) depends on the **unlawfulness** of the conduct. The extent of the protection granted under the ECD is thus directly linked to decisions made in national environmental law, including decisions to grant permits for the hunting or fishing of protected species of wild flora and fauna or permits for the cutting of trees or carrying out of construction works in Natura 2000 areas.
- the dependency created between administrative decision-making and criminal liability has paved the way for the **conflict between economic and ecological interests**, which became evident during the analysis of the BHD, to become **directly incorporated into**

the ECD. Ultimately, it provides national authorities with the possibility to legitimise criminal acts "in the general pursuit of economic growth" thus avoiding the application of the ECD.

- solutions to this problem are not obvious. On the one hand, attaching criminal liability to an activity that has been authorised under a permit undermines legal certainty for the permit holder who relied on the lawfulness of the permit. On the other hand, upholding a permit that legitimises unlawful conduct and infringes environmental law undermines justice. Any attempt at a solution must therefore aim to strike **a balance between** these **two fundamental values**, i.e. **the value of legal certainty** on the one hand and **the value of justice** on the other.
- the question inevitably arises, whether a public official, who knowingly issues an unlawful permit, that legitimises the criminal act, may be held criminally liable. However, an exemplary examination of the situation in Austria and Germany suggests that significant criminal liability gaps exist in the prosecution of unlawfully issued permits and other conduct by public officials that facilitates environmental crime.
- in conclusion, in the case of unlawfully authorised activities the criminal law provisions of the ECD fail to ensure compliance with the BHD. For as long the "veil of dependency" is not removed and the "permit shield" applies, the provisions of the ECD are, at least in the case of unlawfully issued permits, of little avail.

16.4.4 Threshold criteria, the use of vague notions and the nulla poena sine lege and lex certa principle

The threshold criteria established under the ECD are important since they determine whether a conduct falls within the scope of Article 3(f) and 3(h). The investigation of the threshold criteria has shown that:

- The ECD defines the threshold criteria under Article 3 (f) and (h) ECD using rather vague notions, such as **"negligible quantity"** and **"negligible impact"** in the case of wildlife crime or "**significant deterioration**" in the case of habitat crime.
- The **vague formulation of the threshold criteria was intended**. The Commission, in its 2007 proposal for the Directive, explicitly stated that vague terms were not further

defined to leave their appraisal "to each MS to interpret in the light of its traditional and legal system".[179]

- The exemplary examination of the **transposition of the threshold criteria into the national law** of four EU MS, namely Austria, Germany, Italy and Spain, in this dissertation has shown that these **MS have also not further clarified these terms in their transposing legislation**. Their interpretation is thus left to the national courts.
- In light of these findings, the question was investigated to what extent the use of vague notions in criminal law is acceptable and aligned with the *nulla peona sine lege* and *lex certa* principles, which require the legislator to define the punishable conduct with sufficient certainty.
- The current study found that the **use of vague notions is not uncommon in environmental criminal law**. As Faure (2010) has pointed out, given the wide range and diversity of environmental harms, there are good legal technical reasons to avoid "over-strong" normative specifications. [180]
- Faure (2010) suggests that in some cases vague notions may perhaps become more specific by reference to the legislation provided in annex A of the ECD, which specifies the unlawfulness requirement. [181] In the present context, the question was therefore investigated if the interpretation of provisions under the BHD could guide the interpretation of the identified vague notions under Article 3 (f) and (h) ECD.
- The examination of the BHD, however, found that **no further clarification of the identified vague notions can be gained from the BHD**.
- It is therefore indeed for the national courts of the MS to provide for further clarification of the meaning of the vague notions employed under Article 3(f) and 3(h) ECD. The question was therefore investigated, if national courts have further shed light on the interpretation of the vague terms in question.
- Research into national court cases on Article 3(f) and (h) ECD identified one study examining the application of Article 3(h) ECD. [182] The study, which was published in 2016 and carried out for the European Network against Environmental Crime (ENEC), found very few court cases in the 14 MS that it examined.

[179] European Commission, *Proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law*, COM(2007) 51 final, Brussels, 9 February 2007.
[180] Faure, *Vague Notions (Part 1)*, 121.
[181] *Ibid.*, 123.
[182] Torres Rosell & Marquès Banqué, *Implementation of Directive 2008/99/EC*, 65.

- While it is beyond the scope of this dissertation, to further investigate the application of Article 3(f) and 3(h) ECD in national courts, a brief research into national court cases in Germany and Austria also revealed very few cases.

In summary, it is remarkable that the implementation of Article 3 (f) and (h) ECD in the MS has so far attracted little attention - not only compared to the other offences under Article 3 ECD, but also to the ELD, where the transposition of the term "significant" into national law has resulted in wide ranging discussions on its appropriate interpretation and coherence with provisions under the BHD. Indeed, the interpretation of the term "significant" under Article 3(h) ECD has attracted practically no comments, neither from the academic community, nor from practitioners or potentially affected stakeholders. One reason for this may be that the term has been left without any further specification under the ECD, whereas the ELD defines the threshold requirements in considerably more detail, thus offering more substance for a critical discussion. Another reason may be the lack of specific reporting requirements for MS under the ECD. The resulting lack of information makes it difficult to paint a clearer picture of its actual implementation and impact. The above findings, however, suggest that neither Article 3(f) nor Article 3(h) have so far played a meaningful role at MS level.

The subsequent investigation of the liability rules under the ECD as well as the provisions on penalties under the ECD may shed some more light on potential problems with the implementation of Article 3(f) and (h) ECD in the MS.

17 Liability of legal persons, Article 6 ECD

Environmental crimes are often committed in the interest of or for the benefit of companies or other legal entities. [183] Organized criminal groups also use corporations, businesses, charitable organizations or other legal entities to commit serious environmental crimes. [184] The EU legislator was therefore interested in ensuring liability of legal persons for environmental offences. Since criminal law systems have traditionally evolved as a response to the conduct of natural persons, the application of criminal liability to companies and other legal entities raises a couple of questions. Key questions include: What does the term "legal person" mean in a specific legal context? Can a legal person be held liable for a crime committed by some of its

[183] For further reference, see Fajardo, *EFFACE Study on Organised Crime*.
[184] *Ibid.*

members? How is that liability attributed to the legal entity? How is the mental element of a crime attributed to an artificial entity? Similarly, what responsibility do persons in a leading position, such as managers, have for the criminal conduct of an employee or for an activity that occurs within the legal entity? And since prison terms cannot be served by a legal person, what are appropriate alternative penalties?

Liability of legal persons is expressly addressed under Article 6 of the ECD. According to Article 6 (1), MS shall ensure that legal persons can be held liable for the offences listed under Article 3. Penalties for legal persons are addressed under Article 7 of the Directive.

As will be demonstrated, the ECD addresses some of the initially stated questions, while leaving others to be resolved within the national criminal law systems of the MS. Before addressing penalties for legal person, this chapter briefly introduces the basic rules that apply to liability for legal persons under the ECD.

A "**legal person**" under the ECD is defined under Article 2(d) ECD as "any legal entity having such status under the applicable national law". States, public bodies exercising State authority and public international organisations are expressly excluded from the definition of legal person under the ECD.

Article 6(1) of the Directive requires MS to ensure that legal persons can be held liable for the offences listed under Articles 3 and 4 "where such offences have been committed for their benefit by any person who has a **leading position** within the legal person, acting either individually or as a part of an organ of the legal person, **based on**:

(a) a power of representation,

(b) an authority to take decisions on behalf of the legal person; or

(c) an authority to exercise control within the legal person."

Criminal liability also extends to a **lack of supervision or control**. Article 6 (2) of the Directive requires legal persons to be held liable "where the lack of supervision or control [by a person with a leading position] has made possible the commission of an offence […] for the benefit of the legal person by a person under its authority".

Finally, liability of legal persons does not exclude criminal proceedings against natural persons.[185]

18 Penalties for natural and legal persons, Article 5 and Article 7 ECD

The ECD distinguishes between penalties for natural persons and penalties for legal persons.

Article 5 of the Directive addresses **penalties for natural persons** and requires MS to

> "take the necessary measures to ensure that the offences referred to in Article 3 and 4 are punishable by **effective**, **proportionate** and **dissuasive criminal penalties**".

From the above it is clear that the penalties for natural persons need to be "**criminal penalties**" that are "**effective**, **proportionate** and **dissuasive**". Other than that, the types and levels of penalties are not further specified.

Article 7, in turn, addresses **penalties for legal persons**. Notably, in contrast to Article 5, Article 7 does not require the penalties for legal persons to be of a criminal nature. Concerning penalties for legal persons, Article 7 of the Directive requires MS to [**emphasis added**]

> "take the necessary measures to ensure that legal persons held liable pursuant to Article 6 are punishable by **effective**, **proportionate** and **dissuasive** penalties."

The provisions on liability for legal persons under the ECD had to take into account that some MS, such as Germany, do not provide for criminal liability of legal persons due to different legal traditions in their criminal law systems. The ECD therefore does not require penalties for legal persons to be criminal in nature; administrative and quasi-criminal sanctions are sufficient to meet the requirements of the Directive.[186]

Inadequate sanctions imposed in practice have been identified to remain one of the Directive's main implementation challenges in the MS.[187] The following chapters further investigate this

[185] ECD, Art. 6(3).
[186] For a discussion of the penalties required for both natural and legal persons, see below.
[187] J Seager & T Shears, *A Survey on Practitioners' Views about the Implementation Challenges with EU Environmental Legislation, Their Underlying Reasons and Ways to Improvement*, IMPEL (2017) [Seager &

finding. They examine the provisions on penalties for natural and legal persons under the ECD, their transposition into the national law of the MS and their actual application to date. The examination starts with a review of the initial 2007 Commission proposals concerning penalties under the ECD. In its proposal, the Commission made a number of considerations which are of interest and that help illustrate the need for harmonised sanctions in the MS. Notably, the original scope and content of the proposed penalties was significantly reduced by the subsequent **ECJ decision of 23 October 2007**, which clarified that the "definition of the types and levels of criminal penalties are outside the Community's sphere of competence". As a result, in the final version of the ECD the criteria for penalties were reduced to the formula that they must be "**effective, proportionate and dissuasive**".

Next, the notion of "**effective, proportionate and dissuasive**" is further explored, based on a selection of ECJ case law, literature and publications by EU institutions.[188] This is followed by an investigation into the implementation of the formula into the national law of the MS and an assessment of their application to known cases of national case law. Finally, the findings are summarised and conclusions are drawn.

18.1 Review of penalties under initial 2007 Commission Proposal

Concerning **liability of natural persons**, the original 2007 Commission proposal for the Directive still provided for the specification of maximum and minimum penalties. Under **Article 5** ("Sanctions") the Commission defined sanctions for each offence, considering, among other things, the mental element ("intent" or "serious negligence").[189] The proposed penalties included punishment by a maximum of at least between one and three or two and five years.

Concerning **liability of legal persons**, the Commission noted that some MS do not acknowledge the **criminal liability of legal persons** and therefore explicitly stated under **Article 7** ("Sanctions for legal persons") that sanctions shall include both criminal and non-

Shears, *Implementation Challenges with EU Environmental Law*]; European Environmental Bureau, *Crime and Punishment* (2020) [online] [EEB, Crime and Punishment], 22.

[188] It is beyond the scope of this dissertation to elaborate on the broader discussions of this formula in EU (case) law. Rather, this chapter will focus on comments made in direct connection with the ECD to identify meaningful criteria for the further examination of their implementation into the national law of the MS.

[189] Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law, COM (2007) 51final, 9 February 2007.

criminal fines. The **level of fines for legal persons** was further specified under Article 7 (2) (c) of the Commission proposal, which, for example, required MS to punish the thereunder-specified offences with a maximum fine of at least EUR 750.000,- to EUR 1. 500. 000,-. Furthermore, the Commission proposed under Art. 7 No. 2 b) iii) a penalty for the commission of a crime in the framework of a **criminal organization**. The proposal was later removed from the final text of the Directive.

The Commission's proposal also included additional **optional** sanctions for legal persons such as the obligation to **reinstate the environment** under Article 7 (4)(a), the **exclusion from entitlement to public benefits or aid** under Article 7 (4)(b), the **temporary or permanent disqualification** from the practice of industrial or commercial activities under Article 7 (4)(c) or the **publication of the judicial decision** relating to the conviction or any sanctions or measures applied under Article 7 (4)(g). Similarly, these provisions had to be removed from the final version of the directive.

After the **ECJ Ship-Source- Pollution decision of 23 October 2007** clarified that the "definition of the types and levels of criminal penalties are outside the Community's sphere of competence", the specifications of penalties as provided for under **the Commission's 2007 proposal** had to be removed. [190] Under the text of the final Directive, the provisions on penalties for both natural and legal persons were therefore reduced to the wording that they must be "**effective, proportionate and dissuasive**", a formula commonly used in EU law to describe the required characteristics of penalties for infringements of EU secondary law .[191]

The Commission made a number of considerations in its 2007 proposal which are of interest here because they explain the need for harmonised sanctions in the MS. In the explanatory memorandum to the proposal, the Commission highlighted amongst others the **large disparities in the levels of sanctions** for environmental crimes in the MS. In the accompanying Staff Working Document, the Commission illustrated this by citing examples from the implementation of the EC Regulation on the Protection of Species of Wild Fauna and Flora[192]

[190] *Ship-Source Pollution* (C-440/05).
[191] For further discusion of the formula, see below, Chapter 18.2., *The requirement for "effective, proportionate and dissuasive" penalties under the final version of the ECD*.
[192] Council Regulation (EC) 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein [1997] OJ L 61/1.

and EC Regulation on the Shipments of Waste. [193] The maximum prison sentences for the trade in endangered species, for example, differed from 6 months in Luxembourg to 8 years in Lithuania, the Czech Republic and Slovakia and the lowest defined maximum fine differed from €1.293 in Poland to € 450.000. in the Netherlands (€450,000).[194]

The Commission also noted, that **some countries prioritized high fines over prison sentences.** In Belgium, for example, the fines for the trade in endangered species were stated to be very high while the level of the imprisonment sentence appeared rather low when compared to other countries. Some countries, like the UK, the Netherlands and Germany were stated to generally apply more severe sentences than others, allowing both for high fines and imprisonment between 5 and 7 years. Other MS again showed such low sanction levels that the Commission doubted their deterrent effect and concluded that the true nature of the damage done to the environment and the huge margins of profit gained by offenders were rarely calculated in the fines that were applied to their offences.

To further demonstrate the insufficiency of existing penalties in MS, the Commission proposal cited expert statements and gave the example of Polish law, which provided for a maximum fine of EUR 1.293,- for trade in endangered species. [195] For a criminal organization, the Commission concluded, the low fine of a few thousand Euros for smuggling a rare species, could easily be considered as insignificant "costs of doing business" given the high market prices and the low risk of detection. The Commission further cited from a report in the UK on corporate environmental crime compiled by the House of Commons Environmental Industries Commission for, which stated that:

> "Low fines send the wrong message in trying to create a culture where environmental compliance is taken seriously by industry. […] Companies too often find it more economical to pay a fine than to properly address their environmental performance […] current fines for environmental offences are both too low and inconsistent […] they

[193] Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste, OJ L 190, 12 July 2006.
[194] European Commission, *Commission Staff Working Document Accompanying the Proposal for a Directive on the protection of the environment through criminal law: Impact Assessment*, COM(2007) 51 final, SEC(2007) 161, Brussels, 9 February 2007.
[195] European Commission, *Commission Staff Working Document Accompanying the Proposal for a Directive on the protection of the environment through criminal law: Impact Assessment*, COM(2007) 51 final, SEC(2007) 161, Brussels, 9 February 2007, 161, citing Marceil Yeater, CITES Secretariat, "Beyond Seizure: Prosecuting CITES Offenders", International Expert Workshop on the Enforcement of Wildlife Trade Controls in Central and Eastern Europe.

need to be dramatically raised to have a real economic impact and deter companies from polluting the environment".[196]

The Commission's proposal also emphasized the **need for prison penalties** in cases where the offender is impecunious or, on the contrary, financially very strong, stating that in such cases administrative sanctions or other financial sanctions might not suffice.

Lastly, however, the Commission acknowledged that full harmonisation of environmental criminal law would go beyond what is necessary and highlighted the necessity to respect the cultural values of each MS. These would still strongly influence national criminal law systems and therefore require a certain flexibility in the implementation.[197]

18.2 The requirement for "effective, proportionate and dissuasive" penalties under the final version of the ECD

The ECJ's seminal ruling of 23 October 2007 on the criminal law competence of the European Community institutions ("Ship-Source Pollution") clarified, as previously noted, that the "definition of the types and levels of criminal penalties are outside the Community's sphere of competence". [198] The judgment led to a substantial reduction in the Commission's initially proposed scope and content of the provision on penalties under the ECD, reducing them for both natural and legal persons to the commonly used formula that they must be "**effective, proportionate and dissuasive**".

The criteria of "**effective, proportionate and dissuasive**" are obviously vague notions and not further defined by the Directive. However, the formula "**effective, proportionate and dissuasive**" is a common feature in EU law to describe the required characteristics of penalties for infringements of EU secondary law. Before an examination of the implementation of the formula into the national law of the MS, this chapter explores the application of the "**effective, proportionate and dissuasive**" penalties in EU law.

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[196] European Commission, *Commission Staff Working Document Accompanying the Proposal for a Directive on the protection of the environment through criminal law: Impact Assessment*, COM(2007) 51 final, SEC(2007) 161, Brussels, 9 February 2007, 161, citing House of Commons" Environmental Audits Committee: Second Report on Corporate Environmental Crime 2004-2005, p. 22.

[197] Proposal for a Directiv e of the European Parliament and of the Council on the Protection of the Env ironment through Criminal Law, COM (2007) 51final, 9 February 2007.

[198] *Ship-Source Pollution*, C-440/05.

The ECJ first applied the formula "**effective, proportionate and dissuasive**" in the *Greek Maize Case* (C-68/88), where the Court established that,

> "whilst the choice of penalties remains within the[ir] discretion [of the MS], they must ensure in particular that infringements of Community law are penalized under conditions, **both procedural** and **substantive**, […] which, in any event, make the penalty **effective, proportionate and dissuasive**."[199]

Since then, the formula has found wide application in EU secondary law. Subsequent ECJ rulings have further clarified the meaning of "effective", "proportionate" and "dissuasive", albeit to a limited extent.

Concerning the requirement for **effectiveness**, the Court held in a case concerning EU fisheries law, that in order for penalties to be **effective**, there must be a **"serious risk",** that in the event of infringement of the rules of the common fisheries policy, the offenders **"will be detected and have sufficiently severe penalties imposed on them**".[200] In his Opinion on the case, *Advocate General Geelhoed* further observed that in order for penalties to be **effective**, the **control efforts** and **threats of repressive action** by MS **must make non-compliance economically unattractive** and in this way ensure that the **objectives pursued by the relevant EU legislation** are **achieved in practice**.[201]

Concerning the requirement for **proportionality**, the ECJ has consistently ruled that for a penalty to be proportionate "account must be taken inter alia of the **nature and** the **degree of seriousness of the infringement** which the penalty seeks to sanction"[202] and that it must be ensured that the "penalty **does not go beyond what is necessary** to attain the objectives pursued by the legislation in question".[203]

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[199] *Commission v Greece*, C- 68/88, para.24.
[200] *Commission v France*, C-304/02, para 37, referring to the opinion of AG Geelhoed, who observes in point 39 of his Opinion that "The result to be achieved by the MS under [the regulation in question] is […] to ensure that their surveillance and enforcement activities are indeed effective. 'Effective' in this context must be understood as meaning that there is a credible probability that, in case of noncompliance, fishermen will be running a high risk of being detected and of sanctions being imposed which would at least deprive them of any economic benefit accruing from the transgression of the fisheries provisions."
[201] See Opinion of Advocate General Geelhoed of 29 April 2004 in *Commission v France* (C-304/02).
[202] *Nutrivet*, C-69/15, para. 51 and the case law cited there. Also, of interest in the context of this dissertation is the Court's ruling in *Túrkevei Tejtermelő Kf* (C-129/16), para 66, which concerns the use of an *administrative fine* imposed upon landowners in addition to their liability to pay for the remediation of the damage under the ELD.
[203] See, for example, *Nutrivet* (C-69/15), para 52; *Urbán*, C-210/10, para 24; *Rodopi*, C-259/12, para 38.

Regarding the requirement of **dissuasiveness**, the Court has consistently held that the severity of the sanction must be **commensurate to the seriousness of the breaches** for which they are imposed, in particular by ensuring a **genuinely dissuasive effect** while respecting the general principle of proportionality.[204] In order to assess whether a sanction is truly dissuasive, the Court has found that it is necessary to compare the situation of a person who complies with his legal obligations with the situation of a person who breaches those obligations.[205] If such a comparison shows that the violation of a legal rule still results in an advantage for the offender regardless of the penalty system in place, the system does not ensure that the penalties applicable to the offender are truly dissuasive.[206]

In *Commission vs France* (C-304/02), a case concerning, among others, a general amnesty law for breaches of EU fisheries law, the Court found that fines capped by the amnesty law at €750 for breaches would fail to have a deterrent effect.[207]

The Court also stated that in order for sanctions **to be dissuasive**, account might be taken, where appropriate, **of any repeat offences** of the defendant concerned.[208]

In summary, it appears that only few rulings have attempted to further define and substantiate the formula and its three constituent elements. Rather, the Court has emphasized that in the absence of harmonisation of EU legislation in the field of penalties, "MS are empowered to choose the penalties which seem to them to be appropriate"[209] and that it is ultimately for the national courts "to assess what is necessary to attain the objectives pursued by the legislation in question".[210] The role of the ECJ in this regard would be limited to providing the national courts with the criteria for the interpretation of EU law, [211] while the power of MS to choose appropriate penalties should be exercised as required in principle, in accordance with EU law and its general principles. [212]

[204] See *OPR-Finance*, C-679/18, para.26 and the case-law cited there.
[205] See *LCL Le Crédit Lyonnais*, Case C-565/12, para 50.
[206] *Ibid.*, para 51.
[207] *Commission v France*, C-304/02.
[208] See *Asociaţia Accept*, C-81/12, para 67
[209] See *Nutrivet*, C-69/15, para 50, and the case law cited there.
[210] *Ibid.*, para 52.
[211] *Ibid.*
[212] *Ibid.*, para 50 and the case law cited there.

Based on the rather limited criteria developed through ECJ case law, the three constituent parts of the formula can be defined as follows:

Effectiveness:
Penalties are effective when there is a serious risk, that the offenders will be detected and punished with sufficiently severe penalties[213] and when control efforts and threats of repressive action by MS make non-compliance unattractive, ensuring in this way that the objectives pursued by the relevant EU legislation are achieved in practice.[214]

Proportionality:
Penalties are proportionate when they adequately reflect the nature and degree of seriousness of the infringement[215] and do not go beyond what is necessary to achieve the objectives pursued by the legislation in question.[216]

Dissuasiveness:
Penalties are dissuasive when the system of penalties in place ensures that not complying with his legal obligations puts the offender at a disadvantage. If the breach of a legal rule still results in an advantage for the offender, then the system of penalties in place does not ensure that the penalties incurred by an offender are genuinely dissuasive.[217]

Academic literature on the subject is rare.[218] The *European Commission (2020)*, in its evaluation of the ECD defines **effective sanctions** as sanctions that are "sufficient to ensure compliance with law" and further adds that in order to assess the effectiveness of criminal penalties, they must be seen as part of a system of penalties that also includes administrative and civil penalties as well as additional penalties.[219]

Also concerning the **effectiveness** of sanctions, environmental NGOs have emphasized the **preventive** and **restorative function** of penalties. Effective penalties would have to restore the

[213] See *Commission v France*, C-304/02, para. 37, referring to the opinion of AG Geelhoed.
[214] See Opinion of Advocate General Geelhoed of 29 April 2004 in *Commission v France*, C-304/02.
[215] See *Nutrivet*, C-69/15, para. 51 and the case law cited there. *Túrkevei Tejtermelő Kf*, C-129/16, para 66.
[216] See for example *Nutrivet*, C-69/15, para 52; *Urbán*, C-210/10, para 24; *Rodopi*, C-259/12, para 38.
[217] See *LCL Le Crédit Lyonnais*, C-565/12, para 51.
[218] One of the few commentators addressing the interpretation of the formula under the ECD regime has been Faure, *Effective Penalties*.
[219] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 44. According to the Commission, this definition is based on case-law and literature, which is, however, not further specified.

damage done to the environment, prevent future damage by deterring both the offender and the general public from similar breaches of environmental legislation. [220]

Concerning the dissuasiveness of sanctions, Faure (2010) notes that the notion of **dissuasiveness** generally refers to both **individual** and **general deterrence**. [221] The European Commission (2020) qualifies a sanction as dissuasive, when it prevents the individual offender from committing the offense again and the general public from committing similar wrongdoings. [222] In order to be genuinely dissuasive, expected sanctions should more than outweigh the expected gains from an offence, meaning that sanctions should not only remove the financial gains but also add a punitive element. [223]

The dissuasiveness of a system of penalties will also to a large extent depend on the **likelihood to be detected, prosecuted and convicted**. [224] According to Faure (2010), the lower the probability of detection, the higher the penalty should be. [225] Faure (2010) also stresses the "perverse" learning effect of fines/sanctions that are too low, since they ultimately teach perpetrators that breaching environmental legislation is indeed profitable. [226]

Regarding the **proportionality of sanctions**, the European Commission (2020) and other commentators have highlighted the importance of taking **aggravating** and **mitigating circumstances** into account, allowing national judges to adapt the sanctions to the gravity of the violation. [227]

Finally, several commentators have highlighted the **importance of allowing for differences in the MS**. [228] Different legal traditions as well as economic situations and income levels in the

[220] ClientEarth, *National EUTR Penalties: Are They Sufficiently Effective, Proportionate, and Dissuasive?* (2018) [ClientEarth, *National EUTR Penalties*]: "ensures that the goal set by the legislator is reached, despite the infringement, and intends to prevent future harm"; EEB, *Crime and Punishment*, 21.
[221] Faure, *Effective Penalties*, 260.
[222] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 44.
[223] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 44; EEB, *Crime and Punishment*, 21.
[224] Faure, *Effective Penalties*, 261; See also European Commission, *Environmental Crime Directive Evaluation – Part I*, SWD(2020) 260 final, 44.
[225] Faure, *Effective Penalties*, 261.
[226] Faure, *Effective Penalties*, 263.
[227] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 44, the importance of aggravating and mitigating factors in the determination of proportionality has also been emphasised by EEB, *Crime and Punishment*, 21.
[228] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 44; EEB, *Crime and Punishment*, 21: "Proportionality must also exist within *the penal system of each MS*".

EU MS can mean that a specific sanction (level) acts as a deterrent or qualifies as proportionate in one MS, but not in another.

In summary and based on the above examination of case law and literature on the subject, it is clear that the formula of **effective, proportionate and dissuasive penalties** addresses both the **material as well as procedural aspects of penalties**, i.e. the fines and sanctions applied in practice. While criteria developed through ECJ case law have helped to further outline the requirements under Article 5 and 7 ECD, the ECJ has consistently underlined MS power to choose the penalties, which seem to them to be appropriate and necessary to attain the objectives pursued by the legislation in question, resulting in substantial discretion for the MS.

18.3 Transposition of penalties into the national law of the MS

The transposition of the ECD has seen most MS increase the level of penalties for environmental offences. According to the Commission, this indicates that the level of sanctions before the Directive was insufficient in most MS.[229]

The following chapters further examine the **transposition of the penalties prescribed by Article 5 and 7 ECD** into the national law of the MS. The examination is based on an analysis of the transposition in a few selected MS (as before **Austria**, **Germany**, **Italy** and **Spain**) as well as information available from recent studies and reports. Next, **fines and sanctions applied in practice** are analysed.

18.3.1 Penalties for natural persons

The most comprehensive information on the transposition of Article 5 ECD into the national law of the MS is available from the European Commission's recent evaluation of the ECD. [230] A table displaying the **maximum prison sentences** in the MS for the offences listed in the Directive illustrates the significant disparities across MS. [231] The maximum level for prison sentences, for example, ranges from just a few months to life imprisonment. In the specific cases of Article 3 (f) ECD and 3 (h) ECD a number of countries do not provide for prison

[229] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 21.
[230] *Ibid.*
[231] *Ibid.*, 32.

sentences. This is the case in Belgium for Articles 3 (f) and 3 (h) (federal level) and in Sweden for Article 3 (h).

The large differences in maximum penalties for Article 3(h) offences ("habitat crime") in EU MS' legislation are particularly evident in a separate chart.[232] The chart compares maximum levels of prison sentences in MS for Article 3(h) offences with maximum levels of prison sentences before the transposition of the ECD. The current maximum level of imprisonment in Greece is for example 20 years, while the average maximum sentence for a violation of Article 3(h) is shown to be 5 years. Malta even stipulates a maximum sentence of life imprisonment. In Italy, on the other hand, it is as low as 18 months. The graph also shows that the majority of MS introduced higher sanction levels after the adoption of the Directive.[233] Some countries, including Belgium (Brussels region), Hungary, Italy and Romania, did not provide for criminal sanctions for habitat destruction before the Directive.

In the case of Article 3(f) offences, the **maximum penalty** in some countries falls below one year of imprisonment. [234] This includes Belgium (Wallonia) (max 6 months) and Italy (six months). Malta, on the other hand, states again a maximum sentence of life imprisonment and Greece, as before, a maximum level of imprisonment of 20 years.

The drastic differences in the level of prison sentences can also be observed in the fines for natural persons. [235] Maximum fines range from a few thousand Euros to several million.

18.3.2 Penalties for legal persons

Concerning the liability for legal person, the Directive prompted important developments in some MS.[236] In Italy, the provisions of the Directive have, according to commentators, created the decisive incentive to extend the liability of legal persons to environmental crime.[237] Given that serious environmental crimes are almost exclusively committed by legal entities, the

[232] *Ibid.*, 37. The Commission flags that data for some MS is missing.
[233] *Ibid.*, 37.
[234] *Ibid.*, 32.
[235] *Ibid.*, 31.
[236] As outlined above, the Directive does not require that sanctions for legal persons be criminal in nature. This was meant to facilitate the introduction of environmental liability in legal systems where genuine criminal liability of legal persons is constitutionally controversial, as is the case in Germany.
[237] G M Vagliasindi, *Directive 2008/99/EC on Environmental Crime and Directive 2009/123/EC on Ship-source Pollution. Study in the Framework of the EFFACE Research Project*, Catania: University of Catania (2015) [online] [Vagliasindi, *EFFACE Study on Environmental and Ship-source Crime*], 17.

introduction of criminal liability of legal persons for environmental offences has been considered as a crucial development for a more effective protection of the environment in Italy.[238] According to Vagliasindi (2015), in Italy the ECD in this way helped to overcome one of the main weaknesses of its environmental criminal law.[239] In Spain, where legislation on corporate liability was generally quite vague,[240] the Directive's provisions on the liability of legal persons not only resulted in corporate liability for environmental crimes, but also for many other crimes.[241]

In Sweden, Greece Bulgaria, Latvia and Germany, legal persons cannot be held criminally liable. In Bulgaria and Latvia administrative fines apply instead.[242] Sweden and Greece also rely on administrative fines.[243] In Germany, legal persons are subject to a "Bußgeld", which is a quasi-criminal sanction administered under the so-called German "Ordnungswidrigkeitenrecht". All other MS allow for the possibility to sanction legal persons for environmental crimes under criminal law.

Similar to penalties for natural persons, the maximum level of fines for legal persons varies drastically.[244] The Czech Republic is the country with the highest maximum fine, prescribing almost EUR 60 million for all Article 3 offences, including Article 3(f) and(h). The lowest maximum fines for Article 3(f) and 3(h) crimes apply in Greece, Romania, Cyprus, Bulgaria and Finland (below EUR 1 million or even below EUR 500 000).

18.3.3 Accessory criminal sanctions

Another type of sanctions imposed in the MS are so-called "accessory criminal sanctions".[245] Accessory criminal sanctions apply in addition to fines and imprisonment. They include:

- the confiscation of items used for committing the offence;
- forfeiture of illegal benefits;

[238] *Ibid.*
[239] *Ibid.*
[240] *Ibid.*, referring to Bacigalupo, S. (2005) *Las consecuencias accesorias aplicables a las personas juridicas*, in: Curso de Derecho penal economico, ed. Enrique Bacigalupo (Madrid: Marcial Pons, 2005), 105 et seq.
[241] Vagliasindi, *EFFACE Study on Environmental and Ship-source Crime*, 17, referring to Vagliasindi (2012) *Attività d'impresa e criminalità ambientale. La responsabilità degli enti collettivi* (Catania: Torre, 2012), pp. 24 and 133 et seq.
[242] Milieu, *Evaluation Study on Directive 2008/99/EC*, 54.
[243] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 39.
[244] *Ibid.*
[245] *Ibid.*, 32.

- the revocation of permits;
- winding up of the legal person;
- the prohibition to exercise a professional activity;
- the prohibition of performance of public contracts, of participation in public tenders; or
- the prohibition to receive grants and subsidies. [246]

Another kind of accessory sanction available in a number of MS is the **publication of the judgment**, which is seen as very effective.[247] In Denmark, so-called fixed penalty procedures are used to achieve out of court settlements. [248] A prerequisite is that the offender pleads guilty and agrees to the fixed penalty set out by the prosecutor. In return, the judgement is not made public. Practitioners interviewed in Denmark stated that one of the main incentives to accept fixed penalties would be escaping back publicity. A prosecutor in Sweden also emphasized the **deterrent effect of public judgements.** Since offences against the environment are considered as "bad will" in Sweden, Swedish companies would be particularly sensitive to publicity.[249]

Notably, in a limited number of countries, accessory criminal measures also have a **remedial function**. [250] According to a report published by Milieu (2014), these include Cyprus, France, Luxembourg, Poland and Belgium (in some regions), where the law requires the **reparation of the environmental damage**. [251] The report does not further specify scope or content of these measures. Notably, no reference is made to the ELD.

Given the range of **accessory criminal sanctions** available in the MS, low prison terms or fines may not be a sufficient indicator for the effectiveness of sanctions in a MS. The European Commission (2020) for example claims that in some cases, accessory criminal sanctions could be more of a deterrent than the actual criminal sanction.[252] In France, for example, sanctions for some environmental offences committed by natural persons may be rather low, but the judge would also typically order both the confiscation of the proceeds and benefits of the crime and the remedy of the environmental damage. [253]

[246] See Milieu, *Evaluation Study on Directive 2008/99/EC*, 76-78.
[247] These MS include Denmark, Sweden, Czech Republic, France, Greece, the Netherlands, Poland, Portugal and Romania. For further reference, see Milieu, *Evaluation Study on Directive 2008/99/EC*, 77.
[248] *Ibid.*
[249] *Ibid.*, 78.
[250] *Ibid.*, 76.
[251] *Ibid.*
[252] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 42.
[253] *Ibid.*

A number of additional factors may also influence the actual penalty applied to a case. These include **aggravating** and **mitigating circumstances** or the option of **combining criminal sanctions with administrative** ones, especially remedial ones. To what extent remedial sanctions under administrative law are indeed combined with criminal sanctions and leading to remedial action is not further specified in the reports available at the time research for this dissertation was completed.[254]

The penalties prescribed in law often reveal little about the fines and sanctions imposed in practice. The next section therefore addresses fines and sanctions imposed in practice.

18.4 Fines and imprisonment sanctions imposed in practice

Low levels of fines and imprisonment sanctions imposed in practice have been identified to remain one of the main implementation challenges in the MS.[255] According to a recent report published by the eNGO European Environmental Bureau (2020), fines are the most common sanction for environmental offences in the MS. [256] However, a lack of comparable data on fines and imprisonment sanctions imposed in practice, would make an accurate assessment of the actual situation in the MS fundamentally difficult. The available data would suggest that the overall level of fines and imprisonment sanctions imposed in practice is low, indicating that the penalties required by law are not always applied in practice. [257] Generally, the lack of information would point to a need for more centralised efforts to monitor fines and imprisonment sanctions for environmental crimes in the MS.

Some information on the types and levels of sanctions applied in the MS is available from a report published by the European Network against Environmental Crime (ENEC) in 2016, which concerns the illegal killing or taking of birds. [258]

That report states a number of cases from **Germany** where regional or district courts have issued fines for the poisoning, trapping or killing of birds of prey. Fines would range between

[254] Milieu, *Evaluation Study on Directive 2008/99/EC*, 76-77.
[255] Seager & Shears, *Implementation Challenges with EU Environmental Law*; EEB, *Crime and Punishment*, 22.
[256] *Ibid.*
[257] *Ibid.*
[258] Torres Rosell & Marquès Banqué, *Implementation of Directive 2008/99/EC*, 42 – 45.

EUR 900,- for the killing of a common buzzard and EUR 3.000,- for the trapping of birds of prey and crows.

Quite a few cases are listed in the report for **Malta**, where fines are reported to range from EUR 1.200,- to EUR 9.000 for the shooting of greater flamingo. Other sanctions include imprisonment terms from 3 months to 2 years and the suspension or revocation of licences.

In Bulgaria and the Czech Republic, perpetrators are according to the report frequently released from liability or crimes are not investigated further. In **Bulgaria**, for example, poachers would often kill birds of prey. During the legal hunting season, protected geese would be regularly shot. The few court cases that exist would show that the perpetrator is commonly released of criminal liability and that administrative sanctions are imposed instead.

For the **Czech Republic**, the report states that in the "known history of the Czech Republic" there has not been a single court case and, public authorities would completely fail to enforce the relevant criminal law provisions. Notably, the report also stresses that the Czech Republic is a country where poisoning is known to be widespread.

The enforcement of environmental criminal law in the MS, including the offences prescribed by the ECD, is discussed in detail under Chapter 19 below on the "Enforcement and practical relevance of environmental criminal law in the MS".

18.5 Discussion of findings on penalties for legal and natural persons in law and in practice

Articles 5 and 7 prescribe "**dissuasive, proportionate and effective sanctions**" for both natural and legal persons. The most obvious finding to emerge from this study of penalties under the ECD is that there is no uniform interpretation of these terms in the MS. This means that the Directive has not led to the desired approximation of sanction levels in the MS, but rather to further discrepancies.[259] For both natural and legal persons, very different types and levels of penalties continue to apply to the same offence.

[259] See also European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 38, which reaches a similar conclusion.

The findings are consistent with feedback received during the European Commission's recent consultation on the ECD, where respondents identified **discrepancies in the types and level of sanctions as a major cause of the limited effectiveness of the Directive**. [260] It also appears, that the level of sanctions in a number of MS is not dissuasive. [261] Maximum levels of fines for natural persons for Article 3(h) offences ranging from € 5.000,- in Belgium to € 10.800.000,- in Germany illustrate the problem.

The European Commission is apparently aware of these shortcomings, but has so far refrained from initiating infringement proceedings against MS.[262] According to the Commission (2020), this is because the absence of precise minimum or maximum penalties in the Directive would mean that infringement proceedings would have no prospect of success.[263] In its evaluation of the Directive, the European Commission (2020), has highlighted the need for further action to harmonise sanction levels. [264]

Another noteworthy finding pertains to **the lack of remediation requirements for damage resulting from environmental crime**.[265] Only in a limited number of countries, accessory criminal measures are reported to have a remedial function. [266] The procedures under the ECD also do not appear to be linked to the procedures under the ELD. That said, any damage resulting from a criminal offence should "automatically" trigger the application of the ELD and thus lead to remediation of the damage - provided it meets the ELD criteria. This requires, of course, that the two directives are appropriately integrated. The important question of the integration of the two Directives is dealt with in Part IV of this dissertation.

In order to address the identified discrepancies in the types and level of sanctions and in view of the harmonisation objectives pursued by the Directive, it appears necessary to further specify

[260] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 78.
[261] See also the European Commission's assessment, especially regarding penalties for legal persons: European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 47.
[262] When the Milieu Report (2013/2014) on implementation of the ECD revealed that MS had not properly transposed Articles 5 and 7, the Commission opened informal proceedings against nine MS. Following this, six of them increased their sanction levels. For the remaining three, the Commission closed the proceedings after those states provided further explanations of their existing sanction levels. For further reference, see European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 47, with reference to Milieu, *Evaluation Study on Directive 2008/99/EC.*
[263] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 47.
[264] *Ibid.*, 80-81.
[265] This finding may also be attributed to a lack of data, highlighting the critical need for comprehensive reporting requirements under the ECD.
[266] Milieu, *Evaluation Study on Directive 2008/99/EC,* 76.

the sanctions under the ECD, as already proposed by the Commission in its 2007 proposal for a Directive.

The question arises to what extent further measures to harmonise sanctions under the ECD are compatible with the EU's current competences in the field of environmental criminal law, considering that, according to the ECJ judgment in *Ship-Source Pollution* (C-440/05), the "definition of the types and levels of criminal penalties are outside the Community's sphere of competence".[267] As the following chapters will demonstrate, amendments introduced under the Treaty of Lisbon (2009) may have changed this.[268]

18.6 Scope for further harmonisation of criminal penalties for environmental crime in the EU MS

Amendments under the Treaty of Lisbon ("Lisbon Treaty"), which entered into force in 2009, have further empowered the EU in the area of criminal law and may have opened the door for further harmonisation of criminal sanctions across EU MS. This Chapter first introduces the competences of the EU legislator in the area of criminal law after Lisbon (18.6.1). It then assesses the scope for further legislative harmonisation measures (18.6.2), including the introduction of minimum maximum penalties (18.6.2.1), minimum penalties or specific penalty ranges (18.6.2.2). Next, the political feasibility of further harmonisation measures under the ECD is addressed (18.6.3.). Finally, conclusions are drawn (18.6.4).

18.6.1 Competences after Lisbon – The new powers of the EU legislator

The Lisbon Treaty has endowed the EU with additional competences in the area of criminal law, including the harmonisation of substantive criminal law of the EU MS.[269] Judicial cooperation in criminal matters is now regulated under Articles 82-86 TFEU. As far as harmonisation of substantive criminal law is concerned, **Article 83 TFEU** is the central provision. It explicitly endows the EU legislator with the power to "**establish minimum rules with regard to the definition of criminal offences and sanctions**". The new competences

[267] *Ship-Source Pollution*, C-440/05.
[268] Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed 13 December 2007, OJ C 306, 17 December 2007.
[269] H Satzger, *Der Mangel an Europäischer Kriminalpolitik – Anlass für das Manifest der internationalen Wissenschaftlergruppe „European Criminal Policy Initiative"*, Zeitschrift für Internationale Strafrechtsdogmatik ZIS 12 (2009), 691-694 [online] [Satzger, *Mangel an Europäischer Kriminalpolitik*], 691.

allow for harmonisation of criminal law in areas of particularly serious cross-border crime[270] as well as in areas where harmonisation "proves essential" for the implementation of EU policies.[271] Concerning the latter, which is the relevant provision in the present context, Article 83 (2) TFEU states in full that [emphasis added]

> "[i]f the approximation of criminal laws and regulations of the MS **proves essential** to ensure the effective implementation of a Union policy in an area which has been subject to harmonisation measures, directives may **establish minimum rules with regard to** the definition of criminal offences and **sanctions** in the area concerned."

The Lisbon Treaty has thus created the legal basis for a far-reaching criminal annex competence, which also exceeds the previously developed ECJ case law on the EU's competence in criminal matters. It enables the EU not only to determine the types of offences that must be criminalized, but also the type and level of sanctions for those offenses.

However, while the EU's powers in the area of criminal law have been expanded, it is important to note, that the amendments introduced by the Lisbon Treaty still do not provide for a competence to create supranational criminal offences: the EU still lacks the power to adopt directly applicable criminal law provisions.[272] This means that MS must be given sufficient discretion to integrate the new criminal law standards into their national legal systems so that they can choose between several approximately equivalent transposition measures and thus preserve the coherence of their national criminal law systems.[273]

18.6.2 Potential measures for the harmonisation of penalties across MS

Harmonisation of penalties across MS may take different forms. As previously demonstrated, the Commission's proposal for the Directive (2007) specified maximum and minimum penalties and listed penalties for each offence, taking into account the mental element ("intent" or "serious negligence"). [274] Proposed penalties included punishment by a maximum of at least between one and three or two and five years. In its recent evaluation of the Directive, the European Commission (2020), proposes, among others, the introduction of **minimum maximum penalties** under the Directive and the **stipulation of accessory sanctions**, such as

[270] TFEU, Art. 83 para. 1.
[271] TFEU, Art. 83 para. 2.
[272] Hecker, *Europäisches Strafrecht,* 284.
[273] *Ibid.*
[274] See also discussion in previous Chapter. Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law, COM (2007) 51final, 9 February 2007.

remedy of damage, cancellation or suspension of permit or the exclusion from public tenders or grants. Another proposal includes a requirement to take account of **aggravating and/or mitigating circumstances**, addressing, *inter alia*, the role of organised crime.[275] To what extent such harmonisation measures are possible after Lisbon is examined below, starting with the introduction of minimum maximum penalties (18.6.2.1.) and followed by minimum penalties or specific penalty ranges (18.6.2.2.).

18.6.2.1 Introduction of minimum maximum penalties

At present, the "most detailed" EU legislation on criminal penalties provides for so-called "**minimum maximum penalties**".[276] Under Directive 2011/36/EU on preventing and combating trafficking in human beings and protecting its victims, MS are obliged to respect a certain maximum penalty (e.g. "punishable by a maximum penalty of at least five years of imprisonment").[277] An alternative to "**minimum maximum penalties**" is the stipulation of a so-called "**minimum maximum penalty range**", which leaves it to the discretion of the MS to choose a maximum penalty within a certain range (e.g. "punishable by a maximum penalty of at least one to three years of imprisonment.").[278] As before, a minimum threshold is established and MS are free to opt for more severe minimum maximum penalties.[279] Ultimately, however, a "minimum maximum penalty range" is the same as a "minimum maximum penalty". In both cases, MS are required to ensure that the minimum maximum penalty does not fall below the lower value of the prescribed range.[280]

A recent study by the European Criminal Policy Initiative (ECPI), a research group of 20 academics from 12 MS of the EU, investigated the value of harmonizing sanctions across MS via the stipulation of "minimum maximum penalties" and concluded that their value is at best limited if not questionable at all.[281] The study found that attempts to harmonise criminal

[275] See also European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 80-81.
[276] See H Satzger, The Harmonisation of Criminal Sanctions in the European Union – A New Approach, *eucrim – The European Criminal Law Associations' Forum* 2 (2019), 115-119 [online] [Satzger, *Harmonisation of Criminal Sanctions*], 116.
[277] See Article 4(1) of Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA.
[278] Satzger, *Harmonisation of Criminal Sanctions*, 116.
[279] *Ibid.*, 117
[280] *Ibid.*
[281] See H Satzger (Ed.), *Harmonisierung strafrechtlicher Sanktionen in der Europäischen Union* (1st ed.), Series: Schriften zum Internationalen und Europäischen Strafrecht, vol. 41 (2020) [Satzger, *Harmonisierung strafrechtlicher Sanktionen*].

sanctions on the basis of Art. 83 TFEU, especially by prescribing "minimum maximum penalties", have so far not resulted in the desired approximation of penalties. In many national legal systems, the stipulation of "minimum maximum penalties" would create implementation problems, in some cases resulting in higher penalty ranges than provided for in EU law.[282] In Austria, for example, the implementation of minimum-maximum penalties of four years would be difficult since they do not exist under the national criminal law system. As a consequence, the transposing law in Austria would have to require a maximum of five years, since it would otherwise risk undermining the coherence of the national system. [283] The same would apply to France, where minimum maximum penalties are generally not a problem, but if a prescribed minimum maximum penalty does not exist under the French system, the transposing law needs to align the penalty with the available next higher penalty (range).[284] Similar difficulties were reported for Finland, Greece and Sweden. [285]

Satzger (2019) highlights an additional factor that makes the specification of minimum maximum penalties questionable. [286] While the EU uses the prescription of minimum maximum penalties to classify and signal the seriousness of an offence, it appears that in most national jurisdictions it is not the maximum penalty, but the minimum threshold that is relevant for the determination of individual punishment.[287] Moreover, statutory maximum penalties in MS would vary considerably and range from, for example, twelve years in Finland to maximum penalties of up to thirty years in in France and Italy. [288]

In summary, it appears that prescribing **minimum maximum penalties** at EU level creates difficulties and experience so far suggests that they are not a particularly suitable instrument for greater harmonisation of penalties in the MS.

[282] B Linder, L Neumann and S Pohlmann, *Comparative Conclusion*, in: Satzger, *Harmonisierung strafrechtlicher Sanktionen*. [Linder et al, *Comparative Conclusion*], 538.
[283] H Fuchs, I Zerbes and M Stricker, *Länderbericht Österreich* in: Satzger, *Harmonisierung strafrechtlicher Sanktionen* [Fuchs, Zerbes & Stricker, *Länderbericht Österreich*], 52.
[284] J Leblois-Happe and J Frinchaboy, *Länderbericht Frankreich*, in: Satzger, *Harmonisierung strafrechtlicher Sanktionen* [Leblois-Happe & Frinchaboy, Länderbericht Frankreich], 220.
[285] Linder et al, *Comparative Conclusion*, 538.
[286] Satzger, *Harmonisation of Criminal Sanctions*,117.
[287] *Ibid.*
[288] *Ibid.*

18.6.2.2 Introduction of minimum penalties or specific penalty ranges

An alternative to the stipulation of minimum maximum penalties, is the specification of specific "**penalty ranges**" or "**minimum penalties**".[289]

In principle, Article 83 TFEU allows for the introduction of **minimum penalties**. Satzger (2019), however, notes that such a stipulation would be "either completely unknown or at least totally contrary to the legal system of many countries (especially Denmark and France)".[290] The introduction of minimum penalties would therefore risk creating a serious conflict with existing national criminal law systems, which are often deeply embedded in a MS's national identity. In this context, Satzger (2019) also refers to Article 4(2) TEU, which provides that the EU "shall respect MS" national identities, inherent in their fundamental structures, political and constitutional, inclusive of regional and local self-government" and which should be taken seriously. [291]

Other authors, namely Faure et al. (2016), refer to experiences from the US, where the introduction of mandatory sentencing guidelines was reported to have "devastating effects" on sanctions imposed in practice.[292] The prescribed **minimum sanctions** were perceived as too severe. The result was, that judges avoided imposing sanctions altogether. Similarly, prosecutors would probably refrain from further prosecuting a case if they considered the minimum sanction prescribed by law to be "unreasonable or unfair". [293] In more general terms, Faure et al. (2016) question whether a higher statutory level of penalty necessarily translates into greater deterrence and refer to criminological literature according to which this is not necessarily the case. [294]

In contrast to minimum penalties, the stipulation of a **penalty range**, such as "between 3 to 5 years imprisonment", is currently not covered by Article 83 TFEU. [295] The reason for this is

[289] *Ibid.*
[290] *Ibid.*
[291] *Ibid.*
[292] MG Faure et al, *Conclusions and Recommendations of the Research Project "European Union Action to Fight Environmental Crime" (EFFACE) (2016)* [online] [Faure et al, *Conclusions and Recommendations of the EFFACE Research Project*] 18.
[293] *Ibid.*, with further reference to an EFFACE workshop where participants expressed concern that prosecutors might react in similar ways and "simply drop charges in cases where they found the statutory sanction to be too high".
[294] Faure et al, *Conclusions and Recommendations of the EFFACE Research Project*, 18.
[295] See also Satzger, *Harmonisation of Criminal Sanctions*, 117.

that a penalty range necessarily combines a minimum penalty with a maximum penalty, and in this way also stipulates maximum penalties. Article 83 TFEU, however, only empowers the EU legislator to "**establish minimum rules"**. As Satzger (2019) estimates, finding a political majority for further extending the EU competences in this regard is currently rather unlikely.[296]

18.6.3 Political feasibility of further harmonisation measures

The considerations presented so far indicate a number of problems that arise with the prescription of penalties at supranational level. At present, amendments that further specify criminal penalties for environmental offences are thus likely to lack the necessary political support. Many MS still consider criminal law as a core domain of the national legislator and criminal law to be deeply interwoven with a country's national identity and right of self-determination. This becomes particularly evident in a ruling of the German Federal Constitutional Court (GFCC) on the Lisbon Treaty from 2009 in which the Court extensively addresses Article 83 TFEU. [297] On the harmonisation of criminal law, the Court ruled that the competences of the EU established by the Lisbon Treaty are in no case to be interpreted extensively because of the impact of criminal and criminal procedure law on "democratic self – determination". In this regard the Court states that

> "Due to the fact that **democratic self-determination** is affected in an especially sensitive manner by provisions of criminal law and criminal procedure, the corresponding basic **powers in the treaties must be interpreted strictly** - on no account extensively -, and their use **requires particular justification**. The core content of criminal law does not serve as a technical instrument for carrying out international cooperation but represents the particularly sensitive democratic decision on a **legal ethical minimum standard**." [298]

As previously noted, Article 83 (2) TFEU empowers the EU legislator to prescribe minimum rules where the approximation of criminal laws proves essential for the effective implementation of EU policies. The German Federal Constitutional Court gives a narrow interpretation to this provision and states that

> "this exceptional constituent element only exists and that the related power to legislate in criminal law may only be deemed conferred [where] it is demonstrably established

[296] *Ibid.*
[297] BVerfG, Judgment of the Second Senate of 30 June 2009 - 2 Bv E 2/08, paras. 1-421.
[298] *Ibid.*, para. 358.

that a **serious deficit as regards enforcement** actually exists and that it can **only** be remedied by a threat of sanction." [299]

18.6.4 Summary on scope for further harmonisation of criminal penalties for environmental crime in the EU MS

Amendments under the Treaty of Lisbon ("Lisbon Treaty"), which entered into force in 2009, have further empowered the EU in the area of criminal law. The Lisbon Treaty has endowed the EU with additional competences in the area of criminal law, including the harmonisation of substantive criminal law of the EU MS. However, the EU legislator still lacks the power to adopt directly applicable criminal law provisions. MS must still retain a significant degree of discretion in incorporating the new criminal law standards into their domestic legal systems, allowing them to choose between several approximately equivalent transposition measures, enabling them to maintain the coherence of their national criminal law systems.

More specifically, based on the above research the new powers of the EU legislator can be summarised as follows:

- EU legislation may now prescribe "**minimum rules**". This applies to both the types of offences that must be criminalised as well as the type and level of penalties for those offences ("establish minimum rules with regard to the definition of criminal offences and sanctions"- "minimum rules");
- This does not cover the stipulation of a **penalty range**, such as "between 3 to 5 years imprisonment" This is because a penalty range not only establishes minimum rules, but by necessity also stipulates a maximum penalty, which is currently not covered by Article 83 TFEU;
- **Minimum maximum penalties** at EU level are as such supported by Article 83(2) TFEU. However, they are reported to create difficulties. Experience so far suggests that they are not a particularly suitable instrument for greater harmonisation of penalties in the MS, in some cases resulting in higher penalty ranges than provided for in EU law.
- Other stipulations, including the prescription of **accessory sanctions**, such as remedy of damage, cancellation or suspension of a permit may be difficult to reconcile with the requirement that MS are given sufficient discretion to choose between several approximately equivalent transposition measures.

[299] *Ibid.*, para. 362.

- The same is likely to apply to a proposal that requires MS to take account of **aggravating and/or mitigating circumstances**, addressing, *inter alia*, the role of organised crime, unless the requirement is formulated in rather vague terms.

Against the background of the ongoing conflicts about the exact competences of the EU legislator in the field of criminal law and the described difficulties in integrating penalties prescribed by the EU into national legal systems, the question arises whether (further) harmonisation of penalties for environmental crimes is an effective instrument.

In principle, the call for higher and harmonised levels of sanctions in EU legislation aims to improve compliance with environmental law by natural or legal persons in the MS. This implies that the ECD is indeed being applied and enforced at national level. As the following Chapter 19 will show, enforcement of the ECD by national authorities or the lack thereof is a crucial problem. The causes for this as well as its repercussions for the effectiveness of the ECD are further investigated next.

19 Enforcement and practical relevance of environmental criminal law

Enforcement describes the process whereby full compliance with the law is monitored and secured and non-compliance systematically sanctioned by the courts. [300] Recent studies and reports confirm significant shortcomings in the enforcement of environmental criminal law in all MS and at all levels of the law enforcement chain. [301] Shortcomings have been identified mainly in the following areas:

- Statistical data on environmental crime;
- Technical knowledge, specialisation and training of law enforcement authorities, including prosecution and judiciary;
- Cooperation and communication between the different levels of the law enforcement chain;

[300] The definition of these terms is retrieved from Allio & Fandel, 11.

[301] See European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 33; Council of the EU, EU Environmental Criminal Law - Presidency Report (2019); Council of the EU, *Final Report on Environmental Crime (14852/19)*; European Economic and Social Committee, *Evaluation on the Environmental Crime Directive* (Information Report) NAT/767-EESC-2019-01597, adopted 11 December 2019, Brussels; Faure, Gerstetter, Sina & Vagliasindi, *Instruments, Actors and Institutions*; S Sina et al., *Steckbriefe zur Anwendung des Umwelt(straf)rechts und der Zusammenarbeit der dafür zuständigen Behörden in ausgewählten EU-Staaten* (2020) [online] [Sina et al., *Umweltstrafrecht in EU-Staaten*].

- Resources for law enforcement authorities;
- Political will and prioritisation of environmental crime. [302]

This chapter further investigates these shortcomings and their impact on the effectiveness of the ECD. It starts with an exploration of the **main actors and institutions** in the enforcement chain (Chapter 19.1) and **available data on enforcement levels** in the MS (Chapter 19.2). It then moves on to examine problems with the investigation and prosecution of environmental crime and the much-complained **lack of expertise and knowledge** in the enforcement chain (Chapter 19.3). Next, reported problems with the **cooperation and communication between the different levels of the law enforcement chain** are further investigated (Chapter 19.4). Finally, the **lack of political will and prioritisation of environmental crime** (Chapter 19.5) in the MS is addressed and conclusions are drawn (19.6).

19.1 Actors and institutions involved in the enforcement of environmental criminal law

At the national level, a variety of actors and institutions are involved in the enforcement of environmental criminal law provisions at different stages. Depending on the MS, these normally include the police, public prosecutors, criminal courts, administrative authorities and, in cross border cases, customs. Police investigations are typically triggered by monitoring activities or a complaint. Where there is sufficient evidence, the case is referred to the prosecution and eventually brought before a criminal court.

Other important actors in the area of environmental criminal law enforcement include voluntary practitioner networks and eNGOS.[303] Practitioner networks operate at national, regional and international level. At EU level, the most important networks include the European Network for the Implementation and Enforcement of Environmental Law (IMPEL), the European Network for Environmental Crime (EnviCrimeNet) of members of police and customs, the European Network of Prosecutors for the Environment (ENPE) and the European Union Forum of Judges for the Environment (EUFJE) of judges. They facilitate the

[302] For a more elaborate list of identified shortcomings, see European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 33.
[303] See L Smith & K Klaas, *Networks and NGOs Relevant to Fighting Environmental Crime: Study in the Framework of the EFFACE Research Project*, Berlin: Ecologic Institute (2015) [online] [Smith & Klaas, *NGOs and Environmental Crime*].

exchange of information and expertise across different jurisdictions and in this way help promote implementation and enforcement of environmental law.

Environmental NGOs also operate at and across different levels of governance and play an important role in information gathering, awareness raising and capacity building. They educate the public about the nature and consequences of environmental crime, detect environmental crime and expose perpetrators through naming and shaming campaigns. NGOs also represent individual victims in court. These contributions of eNGOs in the enforcement of environmental criminal law have been highlighted in several reports.[304]

19.2 Data on enforcement levels in the EU MS and for different levels of the enforcement chain

In order to assess the enforcement of environmental criminal law and allocate potential problems along the enforcement chain, data on the detection, prosecution and conviction of environmental crime in the EU MS is crucially important. However, several studies and reports highlight a problematic lack of data on environmental crime, [305] as well as of systems to centrally collect, manage and analyse such data, both at EU and national level. [306] As a consequence, the presently available data are based on multiple individual statistics and sources in the MS.[307] The European Commission notes that the resulting lack of transparency on what compliance authorities actually do and what they achieve would complicate a "systematic and evidence-based assessment of the performance of compliance systems and individual authorities". This would make it difficult to help improve and strengthen their effectiveness. [308] As noted before, the proposal for reporting requirements under the ECD was removed from the final version of the Directive.

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[304] Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 22-23; Smith & Klaas, *NGOs and Environmental Crime*.

[305] See for example European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 8; Council of the EU, *Final Report on Environmental Crime (14852/19)*, 21; Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 28; EEB, *Crime and Punishment*, 22; European Commission, *Environmental Compliance Assurance – Scope, Concept and Need for EU Actions: Commission Staff Working Document Accompanying the Document "EU Actions to Improve Environmental Compliance and Governance"* SWD(2018) 10 final, Brussels, 18 January 2018 [European Commission, Environmental Compliance Assurance SWD(2018) 10 final], 18.

[306] See Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 29. An exception is the collection of data on illegal wildlife trafficking in the EU within EU-TWIX (European Union Trade in Wildlife Information eXchange), managed by the NGO Traffic (https://www.eu-twix.org), and the collection of forest-fire information under the European Forest Fire Information System (EFFIS), which receives forest-fire data from EU Member States under the Forest Focus Regulation (EC) No 2152/2003.

[307] See Council of the EU, *Final Report on Environmental Crime (14852/19)*, 8.

[308] European Commission, Environmental Compliance Assurance SWD(2018) 10 final, 18.

The following chapters provide a summary of the presently available data on law enforcement in the MS and discuss the phenomenon of the large dark figure in the area of environmental criminal law, i.e. the high number of committed crimes that are never reported or never detected.

19.2.1 Data on enforcement levels in different MS

The most recent and comprehensive information on enforcement levels in the MS is available from the European Commission's evaluation of the ECD, for which data was compiled from various sources.[309] Data for MS was collected in three categories: "waste crimes", "wildlife crimes" and "other environmental crimes".

According to the Commission, the data on **court convictions for environmental crime** in the MS since the adoption of the ECD in 2008 was the most complete type of data that could be collected with data available for 17 MS.[310] The data show the number of convictions in the MS between 2008 and 2016 and indicate very different levels of conviction, ranging from very low numbers in Austria, Bulgaria and Romania, mostly in single digits, to a comparatively high level in Germany, with an average of 1200 convictions per year. In two MS, Spain and Portugal, the number of convictions has increased quite significantly since the adoption of the Directive in 2008. In Spain, the number of convictions has almost doubled from 527 in 2008 to 975 in 2016. In Portugal, the number more than doubled from 86 convictions in 2008 to 189 in 2016. In other MS, such as Latvia and Lithuania, the number of convictions remained relatively stable. In the Czech Republic and Poland, the number of convictions for environmental crimes has decreased.

A few sources that provide more specific data for individual MS are examined in more detail below.

[309] European Commission, ECD Evaluation/Part II, SWD(2020) 260 final, 241-254. For information on how the data was compiled, see page 94 (Part II) of the evaluation and European Commission, Environmental Crime Directive Evaluation – Part I, SWD(2020) 260 final, 48, footnote 131. Sources included country reports from the 8th Round of Mutual Evaluations, Member States' responses to the Finnish Presidency questionnaire, country reports from EFFACE, and other national sources, on a case-by-case basis.
[310] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 47.

In **Germany**, a very comprehensive report recently compiled data to assess the status quo of environmental crime and environmental criminal law in Germany.[311] According to the **police crime statistics** cited in the report, the **number of registered cases of environmental crime** dropped by 32% between 2004 and 2016, i.e. from 29,117 registered cases in 2004 to 19,704 cases in 2016. In contrast, the total number of cases for all types of crime decreased by only 4% in the same period.

The numbers for the **prosecution and conviction of environmental crime** between 2004 and 2016, on the other hand, remained relatively stable and only differ slightly from the numbers for all types of crime. In 2016, 74% of environmental crime cases resulted in a conviction, 23% of the cases were discontinued and 3% of the defendants were acquitted. This compares to 82% of convictions, 15% of discontinued proceedings and 3,5 of acquittals for all types of crimes during the same period.

Of the sanctions imposed by the courts for environmental crimes, fines were the most frequently applied type of sanctions and were imposed in 1,813 cases in 2016. In contrast, only 78 of the cases heard by the courts in 2016 resulted in a prison sentence.[312]

The report, however, also highlights a number of factors that limit the informative value of the statistical data in Germany.[313] To begin with, crime statistics, by their very nature, can only register and inform about detected crimes, which leaves out the high number of unreported or undetected crimes in the area of environmental criminal law, a problem that will be discussed in more detail below. Secondly, police crime statistics in Germany only document the number of crimes, but not the specific nature (seriousness) of the crime or the damage caused by the crime. [314] Lastly, detailed information about administrative enforcement is lacking, a finding that is of particular relevance in Germany, where administrative sanctions are an important instrument for the enforcement of environmental law.[315]

In **Austria**, some noteworthy data on the prosecution of environmental crime emerged from a parliamentary question in 2018. The parliamentary question concerned, among other things, the

[311] Gerstetter et al, *Status quo Umweltstrafrecht, 23.*
[312] *Ibid.,* 24.
[313] *Ibid.*
[314] *Ibid.*
[315] *Ibid.*

figures on the prosecution and conviction of environmental crime in Austria.[316] The official response from the Ministry of Justice shows that between 2014 and the first half of 2018, a total of **1313 environmental crimes were registered with the Public Prosecution Service**, but **only 44 court convictions** for environmental crimes. Thus, only 3.35% of the cases registered with the Public Prosecution Service result in convictions, which indicates a high number of discontinued proceedings or acquittals. This points to a lack of practical relevance of environmental criminal law in Austria, a finding that is confirmed by other sources. The most common cases of environmental crime in Austria are minor offences ("Bagatellfälle"), which include farmers who cause environmental damage in the course of field management (e.g. cases of manure spreading) or environmental hazards during operational waste disposal (handling of waste oils, etc.).[317] The available statistical data suggest that the introduction of the ECD has not had any impact on the level of court convictions, with the numbers persistently remaining at the lower end, also compared to other EU MS.[318]

For Bulgaria and the Czech Republic, data from the aforementioned 2016 study on the illegal killing or taking of birds indicate serious problems with the enforcement of environmental criminal law provisions in these two MS. [319] Perpetrators are reported to be regularly released from liability or crimes are not further investigated.

19.2.2 Dark figure of unrecorded environmental crime

The large **dark or hidden figure** of unreported or undetected crime, i.e. the difference between the numbers recorded and the actual number of crimes committed, is a problem well acknowledged in the area of environmental crime.[320] The number of unreported or undetected cases in the area of environmental crime is significantly higher than for other crimes. According to estimates, 20%-40% of all environmental crimes remain undetected; in some cases, the figure is estimated to be as high as 90%.[321] As will be demonstrated, several features of environmental

[316] A. Noll et al., *Schriftliche Anfrage betreffend Umweltschutz durch Strafrecht* (03 July 2018) [Austrian Parliament] [online]; Bundesminister Dr Josef Moser, *Anfragebeantwortung zu der schriftlichen Anfrage betreffend Umweltschutz durch Strafrecht* (2018) [online].
[317] Reindl-Krauskopf & Salimi, *Umweltstrafrecht*, 31.
[318] European Commission, ECD Evaluation/Part II, SWD(2020) 260 final, 241-245.
[319] Torres Rosell & Marquès Banqué, *Implementation of Directive 2008/99/EC,* 42 – 45.
[320] See for example Gerstetter et al, *Status quo Umweltstrafrecht*, 24; European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 24.
[321] Gerstetter et al, *Status quo Umweltstrafrecht*, 43.

crime mean that environmental crimes are more likely to go undetected. Features that complicate their detection have been described as follows: [322]

- **Latency**: often, the harmful effects of environmental crime only become evident years after the offence was committed. [323] This time delay between the commission of the crime and the manifestation of environmental harm is also referred to as latency. [324] A long latency period can make it difficult to prove that a crime has taken place or to establish the necessary causal link between the crime and the harm to the environment.
- **No direct human victim**: victims of environmental crimes often lack incentives to inform the authorities or to initiate civil proceedings ("victimless crime") compared to other types of crimes, e.g. crimes against the person or property, there is often no direct human victim in environmental crimes. This is especially relevant for offences related to habitats and wildlife. Environmental crimes are therefore also often referred to as "victimless". Although, as *Gerstetter et al. (2019)* point out, in the strict sense, this is not true, because the whole of society is harmed by the effects of environmental crime on health and well-being, available resources and the opportunities of future generations.[325]
- **Widespread harm**: the harm caused by the environmental offence may be spread over a large number of victims and the concrete harm to each victim so small that there is insufficient incentive for any victim to report the crime.
- **Harm not attributed to the environmental crime**: the victims do not identify themselves as victims because they do not attribute the harm, e.g. the development of a disease, to the crime.

Considering the resulting difficulties in the detection of environmental crime, a far more **proactive approach** is required to enforce environmental criminal law effectively.[326] *Ex-ante* monitoring and proactive inspections have been identified as essential requirements for the

[322] See E Skinnider, C Nwapi & P Cloutier de Repentigny, *Victims of Environmental Crime – Mapping the Issues* (2011) [online] [Skinnider et al., *Victims of Environmental Crime*], 25-26, who discuss the characteristics of environmental crime from a victim's perspective; M G Faure *Environmental Liability* in *Tort Law and Economics* (Edward Elgar 2009) 247–286 [online], Chapters 6-8, who disccusses the issues in the context of tort law. Gerstetter et al, *Status quo Umweltstrafrecht,* 24.
[323] See also Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis,* 38; Skinnider et al., *Victims of Environmental Crime,* 35.
[324] See Faure *Environmental Liability* in *Tort Law and Economics*, 261.
[325] Gerstetter et al, *Status quo Umweltstrafrecht,* 78.
[326] *Ibid.*

successful detection, prosecution and punishment of environmental crime.[327] Gerstetter et al. (2019) illustrate the requirement for a more proactive approach with observations of law enforcement authorities in Germany, that clearly point to a correlation between frequency of inspections and number of detected cases.[328] Law enforcement agencies in Germany had reported that inspections often led to unexpected discoveries of environmental crime.[329] In the case of corporate crime, the crime had often already been carried out over a long period of time by the time it was discovered. Another argument put forward by Gerstetter et al. (2019) in support of a more proactive approach in the area of environmental crime are differences in the number of detected crimes observed in relation to different monitoring capacities in the German Federal States. States equipped with better monitoring capacities would also display higher numbers of environmental crime. Finally, the authors of the German study argue with the high costs for the general public when environmental criminal law is not proactively detected and enforced, since environmental damage resulting from environmental crime would often lead to high remediation costs for the public.[330]

19.2.3 Summary of findings on data on environmental crimes

In summary, the findings suggest the following needs:

- Improved data availability on the detection, prosecution, and conviction of environmental crime across EU MS. Such data are essential to assess the effectiveness of enforcement systems and to identify weak points along the enforcement chain;
- The establishment of a centralised database with harmonised criteria for data collection. This would allow for the systematic recording, management, and evaluation of environmental crime data at both national and EU levels.
- A more proactive approach to detection and enforcement, which is indicated by high levels of unrecorded environmental crime ("dark figure").

The available data to date indicates that problems with the enforcement of environmental crime are located at different levels of the enforcement chain. These issues—together with the need for a more proactive approach to detection and enforcement—are further explored in the

[327] *Ibid.*
[328] *Ibid.,* 23
[329] *Ibid.*
[330] *Ibid.,* 78.

following chapter, which examines the importance of technical knowledge, specialisation, and training within the enforcement chain.

19.3 Importance of technical knowledge, specialisation and training

According to several reports and studies, one of the main challenges in countering environmental crime in the MS is the lack of technical knowledge, specialisation and training of the main actors in the enforcement chain.[331] Environmental crime cases require a **high degree of expertise**, are **technically challenging** and present **problems of proof**, especially in the area of long-term damage and cumulative causality. Practitioners often describe the application of criminal law to cases of environmental damage and pollution as difficult. They highlight the following in particular:

- **formulations of environmental criminal law**, especially the **use of vague notions**;
- the dependence on administrative law which would create a highly complex and fragmented **legal framework for environmental crime**;
- environmental crime cases that involve a corporate context, which would additionally require handling the classical problems in the field of **white-collar crime**.

Concerning problems with the "**formulation of law**", practitioners stated that, unless specified by case law or guidelines, the **use of vague notions** in environmental criminal law would make it difficult to determine whether a particular incident would fall within the scope of a criminal offence.[332]

Furthermore, due to its dependence on administrative law, the legal framework for environmental crime was perceived as highly complex and fragmented. Administrative rules and regulations would frequently change and were described as "**not sufficiently definite**" for application under criminal law.[333] In France, for example, practitioners reported challenges with the **fragmented nature of environmental criminal law provisions**, because they would be often scattered across various legal texts. [334] This would directly undermine the "willingness,

[331] See European Commission, ECD Evaluation/Part I, *SWD(2020) 260 final*; Council of the EU, *EU Environmental Criminal Law - Presidency Report 12801/19*; Council of the EU, *Final Report on Environmental Crime (14852/19)*; EESC, *Evaluation on Environmental Crime Directive*;
[332] EnviCrimeNet, *Intelligence Project on Environmental Crime* (2015, The Hague) [online] [EnviCrimeNet, Intelligence Project], 13-14.
[333] *Ibid*.,12.
[334] Sina et al., *Umweltstrafrecht in EU-Staaten*, 23.

motivation and even ability to investigate" and as a result weaken the enforcement of environmental criminal. [335] For less experienced practitioners, the complex and challenging legal framework would make it difficult to appropriately classify the crime or assess aggravating circumstances, ultimately leading to inappropriate sanctions or the unjustified dismissal of cases.[336]

In addition to the inherent difficulties of environmental criminal law, practitioners consulted on the challenges of environmental crime identified **white collar crime** as a further critical challenge in the context of environmental criminal cases.[337] If environmental crimes were committed in a corporate context, the classic problems of white-collar crime would also have to be dealt with, including the difficulties in identifying the person who committed the crime and assigning individual responsibility in a corporate context.

In summary, the successful investigation, prosecution and conviction of environmental crime clearly requires high levels of knowledge, specialisation and experience. [338] As will be demonstrated below, crucial actors in the law enforcement chain, including prosecutors and judges (Chapter 19.3.1.), the police forces (Chapter 19.3.2.) and administrative environmental authorities (Chapter 19.3.3.) are often not sufficiently trained and equipped to tackle the challenges in the area of environmental crime.

19.3.1 Specialisation and knowledge in the prosecution services and judiciary

According to the findings of several studies and reports the **degree of specialisation and experience within the prosecution services and the judiciary** in the area of environmental crime is often inadequate. [339] In many cases the prosecution services and the judiciary would not have the expertise and capacity to successfully handle the technical and often highly complex cases. [340]

[335] EnviCrimeNet, Intelligence Project, 12.
[336] See further below and Council of the EU, *Final Report on Environmental Crime (14852/19)*, 61.
[337] See also Europol, Environmental Crime in the Age of Climate Change: Strategic Threat Assessment (Europol 2022), [Europol, *Environmental Crime*].
[338] See also Council of the EU, *Final Report on Environmental Crime (14852/19)*, 32.
[339] Council of the EU, *Final Report on Environmental Crime (14852/19)9*, 32; Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 34.
[340] Council of the EU, *Final Report on Environmental Crime (14852/19)*; Faure, Gerstetter, Sina & Vagliasindi, *Instruments, Actors and Institutions*.

Most MS would lack **formal specialised structures for the prosecution of environmental crime**. Environmental crime cases were often handled along with various other types of crime, with no specialised services within the prosecution offices or specific chambers / judges at the criminal courts for the examination, prosecution and adjudication of environmental crime. This would leave judges and prosecutors without the opportunity to build the necessary expert knowledge or experience in the field of environmental crime. [341] In many MS, the courts would not always be able to handle large-scale environmental crime cases, due to both a **lack of specialisation of judges and a shortage of staff**. [342] Prosecutors and judges would often already handle a high workload, even without environmental crime cases, which are difficult to investigate and work intensive. [343] Confronted with limited resources and the need to discern where to invest their time, practitioners, faced with highly complex and time-consuming environmental cases and insufficient training, would prefer choosing cases with higher chances for successful outcomes and public acknowledgment. [344] It is obvious that these shortcomings observed in the prosecution services and the judiciary will have a direct impact on the number of convictions in environmental crime cases, which is generally deemed to be too low.

In addition to a **lack of specialisation and a shortage of staff,** practitioners also point out that prosecutors and judges were often unaware of the seriousness of environmental crimes in general. Compared to other crimes, environmental crimes would still be perceived as minor offences, and the extent and potential threat of environmental crimes would often be underestimated. [345]

19.3.2 Specialisation and knowledge within the police forces

Police forces are crucial for the active monitoring and detection of environmental crime. Officers on the ground report that the **establishment of the facts** and the **identification of the perpetrator(s)** are among the biggest challenges in environmental crime cases. [346] This can include the ability to correctly identify a bird species or the need for scientific conclusions. Other difficulties highlighted by practitioners refer to the assessment and documentation of

[341] Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 34; Council of the EU, *Final Report on Environmental Crime (14852/19)*, 33.
[342] Council of the EU, *Final Report on Environmental Crime (14852/19)*, 34.
[343] See EnviCrimeNet, Intelligence Project, 14.
[344] *Ibid.*, 14.
[345] *Ibid.*, 15.
[346] Gerstetter et al, *Status quo Umweltstrafrecht*, 24.

environmental findings during an inspection that holds up as evidence in court or the use of forged documents by perpetrators. [347]

It appears that at least in some MS the degree of specialisation within the police forces is higher than within the prosecution services or the judiciary. These MS have dedicated, specialised units or services that deal with environmental crime cases.[348] The units are either centralised or operate at the local and/or regional level. They support local authorities or in the case of centralised units coordinate activities throughout the country. However, such specialized units within national police forces are not the norm. In other MS, a lack of specialisation or only partial specialisation , with specialised staff dealing with environmental crime among other responsibilities, prevent the police from proactively monitoring and seeking out environmental crime.[349]

19.3.3 Specialisation and knowledge within administrative environmental authorities

In addition, in almost all MS, administrative authorities play an important role in the enforcement of environmental law.[350] They carry out **controls** and **inspections** and impose administrative measures and penalties in the case of environmental offences. Enforcement activities carried out by administrative authorities, including inspections and controls, have been identified as "vital" for the detection of environmental crime. [351] According to EnviCrimeNet, supervisory authorities are, in most MS, the main source for reporting crimes to the law enforcement authorities. [352]

The organisation and powers as well as the number of officials within these authorities can vary significantly from one MS to another. [353] Due to their specialisation in environmental matters, the level of experience and knowledge within environmental administrative authorities is generally assumed to be superior to that of other actors in the law enforcement chain.[354] The

[347] Council of the EU, *Final Report on Environmental Crime (14852/19)*, 61.
[348] See examples for specialized police forces in Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis,* 35; Council of the EU, Council of the EU, *Final Report on Environmental Crime (14852/19)*, 36.
[349] Council of the EU, *Final Report on Environmental Crime (14852/19)*, 36-37.
[350] EnviCrimeNet, Intelligence Project, 10.
[351] *Ibid*. The role of inspections is further discussed in Part IV below.
[352] EnviCrimeNet, Intelligence Project, 11. For a more detailed discussion on the role of police forces versus administrative authorities in the detection of environmental crime, see Faure, Gerstetter, Sina & Vagliasindi, *Instruments, Actors and Institutions*, 100-104.
[353] Council of the EU, *Final Report on Environmental Crime (14852/19)*, 40.
[354] See for example Faure, Gerstetter, Sina & Vagliasindi, *Instruments, Actors and Institutions*, 112-113.

Council of the European Union (2019) describes the overall degree of specialisation and knowledge in the administrative environmental authorities as "generally satisfactory or sufficient, though to differing extents".[355]

As the EnviCrimeNet (2015) report notes, available resources, priority setting and the underlying national legislation are also important factors for administrative authorities. They influence their efficiency and result in a direct impact on the number of crimes reported to the law enforcement authorities. [356]

19.3.4 Summary of findings on technical knowledge, specialisation and training

The above findings demonstrate that technical knowledge, specialisation and training of key actors as well as resources are critically important for effective enforcement of environmental crime. Environmental crime cases are demanding for practitioners, who often describe the application of criminal law to environmental crime cases as particularly complex. They are technically challenging, require a high degree of both legal and scientific expertise (such as the ability to identify different plant or animal species) and present problems of proof, especially in the area of long-term damage and cumulative causality.

In most MS technical knowledge, specialisation and training of key actors in the enforcement of environmental criminal law still appear insufficient:

- **Judges** and **prosecutors** are reported to frequently lack the expertise, training and resources to successfully handle the technically challenging and often highly complex environmental crime cases.
- In some MS, **police forces** have higher specialisation in handling environmental crime than prosecution services or the judiciary, with dedicated units operating locally, regionally, or centrally to support or coordinate activities. However, such specialised police units are not the norm in all MS.
- Most MS lack **formal specialised structures** for the prosecution of environmental crime, such as specialised units within the police forces, prosecution services or the judiciary.
- The overall degree of specialisation and knowledge in the **administrative environmental authorities** as "generally satisfactory or sufficient, though to differing extents".[357]

[355] Council of the EU, *Final Report on Environmental Crime (14852/19)*, 41.
[356] EnviCrimeNet, Intelligence Project, 12.
[357] Council of the EU, *Final Report on Environmental Crime (14852/19)*, 41.

19.4 Communication and cooperation between different actors in the enforcement chain

Numerous studies report problems in communication and cooperation between different actors in the enforcement chain. These would significantly undermine effective prosecution and enforcement of environmental criminal law.[358]

Due to the mostly accessory nature of environmental criminal law, cooperation between administrative and law enforcement authorities is of particular importance. [359] Information obtained by administrative authorities in the course of their control and monitoring activities can help substantiate suspicions of environmental offences and in this way support the work of law enforcement authorities. [360] The necessary communication and cooperation has been reported to be undermined by a number of problems. [361] Among the identified shortcomings are a lack of standard procedures, an absence of appropriate tools for information exchange and a reluctance of administrative authorities to share information.[362] Cooperation, if any, would often be low-level and "case-by-case" without a common strategy to coordinate action against environmental crime.[363] Consequently, the strengths, expertise and knowledge of the various institutions involved would not be used effectively. [364]

Criticism also comes from NGOs. They claim that the national competent authorities do not systematically involve them in the fight against environmental crime and suggest that cooperation between authorities and NGOs should be improved[365]

[358] Council of the EU, *Final Report on Environmental Crime (14852/19)*; EEB, *Crime and Punishment*; Gerstetter et al, *Status quo Umweltstrafrecht*, 93; MG Faure et al, *Conclusions and Recommendations of the Research Project "European Union Action to Fight Environmental Crime" (EFFACE) (2016)* [online] [Faure et al, *Conclusions and Recommendations of the EFFACE Research Project*]; EnviCrimeNet, *Intelligence Project*.
[359] Gerstetter et al, *Status quo Umweltstrafrecht*, 93.
[360] *Ibid*. Problems of cooperation and communication are also reported to take place among different investigative units.
[361] EnviCrimeNet, Intelligence Project, 16.
[362] *Ibid*.
[363] *Ibid.*, 13.
[364] *Ibid.*, 16.
[365] See EESC, *Evaluation on Environmental Crime Directive*.

19.4.1 Examples for communication and cooperation in selected EU MS

Two recent studies have investigated communication and cooperation in several MS, comparing *inter alia* Germany, Denmark, Belgium, Spain and Poland. [366] The findings show a mixed picture of cooperation and communication. They are discussed in more detail below.

19.4.1.1 Germany

In Germany, rules at both federal and state level govern cooperation between administrative authorities and law enforcement authorities in combating environmental crime. [367] In many cases, the obligation of administrative authorities to report environmental crimes to the public prosecutor's office is made dependent on further requirements, such as whether the notification is required in the public interest. [368] Some Länder distinguish between **absolute reporting obligations** for **serious environmental offences** and **relative reporting obligations** for **minor environmental offences**. In the case of minor offences, the decision on reporting to the public prosecutor's office remains at the discretion of the administrative authorities.

In addition to these reporting requirements, various rules at state level institutionalise meetings between administrative and law enforcement authorities in order to promote the exchange of information and the coordination of activities.[369]

In practice it appears that administrative authorities in Germany are rather reluctant to share information with the prosecution services.[370] The reasons for this reluctance of administrative authorities to share information have been identified by the study as follows:

- the cooperative relationship that administrative authorities maintain with the companies they monitor. Where problems arise, the authorities prefer to settle the situation with the instruments at their disposal instead of involving the public prosecutor's office;
- the fear that they themselves may have committed a criminal offence;
- preparing documents and evidence for criminal proceedings is time-consuming and criminal proceedings are not expected to produce satisfactory outcomes;

[366] See Gerstetter et al, *Status quo Umweltstrafrecht*; Sina et al., *Umweltstrafrecht in EU-Staaten,* with further references.
[367] Gerstetter et al, *Status quo Umweltstrafrecht,* 94.
[368] *Ibid.*
[369] *Ibid.*
[370] *Ibid*., 94, with further references.

- administrative fines, unlike criminal penalties, usually benefit the administration's budget.

In addition, administrative authorities have increasing difficulties in obtaining relevant information to pass on to prosecutors due to scarce resources.[371]

19.4.1.2 Denmark

For Denmark the cooperation between the competent authorities is described as overall satisfactory.[372] Cooperation between local administrative authorities, the police and the public prosecutor's office is formally regulated and local authorities must involve the police and the public prosecutor's office in case of suspected environmental criminal offences. Conversely, the police must communicate all reported violations to the local authorities. The good collaboration between the different actors is attributed to geographical proximity and decades of experience in combating environmental offences.

Environmental data of a general nature is primarily compiled in the Danish Environmental Portal, a web portal available to public authorities, businesses, journalists as well as private individuals. A special database on environmental offences does not seem to exist.

19.4.1.3 Belgium

In Belgium, strengthening the role of administrative fines for minor offences is reported to have had a positive impact on the cooperation between administrative authorities and prosecutors.[373] Cooperation is *inter alia* required to determine which offences should be prosecuted by the public prosecutor's office and which should be dealt with by administrative fines. [374]

A notable institution in Belgium is the Flemish High Enforcement Council for Spatial Planning and Environment (VHRM) in the Flemish Region.[375] The Council was established to promote cooperation between the main authorities involved in the enforcement of environmental law. Officials represented on the VHRM belong to federal Belgian organisations such as the police and the public prosecutor's office and Flemish regional organisations, including specialized

[371] *Ibid*., 94, with further references.
[372] C H Stefes, *Steckbrief Dänemark*, in: Sina et al., *Umweltstrafrecht in EU-Staaten*, 17-18 [Stefes, *Steckbrief Dänemark*].
[373] M Faure, *Steckbrief Belgien*, in: Sina et al., *Umweltstrafrecht in EU-Staaten* [Faure, *Steckbrief Belgien*].
[374] *Ibid.*, 9-11.
[375] *Ibid.*, 12.

environmental officials. Enforcement practitioners from different levels of governance meet once a month to exchange views on the effectiveness of enforcement.

In addition, the VHRM publishes an annual report on environmental enforcement on its website with detailed information, including the number of violations, the number of officers involved in enforcement and the time spent on enforcement. This data supports an evidence-based assessment of how effective and helpful a particular enforcement policy is or what changes would be appropriate. The European Commission has highlighted VHRM's annual reports on environmental enforcement as best practice. [376]

19.4.1.4 Spain

The information available for Spain indicates that cooperation between the different authorities involved in the fight against environmental crime has improved in recent years. [377] When evidence suggests that an environmental crime has been committed, the administrative authorities are obliged to refer the case to the law enforcement authorities. While in some provinces in Spain prosecutors describe cooperation between prosecutors and administrative authorities as good, others describe cooperation as rather poor. Prosecutors from several localities have complained that, in their view, the administrative authorities do not always sufficiently fulfil their obligations and instead impose administrative sanctions. Compared to previous years, however, an overall improvement in the relationship between the two actors has been noted. Some problems are reported by the study in the exchange of information between the public prosecutor's office and the police, who cannot fully access each other's databases.

19.4.1.5 Poland

Significant shortcomings in the cooperation between different actors in the enforcement chain are reported for Poland. [378] These would include a lack of cooperation and coordination between prosecutors and environmental authorities, as well as structural communication deficits within the environmental authorities. [379] The observed shortcomings would manifest themselves in an

[376] Faure, Steckbrief Belgien, 14.
[377] C Gerstetter, Steckbrief Spanien, in Sina et al., *Umweltstrafrecht in EU-Staaten* [Gerstetter, *Steckbrief Spanien*], 36.
[378] L Mederake, *Steckbrief Polen*, in: Sina et al., *Umweltstrafrecht in EU-Staaten* [Mederake, *Steckbrief Polen*], 29-31.
[379] *Ibid.*

enforcement deficit as only few environmental offences are reported and even fewer are prosecuted.

19.4.1.6 Netherlands

An interesting example for the organisation of effective communication and cooperation among stakeholders is the national **Environmental Law Enforcement Strategy** by the Dutch Ministry of the Environment.[380] A step-by-step plan combined with a so-called intervention matrix details the required steps and consideration to be taken by the authorities. Step 1 requires the authorities to position the findings on the intervention matrix. The matrix considers the impact of the offence and the intentions of the offender. Once these two aspects have been considered, the next steps are:

- determination of aggravating facts (such as profit motive or commitment of the offence in combination with other relevant offences to conceal the offence);
- consultation of the public administration with the police and Public Prosecution Service, or the police and Public Prosecution Service with the public administration, on whether the application of administrative and/or criminal law is indicated;
- additional steps based on the intervention matrix;
- reporting, i.e. clear and transparent recording and documentation of the decisions taken by the enforcement authorities, making it possible to verify whether the authorities have acted within the rules applicable to them when taking their decisions.

In more general terms, the strategy states that enforcement of environmental law in the Netherlands should be strategic and that enforcement should be based on certain principles. These principles include:

- **Independence**: Strong, effective and independent enforcement institutions.
- **Professionalism and expertise**: Training, education, knowledge and information exchange.
- **Reliability**: General duty to enforce and to be accountable.
- **Simplicity**: Appropriate interventions for each finding and how to achieve them – "making comparable choices in comparable situations and choosing and applying interventions in similar ways nationwide."

[380] For further reference, see Gerstetter et al, *Status quo Umweltstrafrecht,* 94.

- **Joint action:** Consultation, coordination and systematic and information-driven joint action.

19.4.2 Summary of findings on cooperation and communication between different actors of the enforcement chain

In summary, the evidence created by numerous studies and reports suggests a lack of communication and cooperation in national enforcement chains with serious repercussions for the effective prosecution and enforcement of environmental criminal law in the MS. Considering the mostly accessory nature of environmental criminal law and the strong dependence of criminal law on decisions taken by administrative authorities, this finding appears of particular relevance, especially as regards the apparently insufficient cooperation and communication between administrative and law enforcement authorities.

Among the identified shortcomings are currently:

- No common strategy to coordinate action against environmental crime.
- No effective use of strengths, expertise and knowledge of various institutions involved due to lack of a common framework.
- Lack of standard procedures.
- Absence of appropriate tools for information exchange.
- Structural communication deficits within environmental authorities.
- Reluctance of administrative authorities to share information for various reasons, including cooperative relationships with companies they monitor, fear to have committed a criminal offence, lack of resources, perceived lack of satisfactory outcomes in criminal procedures and administrative fines unlike criminal penalties benefitting the administration's budget.
- Unsatisfactory exchange of information between public prosecutor's office and police, who cannot fully access each other's databases.

A closer look at the different MS also reveals considerable differences in the approach taken to the management of the enforcement chain. Noteworthy are the Flemish High Enforcement Council for Spatial Planning and Environment (VHRM) in the Flemish Region of Belgium or the national Environmental Law Enforcement Strategy by the Dutch Ministry of the Environment. A consolidated national strategy for the enforcement of environmental criminal law (Netherlands) as well as a national or regional body to facilitate collaboration and

communication (Flemish Region of Belgium) appear to be two necessary measures to effectively overcome present shortcomings. Both may serve as best practice should there be future attempts to harmonise enforcement across MS, for example through guidelines or best practice reports.

19.5 Lack of political will to enforce environmental criminal law

The above findings on the enforcement of environmental criminal law indicate a lack of political will to enforce environmental criminal law in the MS. A report published by the Environmental Crime Network (EnviCrimeNet) in 2015 reports similar findings.[381] According to the report, the majority of MS does not prioritise the enforcement of environmental criminal law. Low priority is given to it in some MS it would have, and a few MS would indeed prioritise it.

In some MS the lack of political will to prosecute environmental offences and enforce environmental criminal law is more evident than in others. Recent developments in Poland and Romania show the extent to which MS authorities can be implicated in breaches of EU environmental law and in particular the BHD. In both countries, large areas of primeval forests are increasingly threatened by commercial logging. Notably, many parts of these forests are protected as part of the Natura 2000 network under the BHD. The following is a detailed presentation of the situation in Poland and Romania, which exemplifies the effects of political will as well as the scope for action of various actors already discussed in the context of this dissertation.

19.5.1 Poland

In Poland, the ancient Bialowieza Forest is home to ancient trees and a variety of endangered species typical for such forests, including the pygmy owl, the boreal owl, the white-backed woodpecker, and the three-toed woodpecker. [382] It is also home to the largest remaining population of European bison, which roam the forests.

[381] EnviCrimeNet, Intelligence Project, 12, stating that "In only a few jurisdictions are environmental crimes a priority; in most they are not, and in some jurisdictions environmental crimes have a low priority."
[382] For further reference, see L Ławicki, *The Białowieża Forest – a new threat,* British Birds, 9 May 2017 [online].

In March 2016, the Ministry of the Environment under its then Minister of the Environment, Jan Szysko, decided to triple logging in the protected forest.[383] He claimed that logging of the ancient trees was necessary to counter beetle infestation and forest fires. Spruce bark beetles are mostly attracted to already dying and weakened trees.

According to scientist, there was, however, no scientific proof that felling of the trees was necessary. [384] On the contrary, scientists across Europe warned, the felling of the tress would be harmful to the ecosystem and would lead, amongst other things, to the deterioration or destruction of breeding sites of protected bird species and to the disturbance of their rearing periods.[385]

Despite scientific warnings, protests by environmentalists and a national petition signed by 120 000 Poles, the ministry allowed logging to continue. [386] In April 2016, several environmental NGOs filed a formal complaint with the European Commission, maintaining that the decision to allow a tripling of logging violated Article 6 of the HD and Article 4 of the BD.[387]

On 17 June 2016, the Commission sent a letter of formal notice under Article 258 TFEU to the Polish authorities, stating that the authorisation of increased timber extraction was in breach of the BHD. In their reply to the letter of formal notice a month later, the Polish authorities rejected the Commission's complaints in their entirety.

On 28 April 2017, the Commission sent a reasoned opinion to Poland, claiming Poland had failed to meet its obligations under Article 6(1) and (3) and Article 12(1)(a) and (d) of the HD and Article 4(1) and (2) and Article 5(b) and (d) of the BD. The Commission set a deadline of one month for the Polish authorities to comply with the reasoned opinion. The Commission justified the deadline by the fact that tree felling had already started and there was thus an imminent risk of serious and irreversible damage to a Natura 2000 site.

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[383] For further reference, see E Stokstad, 'Logging in Europe's Primeval Forest Ruled Illegal' (Science, 18 April 2018) [online].
[384] International Union for Conservation of Nature (IUCN), *Białowieża Forest Case: Judgement of the Court of Justice of the EU* (World Commission on Environmental Law, 8 May 2018) [online]
[385] L Ławicki, The Białowieża Forest – a new threat, British Birds, 9 May 2017 [online].
[386] ClientEarth, *Saving Białowieża* (18 April 2018) [online]
[387] ClientEarth, *Complaint to the European Commission Concerning an Alleged Breach of Union Law over Logging in the Białowieża Forest* (19 April 2016 [online]

In its reply to the reasoned opinion of 26 May 2017, Poland claimed that the alleged failures to fulfil obligation under the BHD were unfounded.

In July 2017, the Commission referred the case to the ECJ. Separately, the Commission also applied for interim measures under Article 279 TFEU and Article 160(2) of the Rules of Procedure of the Court of Justice, seeking a Court order that Poland, pending the ruling of the Court in the main action, cease the logging activities. The Court granted the request for interim measures on 27 July 2017. On 13 September 2017, the Commission requested the Court to order Poland to pay a periodic penalty payment should it not comply with the orders made in the proceedings.

In November 2017, the Court declared it would impose fines of at least €100,000 a day if Poland continued to ignore the Court's decisions. The formal warning set a new precedent, since the threat of penalty payments had never before been applied at this stage of the proceedings.[388] By the end of November 2017, logging finally ceased.

On 17 April 2018 the Court ruled that Poland had failed to fulfil its obligations under the BHD.[389]

The underlying economic interests in Poland to act in breach of the BHD are strong and the threat for protected habitats and species in Poland remains.[390] Data from Eurostat is reported to show that the total production of forestry and logging in Poland in 2017 was over €5 billion and 52700 people were employed in the sector.[391]
In 2019, after the quotas scheduled until 2021 had already been exhausted, the state logging company started issuing new logging permits again. Due to public pressure these plans came

[388] ClientEarth, *Saving Białowieża* (18 April 2018) [online]
[389] See *Białowieska Forest*, C-441/17
[390] For a summary on Poland, refer to Mederake, *Steckbrief Polen*, with further references. Poland has not received favourable reviews of its overall implementation and enforcement of environmental criminal law. A lack of collaboration between criminal law enforcement and administrative authorities, corruption, insufficient staff, missing specialisation, a lack of inspections, and an overall lack of awareness of the gravity of environmental crime are among the factors believed to lead to a significant enforcement deficit in Poland. There are no specialised units within the police forces or the judiciary, administrative penal law is not clearly distinguished from criminal penal law, and corruption undermines the efficiency of public authorities. Most environmental offences are ultimately dealt with under administrative penal law.
[391] N Đorđević, *Emerging Europe's Primeval Forests Are in Danger,* Emerging Europe (21 September 2020) [online]

to a halt. According to the environmental NGO Client Earth, the situation is currently "stable" and the ECJ ruling would serve as a "shield for the forest".[392]

While the situation of the Polish primeval forests seems to be safe, at least for the moment, the same cannot be said of the situation in Romania.

19.5.2 Romania

Romania hosts 525.000 hectares of old growth forests, which is the equivalent of two thirds of the remaining primeval forests in Europe in the temperate climate zone. Around 300.000 hectares are protected under the BHD as part of the Natura 2000 network. They are home to numerous protected species, including bats, owls, the black stork and beetles, as well as large carnivores, such as bears and lynxes.

Large-scale logging operations in Romania put these protected areas at risk. It is estimated that half of Romania's ancient forests have been lost in the last 15 years, many of them in Natura 2000 areas.[393] They are systematically logged and destroyed, involving not only the activities of illegal operators but also the Romanian state forestry management company Romsilva, which has long carried out logging in protected areas without carrying out appropriate impact assessments.

Apparently, illegal logging activities in Romania are not met with sufficient efforts by the authorities to detect, prosecute and adjudicate environmental crime. A significant problem is the traceability of timber. Opaque practices of log yards and intermediary actors in the timber industry hinder traceability and transparency and stand in the way of corporate accountability and liability. Such a situation fosters environmental crime and benefits those who profit from the illegal logging of Romania's ancient forests.[394]

Environmental NGOs assume a "complex and corrupted system" behind the illegal logging in Romania that involves "corruption on many little points in the system" and powerful people "in

[392] *Ibid.* Agatha Szafraniuk from Client Earth in the interview with Emerging Europe, published in September 2020.
[393] ClientEarth, Media Briefing Paper: Complaint to the European Commission Regarding Illegal Logging in Romanian Forests (22 April 2020) [online].
[394] EEB, *Crime and Punishment*, 17.

the back" that benefit from the system.[395] A lawyer from the eNGO ClientEarth has described the situation Romania as a "huge systemic problem far exceeding in scale the illegal logging of Poland's Bialowieza forest".[396] Foresters and activists who reported illegal logging have been attacked or even killed.[397] Between 2014 and 2020, six forest rangers were killed and 184 cases of violence against rangers were registered.[398]

In September 2019, a number of environmental NGOs filed a complaint with the Commission claiming that Romania failed to fulfil its obligations to protect its forests under the BHD.[399] The NGOs identified a number of forest administrations, both under management of Romania's state forestry Romsilva and under private administration to be in breach of EU legislation by not carrying out appropriate assessments.

In February 2020 the European Commission opened infringement proceedings against the Romanian government for failure to comply with its obligations under the BHD and to act effectively against illegal logging.[400] Following Romania's response to its letter of formal notice from February 2020, the Commission concluded that Romania had failed to address the problems.

In July 2020, the Commission issued a reasoned opinion. The reasoned opinion addressed both the proper implementation of the EU Timber Regulation as well as breaches of the BHD.[401] According to the Commission, protected forest habitats within Natura 2000 sites had been lost in breach of the BHD. The Romanian authorities had failed to assess the impact on protected habitats as required by the HD and the Strategic Environmental Assessment Directive. The Commission also found shortcomings in public access to environmental information in forest management plans.

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[395] N Đorđević, *Emerging Europe's Primeval Forests Are in Danger,* Emerging Europe (21 September 2020) [online], citing NGO representative Janinka Lutze of the German-based environmental NGO EuroNatur in an interview with *Emerging Europe*.
[396] ClientEarth, *Romania Facing Legal Action over Destruction of Europe's Last Natural Forests* (5 February 2020) [online].
[397] EEB, *Crime and Punishment*.
[398] S Walker, Violence Escalates as Romania Cracks Down on Illegal Timber Trade, The Guardian (8 January 2020) [online]
[399] Romania Insider, *Environmental NGOs File Complaint against Romania over Forest Protection* (5 July 2017) [online]
[400] European Commission, *February Infringements Package: Key Decisions* (5 March 2020) [online].
[401] European Commission, *July Infringements Package: Key Decisions* (4 September 2020) [online].

The Commission also pressed for the proper implementation of the EU Timber Regulation.[402] The regulation prohibits the placing on the EU market of products made from illegally harvested timber and products derived from such timber. The Commission found that due to inconsistences in the national legislation, national authorities were not able to effectively check the operators and apply appropriate sanctions.

At the time of writing, no further steps had been undertaken by the Commission.

19.5.3 Summary of findings on lack of political will to enforce environmental criminal law

Public attention has increasingly turned to enforcement challenges in certain MS, notably Poland and Romania, due in large part to the efforts of non-governmental organisations and investigative journalism. While these situations may appear particularly serious in scope, available evidence suggests that challenges relating to the enforcement of EU environmental law are not limited to these countries alone.

As outlined in preceding chapters, economic and political interests can sometimes be at odds with the full implementation and enforcement of the BHD. MS have, in various instances, taken steps that may be interpreted as attempts to limit or delay the application of obligations under the Nature Directives. This includes the determination of MS during the negotiation of the BHD to include exceptions for "reasons of overriding public interest," their reluctance to designate appropriate sites, the numerous cases brought before the ECJ for breaches of the BHD and questions of interpretation, and, last but not least, the insufficient efforts to combat environmental crime, as evidenced by the shortcomings in detection, prosecution, and adjudication outlined above.

19.6 Summary of findings on enforcement and practical significance of environmental criminal law

The persistent enforcement deficit in EU environmental law and the expectation that the "sharp weapon" of criminal law would help overcome this deficit in MS was a key driver behind the adoption of the ECD. This approach, however, assumes effective enforcement of the Directive

[402] Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market, OJ L 295, 12.11.2010, p. 23-34.

itself. The findings of this chapter suggest that enforcement of the ECD is likely its greatest weakness.

Effective enforcement of environmental law via criminal penalties depends heavily on the resources allocated, including training to build expertise, investment in human and financial resources, and the establishment of formal specialised structures to support detection, prosecution, and adjudication. MS show considerable deficits in all these areas. The investigation has revealed:

- Significant shortcomings in the **collection, management and evaluation of data** on the detection, prosecution and conviction of environmental crime, resulting in a lack of statistical data for the allocation and remediation of problems along national the enforcement chain.
- A lack of **transparency, collaboration and information sharing** between the main actors involved in the national enforcement of environmental criminal law.
- Insufficient **resources**, **training and capacity building** as well as a lack of **formal specialised structures** to support the detection, prosecution and adjudication of environmental crime in the MS.
- A lack of **political will**; and finally.
- The absence of a consolidated **national strategy**.

Thus, while on paper a MS may accurately transpose the Directive, this does not necessarily entail a commitment to invest in its effective enforcement. Despite accurate transposition of the ECD, a MS may still do very little to detect, prosecute, and adjudicate environmental crime. The aim of the Directive, "to ensure a more effective protection of the environment" across MS, is thereby severely undermined. This also affects the level playing field among MS: if some invest in specialized police forces, prosecution services, and courts, collect data, and enable effective communication, while others do not, it becomes evident that the enforcement of the ECD and, by extension, the effectiveness of related environmental laws, will exhibit notable disparities among MS. [403]

The problem is further exacerbated by the fact that MS have been under no obligation to collect data or report on the actual enforcement of the Directive. The resulting lack of information,

[403] For similar conclusions, see Gerstetter et al, *Status quo Umweltstrafrecht,* 82.

makes an assessment of the enforcement situation in individual MS and the allocation of failures in their national enforcement chains nearly impossible.

The ECD could be amended to the effect that in the areas of

- **Transparency, collaboration and information sharing:** MS create a national body of representatives comprised of the different actors along the enforcement chain, that convenes regular meetings. Such a body should also enable contributions of non-permanent representatives such as civil society organisations and businesses.[404] A prime example for this is the Flemish High Enforcement Council for Spatial Planning and Environment (VHRM), which was established to promote cooperation between the main environmental law enforcement authorities and issues annual online reports with detailed information on enforcement activities. This would strengthen the exchange of data, technical support and investigative techniques and help coordinate initiative.
- **Collection, management and evaluation of data:** MS create a national online portal, that centrally records, manages and evaluates data on environmental crime and provides data on what compliance authorities actually do and what they achieve.[405] This should improve the availability of statistical data for the allocation and remediation of problems along national the enforcement chain;
- **Resources, training, specialisation and capacity building:** MS ensure that formalised structures, training, and capacity-building as well as the availability of sufficient resources provide the main actors in the enforcement chain with the necessary expertise and ability to successfully handle the technical and often highly complex cases in the area of environmental criminal law.
- **National strategy:** MS adopt a national strategy to combat environmental crime.
- **Political will:** MS ensure that private actors, including non-governmental organisations and investigative journalists, are equipped with the rights, resources and protection to contribute to the detection, prosecution and adjudication of environmental crime.

[404] See recommendation by Council of the EU, *Final Report on Environmental Crime* (14852/19), 61.
[405] European Commission, Environmental Compliance Assurance SWD(2018) 10 final, 18.

20 Administrative versus criminal penalties for environmental offences

Most MS use both administrative and criminal penalties to enforce environmental law. In the MS, basically three different models of application of administrative and criminal penalties for the punishment of environmental offences have been identified:

- administrative penalties and criminal penalties, are **applied in parallel**;
- criminal penalties are **combined** with administrative penalties other than fines;
- administrative and criminal penalties are **mutually exclusive**. [406]

Recent developments show an increasing tendency for MS to rely on administrative penalties for environmental offences. As will be demonstrated, there are good reasons to consider the use of administrative law for the punishment of environmental offences. Given the limitations observed in applying criminal sanctions to environmental offences, this chapter examines the use of administrative sanctions, reasons for their use and the possible scope for their use in the context of a revised ECD. First, **different types of administrative penalties** used by MS to enforce environmental law are introduced (Chapter 20.1). Secondly, **advantages and disadvantages of administrative sanctions** are examined and compared to **criminal sanctions**. (Chapter 20.2). Next, options for **complementary use of both administrative as well as criminal penalties** are discussed (**"smart mix"**) (Chapter 20.3.). **Reported problems with their interplay** in the MS are explored (Chapter 20.3.1.) and **conclusions** are drawn (Chapter 20.3.2.).

20.1 The use of administrative penalties in the EU MS

Administrative penalties are normally applied to **less serious violations** and imposed by administrative authorities, which are empowered to prosecute and sanction administrative penal offences after having completed administrative proceedings. [407] **Proceedings** are typically triggered by a public authority detecting a violation of environmental law either through their own monitoring activities or a complaint by a citizen or an NGO. **Administrative penalties** usually consist of the payment of a fine. Examples include the "Geldbuße" under the

[406] See also European Commission, ECD Evaluation/Part I, SWD(2020) 260 final.
[407] See, for example, § 35 of the German Act on Regulatory Offences (*Gesetz über Ordnungswidrigkeiten*, OWiG).)

"Ordnungswidrigkeitenrecht" (Administrative Offences Act) in **Germany**,[408] the "milieu-inbreuk" in **Flanders** (**Belgium**),[409] or "les amendes" in **France**[410].

Other administrative measures are also sometimes used as "sanctions" or "penalties", depending on the national legal system. **Spain,** for example, uses orders to repair the damage, the revocation of permits or a ban on continuing certain activities as administrative penalties.[411] In **Austria** the so-called "Verwaltungsstrafe" (administrative penalty) comprises fines as the most common type of penalty, forfeiture and under certain conditions even imprisonment.[412] Other measures in MS that are sometimes classified as administrative penalties include the **confiscation** or **seizure** of goods, the order to **cease a certain activity** or **meet certain technical standards**, the **temporary or permanent closing down** of a facility or even the **removal** of it. [413] In Germany, administrative authorities can confiscate goods (section 22 OWiG) or profits (section 29a OWiG) in addition to or instead of fines.

The following chapter examines advantages and disadvantages of using administrative penalties for environmental offences. The comparison is supported by the **methods and criteria developed by scholars of Law and Economics**, which, as stated before, analyse law from an economic perspective and for which efficiency aspects are central. Subsequently, a so-called "tool box approach" to enforcement examines the **complementary use of administrative and criminal sanctions**.

Considering the diversity of administrative measures and a lack of sufficient comparable information and data on their use in the MS, the comparison is confined to the **use of administrative fines**. Other **administrative (penal) measures** are not dealt with.

It is important to note that the obligation to prevent or remediate damage under the **Environmental Administrative Liability Directive** is not a penalty. While the prevention and

[408] The German *Ordnungswidrigkeitengesetz* is available online at www.gesetze-im-internet.de/owig_1968/
[409] Faure, *Steckbrief Belgien*, 10, with further references.
[410] F Bianco, A Lucifora and GM Vagliasindi, *Fighting Environmental Crime in France: A Country Report* (2015, University of Catania) [online] [Bianco, Lucifora & Vagliasindi, *EFFACE Country Report (France)*], 12.
[411] For further reference, see Gerstetter, *Steckbrief Spanien,* 34.
[412] For further reference, see §§ 10–17 of the Austrian *Verwaltungsstrafgesetz* (VStG).
[413] For further reference see *inter alia* G M Vagliasindi, *Environmental Criminal Law in Italy*, in A Farmer, M G Faure and G M Vagliasindi (eds), *Environmental Crime in Europe* (2017, Hart Publishing) Oxford; Portland, Oregon [online][Vagliasindi, *Environmental Criminal Law in Italy*].

remediation of damage under the ELD may *de facto* result in very high costs and thus also act as a deterrent, their primary aim is to ensure that polluters pay for the damage they cause and not to punish. The interplay of penalties imposed under the ECD with the obligation to prevent and remediate damage under the ELD, is discussed separately in Part V.

20.2 Criminal or administrative law for enforcement of environmental law?

Against the background of the growing use of administrative penalties for environmental offences in the MS, this chapter examines advantages and disadvantages of using administrative penalties for environmental offences and compares them to the use of criminal penalties. Benefits of using administrative fines for environmental law enforcement are discussed first in Chapter 20.2.1. The use of administrative fine also has a number of limitations and therefore requires careful consideration. Limitations in the use of administrative fines are discussed in Chapter 20.2.2. Lastly the findings are summarised and conclusions on the use of administrative penalties versus criminal penalties are drawn in Chapter 20.2.3.

20.2.1 Arguments in favour of using administrative fines for environmental law enforcement

Germany and the Netherlands are two EU MS with a longer tradition of using administrative fines for the enforcement of environmental law. [414] Other countries, such as Belgium, France and the UK have followed and increasingly use administrative fines for violations of environmental norms.[415]

The use of administrative instead of criminal penalties for the enforcement of environmental law is generally argued with the following advantages of administrative proceedings:

- simpler, i.e. **less complex** and requiring **lower threshold of proof**;[416]
- **faster** and **less expensive;** [417]

[414] See Gerstetter et al, *Status quo Umweltstrafrecht*, 72; Faure & Svatikova, *Criminal or Administrative Law*, 255.
[415] *Ibid.*
[416] See for example Faure & Svatikova, *Criminal or Administrative Law*, 255, with further references; A Ogus & C Abbot, Sanctions for pollution: do we have the right regime? Journal of Environmental Law 14:3 (2002), 283–298 [Ogus & Abbot, *Sanctions for Pollution*].
[417] Faure & Svatikova, *Criminal or Administrative Law*, 284. As the authors note, because there are no data comparing the costs of administrative and criminal proceedings in the MS, one can only presume that the considerably less complex administrative proceedings also entail lower costs. See further Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 31, drawing on: Ogus & Abbot, *Sanctions for Pollution*; Faure et al, *Environmental Crime and Sanctioning in Europe* (2015); and Germani and Gerstetter (2016).

- generate public revenue;[418] and
- benefit from **better knowledge and technical understanding** of environmental offences within administrative authorities.[419]

A noteworthy example for the shift from criminal to administrative penalties are recent developments in the UK. While the UK is no longer a MS, these shall be discussed nonetheless. The UK is a country that has traditionally relied on criminal enforcement. In 2002, the authors Ogus and Abbot (2002) published their seminal paper "Sanctions for pollution: Do we have the right regime?". The paper strongly argued for greater use of administrative fines for environmental offences. According to the authors, the UK's reliance on criminal law was to blame for low numbers of prosecutions and a "failure of courts to impose fines that reflect the nature of the offence". This would have resulted in a failure of the criminal justice system to deter potential offenders.[420] Referring to the German system of *Ordnungswidrigkeiten* as an "excellent model", Ogus and Abbot (2002) proposed to empower the Environment Agency of England and Wales to impose administrative fines for environmental offences without the "procedures and onus of proof with which the criminal process protects defendants, but which also inhibits prosecution".[421] They also emphasized the need to "reappraise and integrate the role of suspension and revocation of licences within the system of sanctions". [422]

As a result of recent reforms, administrative authorities in the UK are now empowered to impose, *inter alia*, Fixed Monetary Penalties for minor offences as well as Variable Monetary Penalties for more serious environmental offences. [423] These so-called "civil sanctions" are considered to be easier to process as well as more appropriate and more flexible.[424] However, concerns have been raised about the resulting shift of power to administrative authorities away from the courts.[425] These concerns are discussed in more detail in Chapter 20.2.2.

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[418] Faure & Partain, *Environmental Law and Economics*, Chapter 10.3, note that economic theory generally favours fines over imprisonment because fines are less costly and generate public revenue; see also Faure, *Effective Penalties*, 266.
[419] See Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 31, drawing on: Ogus & Abbot, *Sanctions for Pollution*; Faure et al, *Environmental Crime and Sanctioning in Europe* (2015); and Germani and Gerstetter (2016).
[420] Ogus & Abbot, *Sanctions for Pollution*, 286.
[421] *Ibid.*, 298.
[422] *Ibid*
[423] See Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 27, and the references cited therein.
[424] For further references, see Faure, Gerstetter, Sina & Vagliasindi, *Instruments, Actors and Institutions*,118.
[425] *Ibid.*

Another country that has recently strengthened the role of administrative penalties is **Belgium**.[426] In Belgium, until recently, criminal law was in principle the only instrument to sanction breaches of environmental law. This reliance on criminal law, however, yielded poor results. Over 60% of the cases were dropped in the public prosecutor's office with only 5% of the cases ending up court. To improve the situation, the enforcement system in the three regions of Belgium was significantly changed, leading to the coexistence of criminal and administrative penal law. Administrative fines were introduced for offences, which the public prosecutor's office does not consider sufficiently serious for the criminal court, but which nevertheless require a response. In the Brussels Region, for example, administrative fines now settle more than 90% of the cases with criminal prosecution being the great exception.

20.2.2 Arguments against the use of administrative fines for environmental law enforcement

The use of administrative fines also has a number of limitations, which means that administrative fines may not always be the best choice for the enforcement of environmental law. Therefore, when contemplating their use in the context of environmental law enforcement, the following aspects need to be taken into consideration:

- Low risk of detection of environmental offences (Chapter 20.2.2.1.);
- Higher risk of errors in criminal law than in administrative law (Chapter 20.2.2.2.);
- Ineffectiveness of administrative fines in case of poorly capitalised companies with a high risk of insolvency; (Chapter 20.2.2.3.);
- Corporate capture, collusion and lobbying (Chapter 20.2.2.4.).

These potential shortcomings in the use of administrative sanctions for environmental offences are discussed in more detail next.

20.2.2.1 Low risk of detection

For the reasons already stated above, the risk of detection of environmental offences is often very low.[427] According to Gary Becker's economic theory of deterrence, such low risk of

[426]M Faure, *Steckbrief Belgien*, 9-15, with further references on the enforcement situation in Belgium.
[427] See Chapter 19.2.2, *Dark figure of unrecorded environmental crime*.

detection needs to be compensated with sufficiently high penalties.[428] Becker's theory is based on a cost-benefit analysis, suggesting that a penalty is sufficiently deterrent, when the expected costs of a penalty are higher than the benefits of the unlawful behaviour. The expected costs in that case refer to the severity of the sanction combined with the probability that the sanction will be imposed.[429] In Becker's terms, if the benefit of a potential offence is B, the probability of being detected is p and the sanction is S, then a dissuasive penalty system would require that $B < p \times S$.[430]

Considering that in practice the risk of detection of environmental offences is often low, the optimal penalty would have to be sufficiently severe to be an effective deterrent. However, for good economic reasons, in particular because of the risk of so-called "error costs" (Chapter 20.2.2.2.), severe penalties such as imprisonment or very high fines should not be imposed through administrative proceedings. The reasons for this are discussed next.

20.2.2.2 Higher risk of error costs

Because the standard of proof in administrative proceedings is lower than in criminal proceedings, there is a higher risk that penalties are wrongly imposed. In Law and Economics, this risk to wrongly impose penalties is referred to as "risk of error costs".

Compared to administrative proceedings, the procedural rules in criminal proceedings are substantially stricter. They contain important procedural guarantees for suspects and defendants. The "in dubio pro reo" principle usually requires proof "beyond a reasonable doubt", which is the highest standard of proof that may be required in a trial. Such high standard of proof in criminal proceedings aims to avoid punishing the innocent. In Law and Economics, the aim to avoid false punishment is also referred to as "the reduction of error costs".[431] When severe penalties, such as imprisonment, can be imposed, the risk of error cost is generally substantially higher than when only fines are imposed. [432]

[428] See Gary Becker's seminal paper from 1968, who also received a nobel prize: G Becker, *Crime and Punishment: An Economic Approach* (1968) 76(2) Journal of Political Economy 69 [Becker, *Crime and Punishment*].
[429] Faure & Svatikova, *Criminal or Administrative Law*, 257.]
[430] See example in Faure, *Effective Penalties*, 260.
[431] Faure & Partain, *Environmental Law and Economics*, Chapter 10.3 with further references.
[432] *Ibid.*

Consequently, because the standard of proof in administrative proceedings is lower, the severity of penalties that can be imposed through administrative proceedings is limited. Otherwise, the error costs would be comparatively too high.[433]

Conversely, severe penalties, such as imprisonment are thus reserved to criminal proceedings.[434] Considering that in practice the risk of detection of environmental offences is often low, administrative penalties may not always be sufficiently severe to be an effective deterrent.

20.2.2.3 Risk of insolvency

Following Becker's theory of deterrence, in order to outweigh the low risk of detection in the case of environmental offences, fines need to be high. High fines, however, bear the risk that they exceed the offender's assets and result in their insolvency.[435] If alternative non-financial penalties are not available, the administrative authorities only have two options: either they impose a small fine, because the company cannot pay a higher fine.[436] Or they impose a (higher) fine, which, however, the offender cannot pay because the company becomes insolvent. In both alternatives, the fine loses its intended deterrent effect.[437] Such an outcome is especially problematic when poorly capitalised companies deliberately cause environmental damage or at least knowingly accept that they do.[438] In such cases, it is important that criminal sanctions, i.e. in particular prison sentences, are also available.[439]

20.2.2.4 Risk of corporate capture, collusion and corruption

Economic literature has highlighted the risk of providing administrative authorities with too much power and discretion in imposing administrative penalties.[440] Administrative authorities would often value good relationships with the companies they regulate. Rather than relying on penalties, they would prefer "persuasion, education, and information" as a means to achieve compliance ("cooperation strategy").[441] However, the cooperative approach would also carry

[433] See also Gerstetter et al, Status quo Umweltstrafrecht, 75.
[434] An exception is Austria, see Chapter 20.1, *The use of administrativ e penalties in the EU MS*.
[435] Faure, *Effective Penalties*, 266.
[436] Gerstetter et al, *Status quo Umweltstrafrecht*, 76.
[437] *Ibid*.
[438] *Ibid*.
[439] Faure, *Effective Penalties*, 266.
[440] Faure & Svatikova, *Criminal or Administrative Law*, 285; Faure et al, *Conclusions and Recommendations of the EFFACE Research Project*, 20; Faure & Partain, *Environmental Law and Economics*, Chapter 10.7.1.
[441] Faure & Partain, *Environmental Law and Economics*, Chapter 10.7.1.

the risk of undue influence of the regulated on the regulator and open the door to corporate capture, collusion and corruption.[442] As a result, effective enforcement would by undermined and compliance no longer secured.

A similar argument was made by the Commission in its proposal for the ECD. The Commission argued that by entrusting judicial rather than administrative authorities with the task of imposing sanctions,

> "responsibility for investigating and enforcing the respect of environmental regulations [would fall] to authorities which are **independent** of those which grant exploitation licences and discharge authorisations".[443]

20.2.3 Summary of findings and conclusions on the use of administrative penalties versus criminal penalties

Administrative fines, under certain conditions, offer advantages over criminal penalties in the enforcement of environmental law: The costs are lower, proceedings generally faster and administrative authorities often better equipped to assess environmental offences. There is evidence that the application of administrative penalties results in overall higher levels of enforcement.[444]

Criminal proceedings, by contrast, are time consuming and expensive. In the case of prison sentences, there are also the costs of enforcing the sentence, which are considerably higher than the costs of enforcing administrative fines.[445] As demonstrated, evidence also suggests that missing resources, a lack of technical knowledge, as well as a lack of awareness and prioritisation in the judiciary, the prosecution and, to a lesser extent, in the police forces, often result in low sanctions or no sanctions at all. Applying Becker's theory of deterrence to these findings, i.e. low sanctions combined with a low probability that sanctions will be imposed, such a current situation leads to under-deterrence.

On the other hand, criminal proceedings also offer advantages over administrative proceedings. These include the independence of the investigating authorities, a lower risk of error costs due

[442] *Ibid.*
[443] Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law, COM (2007) 51final, 9 February 2007, Recital 5.
[444] An example are the developments in Belgium, see Chapter 20.2.1, *Arguments in favour using administrative fines for environmental law enforcement*.
[445] Faure & Partain, *Environmental Law and Economics*, Chapter 10.5.

to the required higher standard of proof and the ability to impose severe sanctions such as imprisonment in cases where fines may not be able to act as a deterrent. Criminal law also allows for **investigation techniques**, that may not be permitted in administrative proceedings, such as wiretapping (the monitoring of telephone and Internet-based conversations). [446] Finally, unlike administrative penalties, criminal penalties involve a moral reproach and "demonstrate a **social disapproval** of a qualitatively different nature compared to administrative penalties".[447] Such social disapproval finds expression in **social stigmatisation**, which has been defined as "the reluctance of others to interact with [the convicted criminal] economically and socially".[448] This may act as an additional deterrent, especially when companies or their executives are concerned about a loss of reputation. [449]

In sum, both criminal and administrative penalties have their strengths and limitations in the enforcement of environmental law. It has therefore been argued, that a "smart mix" of administrative and criminal penalties could result in overall higher levels of environmental law enforcement. [450] By allowing criminal and administrative law to work as complementary instruments, the number of dismissed cases could be decreased and overall enforcement levels in the environmental sector increased.

20.3 Smart mix of administrative and criminal penalties

An increasing number of MS combine the use of administrative and criminal sanctions for the enforcement of environmental law.[451] However, the mix of sanctions at MS level is not always optimal and the communication between the different actors in the enforcement chain insufficient. Several studies have pointed out problems with combined use of criminal and

[446] See also Faure et al, *Conclusions and Recommendations of the EFFACE Research Project*, 15.
[447] ECD, Recital 3.
[448] E Rasmusen, *Stigma and Self-Fulfilling Expectations of Criminality*, The Journal of Law & Economics 39:2 (1996) [Rasmusen, *Stigma and Criminality*], 519.
[449] Faure & Partain, *Environmental Law and Economics*, Chapter 10.5. However, the authors also refer to evidence from the U.S., which suggests that a criminal conviction will not necessarily result in a reputational loss, see Chapter 10.4.3.
[450] See Faure & Svatikova, *Criminal or Administrative Law*, 279. See further, Faure & Partain, *Environmental Law and Economics*, Chapter 9.7.5, which state that "[i]t is precisely since none of the instruments standing alone can be considered as being able to solve the problem of environmental pollution that there is a call from Law and Economics literature for 'smart mixes' of all of the legal tools, from both public and private law."
[451] See Chapter 20.1, *The use of administrative penalties in the EU MS*

administrative penalties for the enforcement of environmental law.[452] They are discussed next.

20.3.1 Current problems in the MS with the interplay of the two systems

Several studies highlight problems with the differentiation and interplay of criminal and administrative penalties for the enforcement of environmental law in the MS.[453] A lack of clear national criteria or guidelines is likely to result in conflicts of competence, legal uncertainty and procedural delays, ultimately undermining effective prosecution of environmental crimes.[454] In addition, it appears that the law does not always clearly specify when minor offenses should be reported to the police or prosecutors. As a result, prosecutors may not investigate the case and leave it to the competent administrative authorities to take action.

A lack of a clear differentiation between penal and administrative sanctions was noted for **Poland** and **Spain**, for example. In **Poland** it is not always clear whether an offence should be classified as an administrative or a criminal offence, as in some cases both an administrative fine and criminal penalties can be imposed.[455] In practice, the use of administrative penalties (e.g. fines or restoration of environmental damage) would prevail over criminal proceedings for the enforcement of environmental law. [456]

In **Spain**, both criminal and administrative penalties apply to violations of environmental law.[457] Administrative penalties include fines, orders to repair the damage, the cancellation of permits or a ban on continuing certain activities.[458] Whether criminal or administrative law applies depends on the severity of the offence. In practice, the interplay and clear delineation between the two types of law enforcement systems appears problematic.[459]

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[452] See European Commission, ECD Evaluation/Part I, SWD(2020) 260 final; Council of the EU, *Final Report on Environmental Crime* (14852/19), 56; Sina et al., *Umweltstrafrecht in EU-Staaten*; in Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 30.
[453] See European Commission, ECD Evaluation/Part I, SWD(2020) 260 final; Council of the EU, *Final Report on Environmental Crime* (14852/19), 56; Sina et al., *Umweltstrafrecht in EU-Staaten*; Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 30.
[454] See for example European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 65, with further references to the country reports on Slovenia, Austria and Croatia, in: Council of the EU, *Final Report on Environmental Crime* (14852/19).
[455] Mederake, *Steckbrief Polen*, 28.
[456] *Ibid*.
[457] Fuentes Osorio, *Environmental Criminal Law in Spain*, § 4.
[458] Gerstetter, *Steckbrief Spanien*, 34, with further references.
[459] Fuentes Osorio, *Environmental Criminal Law in Spain*, § 4.4.

Stakeholders interviewed for the ECD evaluation indicated that in theory, both administrative and criminal sanctions would apply in their MS. In practice, however, environmental offences would mainly be sanctioned with the existing administrative penalty systems. [460] The reasons given for this were lower standards of proof, less complex and time-consuming procedures and the availability of higher levels of sanctions in administrative than in criminal law.

In other MS, such as Italy, administrative fines appear to be less important. This, however, has been criticised as leading to an "excessive reliance on criminal law". [461]

Recent studies into the use of administrative and criminal penalties in the MS recommend that MS provide for "more clarity and uniformity" in the delineation of the applicable penalty regime to ensure that each environmental offence be addressed in the most appropriate way and that criminal offences are followed-up through the criminal justice system. [462] More generally, MS have been recommended to re-examine "the balance" between the use administrative and criminal penalties for environmental offences.[463]

20.3.2 Summary of findings on combined use of administrative and criminal penalties for the enforcement of environmental law

The ECD prescribes that penalties for the enforcement of environmental law must be "effective, proportionate and dissuasive". Both criminal and administrative penalties have their strengths and limitations in meeting these requirements. MS therefore increasingly combine administrative and criminal sanctions to achieve better compliance with environmental law. However, problems exist with their **differentiation** and **interplay.** In order to avoid conflicts of competences, legal uncertainty and delayed proceedings, clear criteria are necessary.

From a deterrence perspective, the criteria for an effective combined application of criminal and administrative penalties are clear.[464] Where the risk of detection is relatively high and the expected benefit of the offender comparatively low, deterrence can be achieved through less severe penalties. In such cases, the use of administrative law instead of the more costly criminal law seems to yield overall better results. Administrative proceedings save the public money,

[460] See European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 65.
[461] in Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis,* 30.
[462] Council of the EU, *Final Report on Environmental Crime* (14852/19), 57
[463] *Ibid.*
[464] As dev eloped by the abov e-discussed economic literature.

enable faster proceedings and promise to achieve overall higher enforcement levels. Conversely, where the risk of detection is low and the potential benefit for the offender high, penalties need to be more severe. To reduce the risk of error costs, the use of the more criminal penalties becomes necessary.

Based on the above findings, it appears, that in order to strengthen the effectiveness of the ECD, the Directive should be amended to:

- not only allow but also encourage the use of a "smart mix" of administrative and criminal sanctions under the ECD that applies to both natural as well as legal persons;
- require clear criteria for the delineation and interplay of criminal and administrative penalties;
- harmonise and improve coherence between national criminal and administrative penalty systems;
- include reporting requirements on the use of both administrative as well as criminal sanctions for environmental offences in the MS to ensure that their application indeed leads to effective enforcement of environmental law.

21 Discussion of findings and conclusions on effectiveness of ECD in its current design and wording

Against the background of the findings in Part I of this dissertation, this part of the dissertation examined to what extent the ECD, in in its 2008 design and wording, has been able to deliver on its stated aim "to ensure a more effective protection of the environment", thereby improving the implementation and enforcement of the BHD and thus strengthening their effectiveness.

This chapter synthesises the findings, offering a critical analysis and drawing conclusions on the effectiveness of the ECD in its 2008 design and wording. It starts with general observations, followed by observations on the integration of the ECD with the BHD. Subsequently, the focus narrows down to key issues identified in the examination of the ECD, including most notably the controversial role of permits, the use of vague notions and the drastic lack of enforcement in the MS.

21.1 General observations

Overall, there is little evidence that the ECD, in its 2008 current design and wording, has been able to improve the implementation and enforcement of the BHD and "ensure a more effective protection of the environment", or in the present case protected species and habitats ("biodiversity"). The identified shortcomings particularly relate to the design of the offences, especially the model of criminalisation and the role of unlawfully issued permits, to the use of vague notions as well as the (lack of) rules governing the enforcement of the Directive in the MS.

In assessing the effectiveness of the ECD, two levels can be distinguished: Firstly, the Member State level and the question whether the introduction of the ECD has indeed improved MS' compliance with their duty under the Treaties to implement and enforce EU environmental legislation. Secondly, the individual level and the question whether the ECD has improved compliance by natural and legal persons with environmental legislation originating from the EU, in this case the BHD. Related to this are two questions of a very fundamental nature that have significantly shaped the discussions of the ECD: Firstly, the question of whether criminal law as such is indeed a suitable instrument for the protection of the environment. Secondly, the competence of the EU legislator to act in the area of environmental criminal law.

This chapter summarises and discusses the most important findings from the examination of the ECD and draws conclusions on its **effectiveness**, addressing **design** and **wording** of the ECD, its **integration with the BHD**, as well as its actual implementation and enforcement in MS.

21.2 Observations on integration with BHD

Two of the offences listed under the ECD directly relate to the BHD: Article 3(f) ECD, which concerns "wildlife crime", and Article 3(h) ECD, which concerns "habitat crime". The integration of the ECD with the provisions of the BHD in this regard is twofold. **Firstly**, the **scope of biodiversity protected under the ECD** is defined by reference to the species and habitats protected by the BHD. **Secondly**, the criterion of "**unlawfulness**" requires that the conduct violates provisions of the BHD for the ECD to apply. As a result, criminal liability under Article 3(f) and 3(h) ECD depends on the violation of a rule established under administrative law – in this case national rules and decisions implementing the BHD.

Concerning the **scope of biodiversity protected under the ECD**, the only remarkable difference between the ECD on the one hand and the BHD on the other hand is, that the hunting of Annex II wild bird species during their most vulnerable period is not penalised under the ECD, while it is prohibited under the BD. Reasons for this could not be identified. Other remarkable differences were not identified.

Of far greater relevance are the findings concerning the criterion of "unlawfulness". They are discussed in the following.

21.3 The role of permits under the ECD

One of the most pertinent issues under the ECD concerns the role of permits. This directly relates to the Directives' requirement, that a conduct only constitutes a criminal offence when it is "unlawful", which means the conduct must violate an administrative norm. This strong dependence on decisions made in administrative law ("Verwaltungsakzessorietät") is a decisive feature of the ECD. It directly links criminal liability to decisions made by national authorities under administrative law, including, *inter alia*, decisions to apply the derogations available under the BHD.

The question arises to what extent a model of criminalisation that creates such dependency between administrative decision-making and criminal liability is designed to effectively ensure compliance with the BHD and secure their proper implementation and enforcement. As already observed in the context of the ELD, where a similar dependency exists between administrative decision-making and administrative liability, this structure raises concerns about its effectiveness. The analysis of ECJ case law and reports on the implementation and enforcement of the BHD suggests that tensions between economic interests and ecological priorities frequently emerge in the context of authorisations granted for plans and projects within Natura 2000 sites under Article 6(3) and (4) of the Habitats Directive. Authorisations have been issued without the necessary appropriate assessment or based on an inappropriate assessment ("incorrect application of those assessments").[465] Political pressure, [466] poor understanding of the

[465] See also ENEC, *Habitat Destruction 2016*, 6.
[466] *Ibid.*, 4-5.

legal framework[467] and lack of transparency[468] are among the factors that have been identified to influence poor decision-making in the authorisation procedure of projects affecting protected habitats.[469]

Solutions to this problem are not obvious. On the one hand, attaching criminal liability to an activity that has been authorised under a permit undermines legal certainty for the permit holder who relies on the lawfulness of a permit. On the other hand, upholding a permit that legitimises unlawful conduct and infringes environmental law undermines justice.

In cases in which an unlawfully issued permit shields the permit holder from criminal liability, the question inevitably arises, whether the public official, who knowingly issues the unlawful permit, that legitimises the criminal act, may be held criminally liable. Criminal liability of public officials is a highly contentious issue in environmental criminal law. As has been demonstrated, significant criminal liability gaps exist in the prosecution of unlawfully issued permits and other conduct that may qualify as participation by public officials in an environmental crime.

In conclusion, two alternatives are conceivable to address the problem of unlawful permit and thus improve the effectiveness of the ECD: firstly, removing the dependence of criminal law on administrative law decisions with the discussed consequences for legal certainty. Or, alternatively, introducing criminal liability for public official who intentionally or grossly negligently issue unlawful permits, thus closing the back door to officially legitimised environmental destruction that remains without punishment.

Both alternatives are, at least in part, pursued by the nECD. To what extent the revised ECD (nECD) improves its effectiveness is discussed in Part IV of this dissertation, which discusses options for amendments in the design and wording of the ELD and ECD against the background of the newly adopted nECD.

[467] *Ibid*, 5.
[468] *Ibid.*
[469] For further reference, see also discussion in Chapter 16.3.1.1., *The conflict between ecological and economic interests and its repercussions for consideration of administrative dependence in environmental criminal law*.

21.4 The use of vague notions in the threshold criteria for wildlife and habitat crime

Another issue that arises under the ECD is the **use of vague notions in the definition of the threshold criteria.** The use of vague notions becomes particularly relevant in the case of concrete harm crimes such as the wildlife crime under Article 3(f) and the habitat crime under Article 3(g). Both crimes not only require the violation of an administrative norm, but also a concrete result such as under Article 3(f) ECD the "killing or destruction" of wildlife or under Article 3(g) ECD the "significant deterioration" of a habitat. What is problematic is that the required concrete harm is further qualified with vague threshold criteria: in the case of wildlife crime, the threshold criteria in Article 3(f) ECD excludes harm which concerns a "negligible quantity" or has a "negligible impact". In the case of habitat crime, Article 3(h) ECD excludes habitat deterioration that does not qualify as "significant". Failing further clarification of these terms in the adopted Directive, their interpretation is left to the national courts. The question remains to what extent the use of vague notions in criminal law is acceptable and aligned with the *nulla peona sine lege* and *lex certa principle.*

Basically, when describing criminal conduct, the legislator has two choices: Either he specifies the conduct in detail, which increases legal certainty but also risks excluding other endangering or harmful conduct that falls outside the scope of the specification. Or alternatively, the harmful or endangering conduct is described using rather vague notions, leaving it to the courts to provide for further guidance and interpretation. This legislative technique, however, risks violating the *nulla poena sine lege* principle ("legality principle") and more particularly the *lex certa* principle.

Considering the diversity of environmental damage and the broad range of conceivable conduct causing it, defining environmental offences with the clarity and precision traditionally required in criminal law is often not a feasible option. In order to capture the diversity of different forms of environmental damage, it is therefore necessary to find a balance that, on the one hand, leaves the interpretation of certain terms to the courts and, on the other hand, ensures sufficient clarity and precision in the light of the *principle of lex certa*.

In the case of Art. 3(f) and 3(h) ECD, the vague notions may become more specific by reference to the BHD. Indeed, considering the close integration of the ECD with the BHD, it appears only logical that reference to the BHD should guide the interpretation of undefined notions under

the ECD. However, neither the Birds nor the Habitats Directive work with the terms ("significant" und "negligible") used under the ECD or corresponding threshold requirements, and thus no meaningful criteria for further clarification of these terms can be derived from such an approach either: In the case of Article 3(f), neither the Birds nor the Habitats Directive contain an exception for the killing, destruction, possession or taking of strictly protected wild fauna or flora species, if it only concerns a "negligible quantity" and has a "negligible impact" on the conservation status of the protected species.[470] In the case of Article 3(h) ECD, which requires "significance", one encounters similar problems. Article 6 (2) HD, which requires MS to avoid the **deterioration** of habitats, does not require significance, nor does it contain any other specification indicating a threshold requirement.[471] The most authoritative information on a threshold criterion relating to the deterioration of habitats under the BHD comes from the Commission, which states that under the Habitats Directive, deterioration is any form of degradation affecting a habitat.[472] This indicates a low threshold under Article 6(2) HD. However, since Article 6(2) HD does not require "significance" in order for Article 6(2) HD to apply to habitat deterioration, it is doubtful to what extent the interpretation of the threshold criteria under Article 6(2) HD can be relied on in order to derive a threshold for criminal liability under the ECD.

The brief research on national court cases in the MS carried out in the context of this dissertation indicates that so far only very few cases have dealt with Article 3(f) and (h) ECD, so that to date hardly any conclusions can be drawn on their interpretation. Overall, the findings on Article 3(f) and 3(h) suggest that neither Article 3(f) nor Article 3(h) have so far played a meaningful role at MS level.[473]

[470] See the discussion of BHD in Part I.
[471] As shown above, the requirement in Article 6(2) HD that damage be "significant in relation to the Directive's objectives" does not apply to habitats. The Commission therefore concludes that any deterioration in the conservation parameters of habitats must simply be avoided altogether. For further details, see Part I, Chapter 5.2.3.2.2, *Threshold requirements under Article 6(2) HD*.
[472] The Commission considers deterioration to have occurred if, taking all influences on the habitat into account, those influences cause the habitat's conservation parameters to become worse than they were before. See European Commission, Managing Natura 2000 Sites, C(2018) 7621 final, §3. For further details, see Part I, Chapter 5.2.3.2.2, *Threshold requirements under Article 6(2) HD*.
[473] See Chapter 16, *Offences related to the BHD under the ECD.*

21.5 Drastic differences in prescribed penalties and inadequate penalties imposed in practice

Another important finding concerns the transposition and application of the penalties prescribed by the ECD.[474] Penalties for both natural and legal persons, under the ECD, must be "effective, proportionate and dissuasive", a formula commonly used in EU secondary law. This is a central requirement of the Directive, since it explicitly aims at a common framework of more dissuasive penalties for environmental violations across MS.[475] Yet, despite the Directive's harmonisation efforts, the available data suggests that drastic **differences in the level and design of penalties** for environmental offences continue to exist in the MS and **inadequate penalties imposed in practice** have been identified to remain one of the Directive's main implementation challenges in the MS: The overall level of fines and imprisonment sanctions imposed in practice is low and the penalties required by law are not always applied in practice. That said, to accurately assess the situation in the MS, more centralised efforts to monitor and register fines and imprisonment sanctions imposed in practice are necessary.[476]

Ideally, the successful prosecution of an environmental crime should always result in **remediation of the damage**. Based on the available data, it appears that this is currently not the case.[477] While some MS require remediation as a penalty, there is no indication that this is a requirement across MS. Obviously, under the ECD, specifying remediation as a mandatory penalty is currently not an option under the Treaties. However, provided the damage falls within the scope of the ELD, remediation of damage caused by environmental crime should follow from the correct application of the ECD. This would also ensure that the remediation meets the requirements set out under the ELD.[478]

Notably, measures to harmonise sanctions under the ECD are also compatible with the **EU's current competences in the field of environmental criminal law**.[479] In this regard, the Lisbon Treaty has created the legal basis for a far-reaching criminal annex competence, which also

[474] See Chapters 18.3.-18.5.
[475] ECD, Recitals 4, 5.
[476] For further reference, see Chapter 18.4, *Fines and imprisonment sanctions imposed in practice*.
[477] See Chapter 18.5, *Discussion of findings on penalties for legal and natural persons in law and in practice.*
[478] Another problem that arises in this context is that the way the offences are currently designed under the ECD they do not necessarily meet the criteria for the application of the ELD liability regime. Thus, in in order to secure remediation of damage resulting from the offences under the ECD, amendments are necessary to further integrate the application of the two Directives. For further reference, refer to Part V, *Integration of ELD and ECD*.
[479] See Chapter 18.6.1., *Competences after Lisbon – The new powers of the EU legislator*.

exceeds the previously developed ECJ case law on the EU's competence in criminal matters. It empowers the EU not only to determine the types of offences that must be criminalised, but also the type and level of sanctions for those offenses. However, it is important to note, that the amendments introduced by the Lisbon Treaty do not provide for a competence to create supranational criminal offences and that the Union therefore still lacks the power to adopt directly applicable criminal law provisions.[480]

An important consideration concerning further harmonisation is whether the required further specification of penalties under the ECD is **practically and politically feasible**.[481] The analysis of potential measures for the harmonisation of penalties across MS in Chapter 18.6.2. shows that the integration of prescribed penalties into existing national orders creates a number of difficulties. In many national legal systems, for example, the stipulation of "minimum maximum penalties" would create implementation problems, in some cases resulting in higher penalty ranges than provided for in EU law. In addition, criminal law is still perceived to be deeply intertwined with a country`s traditions and identity. MS still consider criminal law as a core domain of the national legislator. At present, therefore, finding the necessary political support for amendments further specifying the penalties for the environmental offences listed under Article 3 ECD may prove difficult.

21.6 Problematic lack of enforcement in the MS

The findings on the enforcement of environmental criminal law in the MS, though, suggest that the actual enforcement of the ECD is likely to be the greatest challenge to its success. Recent studies and reports confirm significant shortcomings in the enforcement of environmental criminal law in practically all MS and at all **levels of the law enforcement chain**, albeit to a different extent.

Especially a lack of technical knowledge, specialisation and training as well as a lack of resources weaken the procedures in the area of environmental crime. The problem is further exacerbated by a lack of data on the actual enforcement situation in the MS. Currently, MS are currently under no obligation to collect data or report on the enforcement of the ECD making it difficult to locate problems along the enforcement chain and thus to address them effectively.

[480] *Ibid.*
[481] See Chapter 18.6.3, *Political feasibility of further harmonisation measures.*

It shall be recalled that the MS removed a reporting provision from the final text of the Directive that required MS to send the Commission information on the implementation of the Directive every three years. [482] Apart from the requirement to communicate to the Commission the text of the transposing national legislation, [483] the Directive thus does not contain any reporting requirements. This finding is noteworthy, given the contrast to the regular reporting requirements in EU Directives. [484] Obviously, the MS were interested in softening the EU institutions' control over the actual implementation and enforcement of the Directive.

21.7 Use of administrative penalties for environmental offences

Another area of analysis concerned **the use of administrative penalties for environmental offences** and how their use compares in effectiveness to the use of criminal penalties.[485] Most MS use both administrative and criminal penalties to enforce environmental law and recent developments show an increasing tendency for MS to rely on administrative penalties for environmental offences. The available evidence suggests that the application of administrative penalties results in overall higher levels of enforcement of environmental criminal law in the MS.[486] However, as has been demonstrated, the parallel use of administrative and criminal penalties suffers from conflicts of competences, legal uncertainty and delayed proceedings [487] To help ensure that criminal and administrative penalties are indeed applied where they are most effective, the exclusive use of criminal penalties for individual offenders should be removed from the ECD and a "smart mix" in the application of both types of penalties should be promoted through the introduction of criteria for their respective use. Simultaneously, reporting requirements on the use of both administrative and criminal penalties for environmental violations in MS should be introduced to assess whether their use actually leads to more effective enforcement.

In conclusion, the examination of the ECD has revealed significant shortcomings in its 2008 design and wording, undermining its ability to deliver on its stated aim of ensuring "a more

[482] Proposal for a Directiv e of the European Parliament and of the Council on the Protection of the Environment through Criminal Law, COM (2007) 51final, 9 February 2007.
[483] ECD, Art. 8(3).
[484] See also Meßerschmidt, *Europäisches Umweltrecht*, 272.
[485] See Chapter 20, *Administrative versus criminal penalties for environmental offences*.
[486] See Chapter 20.2.3, *Summary of findings and conclusions on the use of administrative penalties versus criminal penalties*
[487] See Chapter 20.3, *Smart mix of administrative and criminal penalties*.

effective protection of the environment", thereby improving the implementation and enforcement of the Birds and Habitats Directives and thus strengthening the effectiveness of the BHD and protection of biodiversity in the EU. Throughout the examination of the ECD, proposals for amendments have been made. They are revisited and summarised in Part VI of this dissertation, which further discusses if **amendments in the design or wording** of the ELD and the ECD could improve their ability to deliver on their stated aims, contrasting in the case of the ECD the findings of this dissertation with the amendments introduced under the new ECD (nECD), which entered into force in May 2024.

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PART IV The role of inspections

Among the initiatives rolled out by the EU in the early 2000s to strengthen the implementation and enforcement of EU environmental law was **Recommendation 2001/331/EC**, which provides minimum criteria for environmental inspections within the MS (RMCEI). Part IV discusses the RMCEI and the role of inspections in the implementation and enforcement of the BHD. As will be demonstrated, inspections, as an important complementary tool to the ELD and ECD, are indeed likely to play an important role in the proper implementation and enforcement of the BHD. Much, however, will depend on their design and implementation.

Obviously, any practical enforcement of environmental law requires that competent authorities become aware of violations. This is, however, precisely where one of the biggest challenges in the field of environmental crimes lies. The number of undetected cases in the area of environmental crime is significantly higher than for other areas of crime.[1] As previously demonstrated, estimates assume that 20%-40% of all environmental crimes remain undetected.[2] In some cases the figure is estimated to be as high as 90%.[3] Therefore, if enforcement through criminal sanctions is to succeed, the significant dark figure of environmental crime needs to be tackled. As will be demonstrated in the following chapters, **inspections** are essential in this regard.

Although the role of inspections is primarily discussed in the context of environmental crime, they also contribute to the detection of damage that falls within the scope of the ELD, and in this way may help ensure the prevention and remediation of environmental damage, or more precisely in the context of the present dissertation, biodiversity damage.

Inspections fall within the competence of the MS and are carried out to supervise compliance with environmental laws. Basically, two approaches to inspections can be distinguished: the **random approach** and the **targeted approach**, as. These two approaches are discussed in **Chapter 22**.

[1] For further reference, see Chapter 19.2.2, *Dark figure of unrecorded environmental crime*.
[2] *Ibid.*, with further reference to European Commission, ECD Evaluation/Part I, (2020) 260 final, 24; Gerstetter et al, *Status quo Umweltstrafrecht*, 43.
[3] *Ibid*.

Recognising that there was a wide disparity between inspection systems in the MS, the European Parliament and the Council adopted in 2001 **Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the MS** (**RMCEI**). The RMCEI sets out a (non-binding) framework for inspections at national level. By improving the effectiveness of MS inspection systems, the Recommendation aims to strengthen implementation and enforcement of environmental law. The success of the Recommendation to date has been limited. An evaluation of the Recommendation published by the Commission in 2007 has revealed serious shortcomings in the design and implementation of the non-binding Recommendation, as demonstrated in **Chapter 23**.

Notably, the RMCEI does not contain any criteria for the inspection of Natura 2000 sites, neither do the BHD. As will be demonstrated in **Chapter 24**, MS inspection systems for Natura 2000 sites therefore vary greatly and suffer from significant shortcomings. Several proposals for improvements have been made, including a proposal for an **EU Regulation on Environmental Inspection** (Chapter 24.1.) as well as a proposal for a **planning tool to manage inspections at Natura 2000 sites across EU MS** (Chapter 24.2).

Considering the identified shortcomings of the existing framework on inspections in the EU MS, **Chapter 25** discusses options for further harmonisation of national inspections and the idea of an EU inspection authority. Finally, in **Chapter 26** the findings are discussed and conclusions are drawn.

22 Strategies for the organisation of inspections: The random and the targeted approach

Against the background of limited public resources, constant monitoring by national authorities to ensure that all breaches of environmental law are detected is not a viable option in practice.[4] The question therefore arises as to how inspections should be organised to ensure that environmental law obligations are complied with and breaches detected.

Basically, two approaches to inspections can be distinguished: the **random approach**, where inspections are carried out on a regular but otherwise random basis and the so-called **targeted**

[4] See Gerstetter et al, *Status quo Umweltstrafrecht*, 76.

approach, which identifies and prioritises sites for inspections based on a so-called **ex-ante risk assessment**. [5]

Under a **targeted approach**, sites, which may be at greater risk of breaches and/or damage resulting from breaches of environmental law, are monitored more closely than others. This is combined with so-called **ex-post controls**, whereby sites in which many legal violations were found during an inspection are controlled more often than sites that, for example, have a risk management system and where no violations were found during inspections. [6] The combination of ex-ante risk assessments and ex-post targeting leads to what is nowadays referred to as "**intelligent law enforcement**".[7]

23 Recommendation of 4 April 2001 providing for minimum criteria for environmental inspections in the MS

Inspections fall within the competence of the MS and are carried out to supervise compliance with environmental laws. In 2001, in recognition of wide disparities between inspection systems in the MS, the European Parliament and the Council adopted a **recommendation** providing for **minimum criteria for environmental inspections in the MS (RMCEI)**.[8] The observed disparities concerned both MS' capacity to carry out inspection tasks as well as the scope and content of the inspection tasks undertaken at MS level.[9]

Recommendations are non-binding measures under EU law.[10] Recital 21 of the RMCEI makes explicit reference to the **principles of subsidiarity and proportionality** and states that:

> "In accordance with the principles of subsidiarity and proportionality as set out in Article 5 of the Treaty, and given the differences in inspection systems and mechanisms in the MS, the objectives of the proposed action can best be achieved by providing direction at Community level".

[5] Gerstetter et al, *Status quo Umweltstrafrecht*, 77.
[6] *Ibid*.
[7] *Ibid*.
[8] European Commission, Recommendation 2001/331/EC of 4 April 2001 providing for minimum criteria for environmental inspections in the Member States, [2001] OJ L 118/41 (RMCEI).
[9] See RMCEI, Recital 8 .
[10] TFEU, Art. 288(5).

At present, the RMCEI is the EU's main governing framework for environmental inspections. In addition, since 2001, various binding inspection provisions have been adopted in sectoral legislation, which are based on RMCEI principles. [11] They include the IED, the Seveso III Directive and the WEEE Directive.

The aim of the RMCEI is to strengthen implementation and enforcement of environmental law by improving the effectiveness of MS inspection systems. The Recommendation emphasizes the **deterrent character of inspections**. By enabling authorities to identify breaches, inspections would act as a deterrent to environmental violations and therefore constitute an "**indispensable link in the regulatory chain**", representing an "**efficient instrument to contribute to a more consistent implementation and enforcement** of Community environmental legislation across the Community". This would in turn help avoid "**distortions of competition**" in the single market. [12]

To achieve its aim, the RMCEI sets out a framework for national environmental inspection systems and provides for minimum criteria for environmental inspections. Importantly, its **material scope** is confined to "**controlled installations**", which the recommendation defines in Article II (1)(a) –(b) as [emphasis added]

> **"industrial installations** and other enterprises and facilities of which the **air emissions**, **water discharges** or **waste management activities** are subject to **authorisation**, **permit** or **licensing requirements** under EU law […]".[13]

Article III (1) requires MS to ensure that environmental inspections are carried out to achieve a high level of environmental protection. The minimum criteria established under the RMCEI apply to the **organisation and carrying out of environmental inspections** (Article III), **plans for environmental inspections** (Article IV), **site visits** (Article V), **reports and conclusions following site visits** (Article VI) and the **investigation of serious accidents, incidents and occurrences of non-compliance** (Article VII).

Article IV (1) requires MS to ensure that **environmental inspection activities are planned in advance.** A plan or plans covering all controlled installations to be inspected within their

[11] IEEP et al., *Environmental Inspections Study*, 23.
[12] See RMCEI, Recital 7
[13] See RMCEI, Article II (1)(a) –(b)

territory should be available at all times. Article V describes in detail how **site visits** are to take place and specifies certain criteria for them. According to Article VI **reports and conclusions** are to be processed or stored by the inspecting authorities after each site visit; such reports should be properly recorded and maintained in a readily accessible **database**.

In accordance with the directive **on public access to environmental information** (2003/4/EC), the inspection plans as well as the inspection reports should be made available to the public.[14]

Furthermore, Article VII requires MS to ensure that the relevant authorities carry out **investigations of serious accidents, incidents and occurrences of non-compliance** with EC legislation.

In addition, Article VIII stipulates that MS should report on their experience of the operation of the RMCEI to the Commission two years after the publication thereof. The Commission should review the operation and effectiveness of the Recommendation under Article IX.

The Commission published its review on the implementation of the RMCEI in the MS in 2007. [15] According to the report, almost all MS had "partially implemented the Recommendation (to varying degrees)". [16] Only a few had achieved "full implementation".

The Commission's review exposed serious shortcomings of the Recommendation. The identified shortcomings of the RMCEI related, *inter alia*, to its limited scope, which excludes many activities regulated under EU environmental legislation, including the **BHD** and related **inspections of Natura 2000 sites**. Other issues identified by the Commission in its review of the RMCEI include the need to clarify definitions of important terms, the further development of criteria for the planning of inspections and the establishment of a reporting system that results in more comparable information.

[14] RMCEI, Article IV(1) and Article VI(2). The Recommendation still refers to Directive 90/313/EEC, which has been replaced by Directive 2003/4/EC.
[15] Based on the reports MS were required to submit under Article V III of the RMCEI and other available information, the Commission compiled a report on the implementation of the Recommendation and subsequently published its review of the RMCEI: European Commission, *Communication on the Review of Recommendation 2001/331/EC Providing for Minimum Criteria for Environmental Inspections in the Member States*, COM(2007) 707 final, Brussels, 14 November 2007; European Commission, *Commission Staff Working Paper – Report on the Implementation of Recommendation 2001/331/EC Providing for Minimum Criteria for Environmental Inspections*, SEC(2007) 1493 final, Brussels, 14 November 2007.
[16] European Commission, *Communication on the Review of Recommendation 2001/331/EC*, 3.

The persistent large disparities between the inspection systems of the EU MS are not only attributed to differences in the way inspections are organised and carried out, but also to differences in the availability of resources and professional qualifications in the MS. [17] According to the Commission, large differences in the political priority given to environmental inspections in the MS would result, *inter alia*, in a lack of resources for the establishment of a fully effective system of environmental inspections.

24 Inspections of Natura 2000 sites in the MS

The RMCEI does not contain any criteria for the inspection of Natura 2000 sites. Neither do the BHD. Article 11 of the HD provides for "surveillance". However, the provision simply requires MS Member "to undertake surveillance of the conservation status of protected natural habitats and species" without any further specifications on how to perform this task.
As a result, MS inspection systems for Natura 2000 sites vary greatly and suffer from significant shortcomings.[18] These concern, amongst others, proper enforcement of required mitigation or compensation measures under Article 6(3) and (4) HD. According to the environmental NGO BirdLife Intenational (2013) many MS would lack an effective systems to ensure that the measures are indeed carried out and that mitigation measures were working throughout the lifetime of their potential impact (or in perpetuity in the case of compensation). [19] BirdLife International's (2013) observations are consistent with the findings on the implementation and enforcement of Article 6(4) HD in the MS.[20] BirdLife Intenational (2013) also found that inspections to prevent unauthorised activities were either not carried out, or if they were, the action taken to stop them was "poor".[21]

BirdLife International (2013) concludes that in order to increase compliance with the BHD, inspection systems would need to be improved. [22] Such improvements of environmental inspection systems would not only have to addresses illegal activities by private individuals/entities but also poor decision making by national authorities. Poor decision making

[17] See also IEEP et al., *Environmental Inspections Study*, 23.
[18] See IEEP et al., Impact Assessment Environmental Inspections, 59.
[19] BirdLife International, *Position on Environmental Inspections*,7.
[20] For further reference, see Chapter 5.2.3.4.4, *Implementation and enforcement of Article 6(4) requirements*.
[21] BirdLife International, *Position on Environmental Inspections*,7.
[22] *Ibid*.,8.

would concern for example the granting of derogations under Article 9 BD and Article 6(4) HD or the process and quality of impact assessments.[23] Moreover, the same national authorities that were also responsible for the granting of permits or licenses or for the managing of protected areas, would also carry out the environmental inspections [24] This could lead to "conflicts of interest", especially if the national administration itself had an interest in the development in question.[25] In such cases the need of a higher authority controlling lower level practices would become a relevant issue.[26]

24.1 NGO proposal for EU Regulation on Environmental Inspection

To remedy the situation, BirdLife Intenational (2013) has called for an **EU Regulation on Environmental Inspection**.[27] Such a regulation on environmental inspections would need to establish, *inter alia*, **minimum criteria for MS inspection systems**, better **European Commission oversight** and better **European Commission capability to identify and follow up on infringements**. The inspection system established under such a Regulation would need to ensure that both "**citizens on the ground**" as well as **national authorities** respect EU law, and that national authorities do not issue **permits or licences in breach of the BHD**. Inspections should also cover compliance with additional conditions laid down in the BHD, such as mitigation or compensation measures for plans and projects. This would require that mitigation measures are actually working as necessary and that compensation measures are, firstly, introduced before the implementation of any approved plan or project and, secondly, functioning in the long term. In addition, inspections should confirm that unauthorised activities are stopped and that any damage is restored.

According to BirdLife International, inspections are best undertaken at MS level. In order to ensure that equal standards are applied across EU MS, the NGO recommends oversight of national inspections systems by the European Commission.[28] For this task, the Commission would need to have its own inspection capacity. This should allow the Commission to collect its own data, investigate individual complaints of violations and prove impacts on the ground,

[23] *Ibid*., 7.
[24] *Ibid*.
[25] *Ibid*.
[26] *Ibid*.
[27] *Ibid*., 8.
[28] *Ibid*., 2.

when needed. It would also help to reduce the number of ECJ cases on the BHD that have been dismissed for lack of evidence.

24.2 Planning tool for inspections of Natura 2000 sites across EU MS

IMPEL (2017) studied the potential value of an IT (Information Technology) supported planning tool to manage inspections at Natura 2000 sites across EU MS.[29] The study included an assessment of existing arrangements for carrying out inspections in Natura 2000 sites. MS participating in the study included Portugal, Romania, Macedonia, Latvia, Poland, Croatia, Italy, Spain-Galicia, Slovenia.

Questions for the participating authorities in the MS enquired *inter alia* (1) whether Natura 2000 inspections take place at all, if yes how often (2) who undertakes the inspections (3) if inspections of Natura 2000 sites are prioritised and if so what support tools are used for prioritising (4) about the criteria/information used to prioritise inspections (e.g. feature sensitivity for species or habitats, industrial pressures close to habitats, presence of IED/SEVESO installations, number of reports, etc.). In order to establish whether a planning tool for inspections in Natura sites would be useful, questions focussed *inter alia* on the costs and benefits of developing such a tool.

A key outcome of the IMPEL (2017) study was that the participating MS welcomed an IT planning tool for inspections of Natura 2000 as a useful instrument to develop a more consistent approach towards inspections, help prioritise sites and focus resources. It was stressed that inspections of Natura 2000 sites are fundamentally different from inspections of installations because they are regularly exposed to a variety of pressures.

Inspection plans in the assessed MS were based on different approaches and criteria. For countries, such as Slovenia or Croatia, where over 36% of the national territory is designated as protected sites, effective use of national resources for inspections was reported as key. A tool would help detect potential risks for the conservation aims of the site, including negative impacts from forestry, agriculture, building or polluting activities. [30] An additional benefit of a

[29] See IMPEL, *Habitats Directive Planning Tool*. IMPEL is the *European Union Network for the implementation and Enforcement of Environmental Law* and was set up as an informal Network of European regulators and authorities concerned with the implementation and enforcement of environmental law.
[30] IMPEL, *Habitats Directive Planning Tool,* Chapter 3.2.

common planning tool among the MS would be the ability to develop a "library of Natura 2000 sites" based on evidence. Such a library could be beneficial over the long term for a variety of uses, including evidence for enforcement action, documentation of long-term trends on improvements or decline or identification of relevant management options and interventions, including best practice.[31]

25 Scope for further harmonisation of national inspection systems and EU monitoring and controlling powers

Against the background of the above findings on the inadequacies of the existing framework for national inspections, there are strong arguments for EU powers to oversee and control national inspection activities. In the US, for example, the US Environmental Protection Agency (EPA), a federal agency, is endowed with the power to investigate sites in all 50 states to ensure compliance with federal environmental legislation. [32] The idea to also establish an EU inspection authority with similar powers is not new, but the fate of related proposals in the past shows MS' strong reluctance to endow EU institutions, such as the EEA or the European Commission, with inspection powers in the environmental sector. In all instances, the Council opposed any progress in this area despite the existence of EU inspection powers in other policy areas, such as investigations into illegal mergers or breaches of competition law, the use of EU regional funds or in the European Fisheries Control Agency (EFCA). [33]

As Hedemann-Robinson (2017) notes, a potential future empowerment of the EEA with monitoring powers was already referred to in the EU regulation that established the EEA in 1990[34].[35] The Commission, though, has so far not stepped forward with related proposals and the Council, in a 1997 Resolution, clearly stated its opposition to a system of inspections at EU

[31] *Ibid.*, Chapter 4.1.
[32] See Gerstetter et al, *Status quo Umweltstrafrecht*, 81.
[33] For further reference see IEEP et al., *Environmental Inspections Study*; BirdLife International, *Position on Environmental Inspections*, 8, with further references; M Hedemann-Robinson, *Environmental Inspections and the EU: Securing an Effective Role for a Supranational Union Legal Framework* (2017) 6(1) Transnational Environmental Law 31–58 [Hedemann-Robinson, *Environmental Inspections and the EU*], 4.
[34] See Article 20 of Regulation (EC) No. 1210/90 on the Establishment of the EEA and the European Environment Information and Observation Network [1990] OJ L 120/1.
[35] Hedemann-Robinson, *Environmental Inspections and the EU*, 47.

level.[36] The Council's opposition was also restated in Recital 5 of the Preamble to the RMCEI, which states that:

> "Different systems and practices of inspection already exist in MS and should not be replaced by a system of inspection at Community level, as was considered in the Council resolution of 7 October 1997, and MS should retain responsibility for environmental inspection tasks".

The recently expired 7th Environment Action Programme (EAP) (2014-2020) took up the issue again. Under its priority objective No 4 ("Better Implementation"), it announced that the Union would [**emphasis added**]

> "**extend requirements** relating to **inspections and surveillance** to the wider body of Union environment law, and **further develop inspection support capacity at Union level**, drawing on existing structures, inter alia, to respond to requests from MS for assistance, to address situations where there is due reason for concern and to facilitate cooperation throughout the Union".[37]

In the context of the 7th EAP, the Commission commissioned two studies, which were published in 2013 and investigated the strengthening of the EU level role in environmental inspections[38] and possible requirements for environmental inspections in different areas, including nature protection.[39]

Concerning possible further requirements for environmental inspections, including in the area of nature protection, the study concluded in favour of a legally binding instrument, which would provide "a much greater incentive for all relevant authorities to improve the effectiveness of enforcement and control".[40] Ideally such an instrument could be combined with the promotion of voluntary networking efforts based on existing networks, namely that of inspectorates (IMPEL), prosecutors (ENPE) and judges (EUFJE). [41]

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[36] Council Resolution of 7 October 1997 on the drafting, implementation and enforcement of Community environmental law, OJ C 321, 22.10.1997.
[37] See paragraph 60 of Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet", OJ L 354, 28.12.2013.
[38] IEEP et al., *Environmental Inspections Study*.
[39] IEEP et al., *Impact Assessment Environmental Inspections*.
[40] IEEP et al., *Impact Assessment Environmental Inspections*, 163.
[41] IEEP et al., *Impact Assessment Environmental Inspections*, 159 and 164.

Regarding the possibilities of an EU role in inspection-related activities, the authors examined three options, namely

- endowing the Commission with a "**general-purpose audit type function**", allowing it to regularly assess national control systems (option 1);
- endowing the Commission with **ad-hoc inspections-related powers** in sectoral environmental legislation (option 2);
- strengthening the use of a **peer review approach** in the existing EU Network for the Implementation and Enforcement of Environmental Law (IMPEL) (option 3).

The study identified option 2 as the most realistic. Option 1 was found to require a significant increase in staff and resources within DG ENV Regarding Option 3, the study identified both a lack of capacity under the current IMPEL review mechanism as well as legal obstacles to allow for an intensification of the peer review approach. A combination of the options was also seen as a future possibility for analysis.

The European Commission, however, has not yet stepped forward with any new initiatives or proposals to strengthen the EU level role in environmental inspections.[42]

At this point, the difference between the position of the US Environmental Protection Agency (EPA) and the EU Commission becomes evident. [43] The EPA is a federal agency endowed with the power to investigate sites in all 50 states to ensure compliance with federal environmental legislation. [44] In contrast, the EU Commission and other EU institutions presently lack such competences.

26 Discussion of findings and conclusion on the role of inspections in the implementation and enforcement of the Birds and Habitats Directives

It is clear from the above findings that a system of regular and well-planned inspections has the potential to significantly strengthen the implementation and enforcement of environmental law, remedying some of the observed shortcomings in the implementation and enforcement of the BHD on the one hand, and the ELD and ECD, on the other hand. Such a system of inspections

[42] See also Hedemann-Robinson, *Environmental Inspections and the EU*, 50.
[43] Gerstetter et al, *Status quo Umweltstrafrecht*, 81.
[44] *Ibid.*

would not only ensure compliance, but also serve as a proactive measure to prevent environmental damage and violations of environmental law. However, the current EU regulatory framework, as established under the non-binding RMCEI, suffers from several shortcomings. To begin with, the RMCEI's **limited scope excludes many activities regulated under EU environmental legislation**, including the BHD and related inspections of Natura 2000 sites, undermining its effectiveness from the outset. As a result, MS inspection systems for Natura 2000 sites vary greatly and suffer from significant shortcomings.[45] As has been demonstrated, these shortcomings concern, amongst others, proper enforcement of required mitigation or compensation measures under Article 6(3) and (4) HD – a finding that aligns with comparable outcomes observed in the examination of problems with the implementation and enforcement of the BHD. Next, flaws in the design and wording of the Recommendation, including **vague definitions** and **shortcomings in the reporting system** appear to weaken its effectiveness. Additionally, **disparities in resources and political priorities** among MS reportedly further exacerbate these challenges, with some countries implementing the Recommendation only partially or not at all. This finding resonates with similar findings from the ECD, suggesting an **overall reluctance of MS to allocate resources towards the enforcement of environmental law** within their national legal frameworks. Lastly and most importantly, the Recommendation is a legally non-binding document, which basically leaves the adoption of the prescribed minimum criteria at the discretion of the MS. MS have obviously made ample use of that discretion.

Concerning **inspections of Natura 2000** sites specifically, a number of findings appear particularly noteworthy in the context of this dissertation.[46] **Firstly**, inspections to prevent unauthorised activities are often not carried out. If they are, measures to stop unauthorised activities are insufficient. **Secondly**, inspections fail to ensure that mitigation and compensation measures required under Article 6(3) and (4) HD are indeed carried out as prescribed. And **thirdly**, inspections are often carried out by the same national authorities that issue permits for activities or developments in Natura 2000 sites, potentially leading to "conflicts of interest".

Another important finding in the context of this dissertation concerns the **role of permits**, a topic that has already proven to be controversial under the ELD and ECD. Permits also appear

[45] See IEEP et al., *Impact Assessment Environmental Inspections*, 59.
[46] Mandated under Article 11 HD, which requires MS to undertake surveillance of the conservation status of protected species and habitats.

to represent an important loophole in the context of inspections. This is because inspections do control compliance with permits. The lawfulness of permits, however, is not subject of inspections. If activities are backed by unlawful permits, inspections become ineffective. Therefore, in order to secure that EU environmental law is indeed complied with, an important role of inspections should be to ensure that national authorities do not issue permits in breach of the BHD (or other EU environmental law).

While the above findings do not equally apply to all MS, any observed disparities contradict one of the central motivations for the adoption of the RMCEI, namely to reduce disparities between inspection systems in the MS.

In conclusion, there is ample evidence that inspections have the potential to significantly improve the implementation and enforcement of EU environmental legislation. Indeed, they are an important complementary instrument for the effective implementation of the ELD and ECD. However, much depends on their design and implementation. As shown, there are a range of concrete proposals and starting points for improving the current regime of inspections. So far, however, the political will to implement these proposals is obviously not yet there.

PART V Integration of ELD and ECD

PART V investigates to what extent the **design and wording** of the **Environmental Administrative Liability Directive** and **Environmental Criminal Liability Directive** are **sufficiently integrated** to use the **complementary aspects** of administrative and criminal liability for damage to protected species and habitats. The most evident benefit of such an integration would be a guarantee that damage caused by offences listed under the ECD is remediated in accordance with the provisions of the ELD.

First and foremost a successful integration requires that key concepts under the two Directives are aligned. These include the scope of biodiversity covered, the definition of what constitutes damage (threshold criteria), the determination of the liable person and the activities/conduct included with the scope of the Directives. Another critical point under both Directives is, as has been demonstrated, the role of permits and to what extent a permit/authorisation excludes or exempts from liability under the two regimes. Finally, the success of an integrated design also depends on the proper implementation and enforcement of both Directives.

The following chapters address these aspects, starting with a comparison of the species and habitats protected under the two Directives (Chapter 27), followed by an investigation of the activities/conduct and the type of damage covered (Chapter 28), the scope of liable persons (Chapter 29), standard of liability (Chapter 30), thresholds for liability (Chapter 31). Next the role of permits under both Directives is discussed (Chapter 32). Lastly, the findings are summarised and conclusion on the interplay of the two Liability Directives are drawn (Chapter 33).

27 Scope of protected species and habitats under the ELD and ECD

A direct comparison of the species and habitats protected under the ELD on one side and the ECD on the other, as depicted in the table below, reveals that the scope of protection provided by the ELD is somewhat broader than that of the ECD.

Scope of protected species and habitats	
ELD	**ECD**

Species protection	**Species protection**
According to Article 2(3)(a) ELD, the protection of plant and animal species from significant damage or an imminent threat thereof is confined to: "the species mentioned in Article 4(2) of Directive 79/409/EEC or listed in Annex I thereto or listed in Annexes II and IV to Directive 92/43/EEC;"	According to Article 2(b)(i) ECD, the protection of plant and animal species under Article 3(f) ECD ("wildlife protection") is confined to the plant and animal species listed in: "— Annex IV to Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (1), — Annex I to, and referred to in Article 4(2) of, Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (2);"
This translates into: • the **regularly occurring migratory wild bird species** referred to in **Article 4(2)BD**; • the **194 species and sub-species of wild birds** that are **particularly threatened** listed in **Annex I BD**; • the over 400 animal and plant species that are **in need of strict protection** listed in **Annex IV HD**; • the about **900 animal and plant species** whose conservation requires the designation of Special Areas of Conservation listed in **Annex II HD**	This translates into: • the **regularly occurring migratory wild bird species** referred to in **Article 4(2) BD**; • the **194 species and sub-species of wild birds** that are **particularly threatened** listed in **Annex I BD**; • the over 400 animal and plant species that are **in need of strict protection** listed in **Annex IV HD**;
Habitat protection Article 2(3)(b) ELD the scope of protected habitats under the ELD extends to: "the habitats of species mentioned in Article 4(2) of Directive 79/409/EEC or listed in Annex I thereto or listed in Annex II to Directive 92/43/EEC, and the natural habitats listed in Annex I to Directive 92/43/EEC and the breeding sites or resting places of the species listed in Annex IV to Directive 92/43/EEC;"	**Habitat protection** Art. 3(h) ECD confines habitat protection under the ECD to „habitat[s] within a protected site". According to Article 2(c) ECD, "[h]abitat within a protected site" means any habitat or habitat of species in a Natura 2000 site, i.e. • any **habitat of species** for which an area is classified as a special protection area (SPA) pursuant to Article 4(1) or (2) BD; or • any **natural habitat** or a **habitat of species** for which a site is designated as a special area of conservation (SAC) pursuant to Article 4(4) HD
This translates into: • the **habitats of the 194 species and sub-species of wild birds** that are particularly threatened and listed in Annex I BD • the **habitats of the regularly occurring migratory wild bird species** referred to in Article 4(2) BD • the **around 230 natural habitats** listed in Annex I HD, which are the natural habitat types whose conservation requires the designation of Special Areas of conservation • the habitats of the about **900 animal and plant species** listed in **Annex II HD** whose conservation requires the designation of Special Areas of Conservation; • the **breeding sites or resting places** of the animal and plant species that are **in need of strict protection** and that are listed in **Annex IV HD** • where a Member State so determines, **any habitat or species**, not listed in the Annexes of the BHD	This translates into: • the **habitats of the 194 species and sub-species of wild birds** that are particularly threatened and listed in Annex I BD • the **habitats of the regularly occurring migratory wild bird species** referred to in Article 4(2) BD • the **around 230 natural habitats** listed in Annex I HD, which are the natural habitat types whose conservation requires the designation of Special Areas of conservation; • the habitats of the about **900 animal and plant species** listed in **Annex II HD** whose conservation requires the designation of Special Areas of Conservation.

but **designated by the MS for equivalent purposes.**	

Concerning **animal and plant species**, both the ELD as well as the ECD protect the **particularly threatened wirld bird species** listed in **Annex I BD** as well as the **regularly occurring migratory wild bird species** referred to in **Article 4(2)BD**. In addition, both Directives include within their scope the the over **400 animal and plant species** that are **in need of strict protection** listed in **Annex IV HD**. The ELD, moreover, extends its scope to include the about **900 animal and plant species** whose conservation requires the designation of Special Areas of Conservation listed in **Annex II HD**. That said, many of the animal and plant species listed in Annex II enjoy strict protection under the HD and are thus also included in Annex IV HD.

Concerning **habitats**, both Directives cover the habitats of the animal and plant species they protect, including wild bird species. In addition, they protect the natural habitats, which are protected in their own right under the HD. Notably, in the case of habitats, too, the ELD extends the scope of its protection a little further, including the breeding sites or resting places of the animal and plant species that require strict protection (Annex IV HD) and, where a MS so determines, any habitat or species, not listed in the Annexes of the BHD but designated by the MS for equivalent purposes.[1]

Considering the interplay of the two Directives and the primary aim of this part of the dissertation to identify to what extent damage caused by crimes listed under the ECD is covered under the ELD, it can be concluded that the species and habitats covered under the ECD are also covered under the ELD so that in this regard no friction should arise.

28 Punishable conduct under the ECD vs Activities covered under the ELD

The ECD specifies the punishable conduct as the **killing and destruction** and the **possession and taking** of of specimens of protected plant and animal species (Article 3(f)- Wildlife Crime) as well as **any [unlawful] conduct** which causes the **significant deterioration of a habitat within a protected site**" (Article 3(h) - ECD Habitat Crime).

[1] ELD Article 2(3)(c)

The ELD, on the other hand, does not further specify the conduct that results in damage to protected species and habitats. Instead, the ELD generally confines its scope of application to activities of an "occupational" nature, which is defined as "any activity carried out in the course of an economic activity, a business, or an undertaking, irrespectively of its private or public, profit, or non-profit character".[2] This excludes all activities carried out in a purely personal or domestic context.[3] Where strict liability applies, the scope is further confined to activities of a dangerous or potentially dangerous nature (exhaustively listed in Annex III to the ELD).[4]

In conclusion, concerning the application of the ELD to damage resulting from an offence under the ECD, the limitation is that **damage caused by activities of a private nature** is not included. Where complications arise proving fault or negligence on the part of the operator, non-Annex III activities also fall outside the scope of the ELD. However, given the high standards of proof that apply in criminal law, complications to prove fault or negligence should mean that criminal liability in such cases is equally excluded.

29 Scope of liable persons under the ELD and under the ECD

Under the ELD as well as the ECD, both, natural as well as legal persons can be held liable. Yet, while under the ECD the offender can be any natural or legal person, the ELD, confines its scope to the person "who **operates or controls** the occupational activity", i.e. the "operator".

There is some overlap between the **concept of "operator" under the ELD** and **liability of legal persons under the ECD**. For in relation to legal persons, under the ECD MS must ensure that legal persons can be held liable for an offence where it has been committed **for their benefit** by any person who has a **leading position** within the legal person or where a **lack of supervision or control** by a person in such a leading position made the offence by a person under its authority possible.[5]

[2] ELD Article 2(7) ELD
[3] See Chapter 11.2, *Activities covered under the ELD*.
[4] *Ibid.*
[5] ECD, Art. 6.

In summary, however, comparing the two Directives the scope of liable persons under the ELD is clearly narrower than under the ECD, thus leaving out any damage resulting from offences committed by persons that do not qualify as "operator" of an "occupational activity".

Next to operators, the ELD also mentions third parties causing environmental damage. The question is if liability under the ELD in certain cases may therefore extend to persons other than operators of an occupational activity. The crucial provision in this context is Article 8(3)(a) ELD, the so-called third party defence. It stipulates that an operator shall not be required to bear the costs of preventive or remedial actions when it can prove that the environmental damage or imminent threat of such damage was caused **by a third party** and occurred despite **appropriate safety measures being in place**("third party defence").[6] Problematically, the term "third party" is not further defined by the ELD and interpretations of the term differ. Some commentators argue that only operators engaged in activities listed in Annex III should be included within the definition of "third party",[7] others contend the term "third party" should cover all persons, who access the operator's site without authorisation, including terrorists and other criminals.[8] However, regardless of how this argument is decided, there is no indication that the third party instead of the operator is to be held liable for carrying out the necessary preventive or remedial measures or for bearing the costs of these measures. Rather, the term "third party" appears as part of a defence. As demonstrated in the discussion of the ELD, this defence does not release the operator from its liability to take the necessary preventive and remedial measures, but (only) from having to bear the costs of these measures.[9] How this is to be achieved is not further explained by the Directive. In this regard it simply states that "in such cases MS shall take the appropriate measures to enable the operator to recover the costs incurred".[10]

For the purpose of illustration, the application of the two Directives to a case involving a "third party" within the meaning of the ELD may be exemplified as follows: A terrorist gains unauthorised access to an operator's site and engages in an offence specified in the ECD. Under the ECD the terrorist would face liability for punitive measures. Under the ELD, however, the terrorist would escape liability, because he does not qualify as an operator. Instead, the operator would be held liable for taking preventive and remedial action (not for bearing the costs,

[6] See discussion of third party liability in Chapter 11.3.4.2, *Third Party Defence*.
[7] Salanitro, *Environmental Liability Directive*, 13.
[8] Bergkamp & van Bergeijk, *Exceptions and Defences*, 87.
[9] See Chapter 11.3.4.3, *Nature of the defences: Defences to costs or defences to liability?*
[10] ELD, Art. 8(3) second sentence.

though). To summarise, it can be said that even in the case of "third party" involvement, an operator is always required for the ELD to apply to an incident and thus trigger the obligation to take preventive and/or remedial measures.

In conclusion, concerning the scope of liable persons under the two Directives, the ELD will only cover damage resulting from an offence committed under the ECD, if that offence was committed by a person that qualifies as an operator of an occupational activity or by a person that qualifies as "third party" and thus allows and enables the damage to be attributed to an operator. All other environmental damage resulting from criminal activities does not trigger any prevention or remediation obligations under the ELD.

30 Standard of liability

Under the ECD, the offences must be committed **intentionally** or with at least **serious negligence**.[11] A definition of these mental elements is not provided for by the ECD and its interpretation therefore left to the national law of the MS.

Under the ELD, in the case of damage to protected species and habitats, two standards of liability apply: **strict liability** and **fault-based liability**.[12] **Strict liability** applies to biodiversity damage caused by any of the **dangerous occupational activities** listed in Annex III ("Annex III activities"). **Fault-based liability** applies to biodiversity damage caused by **any occupational activities** other than those listed in Annex III ("non-Annex IIII activities").

Applying a **standard of strict liability** means that only the causal link between the damage and the occupational activities of the identified individual operator(s) needs to be established.[13] There is no need to prove that the operator has been at fault or negligent**. Fault-based liability**, on the other hand, requires proof that the operator has acted wrongly intentionally or by negligence, or by insufficient care.[14]

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[11] See ECD, Art. 3.
[12] See ELD Art. 3(1). For further reference, see Chapter 11.3.1, *The two standards of liability in the case of biodiversity damage*.
[13] Concerning the requirement for a causal link under the ELD, see ELD, Art. 4(5) Recital 13, For further reference, see Chapter 11.3.3, *Requirements for establishing the causal link*.
[14] European Commission, *Environmental Liability White Paper (COM(2000) 66 final)*, § 4.2.2. supranote 10. According to the Commission, such an act (or omission) "may involve non-compliance with legal rules or with the conditions of a permit, or may occur in any other form."

Reportedly, much of the damage to biodiversity is caused by smaller operators engaged in non-Annex III activities (e.g. agriculture, forestry, fisheries or construction activities).[15] Thus it is to be expected that the requirement to prove operator fault or negligence will apply in a considerable number of cases – namely in all those cases, where damage to biodiversity was caused by non-Annex III activities.[16]

In response to the question of what damage resulting from ECD offences is covered by the ELD, it can be stated that the standard of liability required under the ECD, namely proof of intent or serious negligence, should always meet the required standard of liability under the ELD, even when proof of fault or negligence are required.

31 Thresholds for liability under the ELD and ECD

Under both Directives, the ELD as well as the ECD, thresholds play an important role and determine their application. Threshold criteria are critical for any regime triggering environmental liability, since a wide range of human activities cause different levels of environmental harm or pollution every day, yet there is a societal interest for these activities to take place and thus, within certain limits, liability is not intended.[17]

Under the ELD and ECD, thresholds for their application are specified using the terms "significant" (ELD and ELD) and "negligible" (ELD). Previous parts of this dissertation have already examined these thresholds and problems with their interpretation and application.[18]

Applying the ELD and thus the polluter-pays principle to damage resulting from offences under the ECD requires, that the threshold criteria under both Directives are aligned or that the threshold that triggers application of the ELD is not higher than that under the ECD thus leaving out any damage below this threshold value. In the following, the thresholds are thus compared,

[15] BIO Intelligence Service, *ELD Scope and Exceptions*, 12, with further references; ClientEarth, *Reviewing the ELD*, 10-11.
[16] Milieu & IUCN, *ELD Biodiversity Damage Report*, vi, 83.
[17] For activities that require authorisation, these limits are stipulated in a permit. A permit should guarantee that the authorised activity does not cause environmental harm or pollution beyond certain limits. See also related discussion on the optimal level of pollution and the role of permits in environmental criminal law in Part III, Chapter 15, *Theoretical foundations and underlying rationale of environmental criminal law.*
[18] For further reference, see the discussions in Part II (ELD) and III (ECD).

starting with the threshold of "significance" in relation to "habitat crime" (Chapter 31.1) and moving on to comparable threshold values in relation to "wildlife crime" (Chapter 31.2).

31.1 Threshold for protected habitats under the ELD vs ECD

Both, the ELD and the ECD use the term "significant" to specify a threshold for their application. However, it is not clear whether the term "significant" in the definition of the offence stated under Article 3(h) ECD ("habitat crime") has the same meaning as the term "significant" in the definition of damage to protected species and habitats under the ELD.

In both cases, the term "significant" refers to the result of an activity or conduct: in the case of the ECD the "significant deterioration of a habitat within a protected". In the case of the ELD the "significant adverse effects on reaching or maintaining the favourable conservation status" of a protected species or habitat.[19]

The ELD, in addition, contains criteria on how to determine the significance of the damage (Annex I), whereas no further specification is provided for under the ECD. In contrast to Article 3(f) ECD ("wildlife crime"), Article 3(h) ECD ("habitat crime") does not refer to the impact on the conservation status of the habitat either, so that in this respect an explicit point of reference for the interpretation of the term is missing as well. MS have largely directly incorporated the wording of Article 3(h) ECD into their national law, so no further indication can be derived from their interpretation.[20] Germany and Italy have arguably added some precision by clarifying that the deterioration needs to "compromise" the **"state of conservation"** of the habitat (Italy) or that it needs to be significant in relation to the "**conservation aims or protection aims of the site"** (Germany).[21]

As previously shown, the vague formulation of the threshold criteria under the ECD was intended to leave their appraisal "to each MS to interpret in the light of its traditional and legal system".[22] A search of national case law on Article 3(h) ECD in the MS revealed remarkably

[19] See, ELD Art. 2(1)(a).
[20] See Chapter 16.2.4, *Threshold criteria for the deterioration of habitat in the implementing laws of the MS*. Notably, Spain is an exception in that, for Article 334(1) CrimC (protected species of fauna), it has not established any threshold criteria.
[21] See Chapter 15.2.4.
[22] European Commission, Proposal for a Directive on the protection of the environment through criminal law, COM(2007) 51 final. For further reference, see Chapter 16.1.3, *Threshold criteria under Article 3(f) ECD*, referring to threshold criteria under the ECD in general.

few cases dealing with Article 3(h) so far.[23] Surprisingly, the interpretation of the term "significant" under Article 3(h) ECD has so far attracted practically no comments, neither from the academic community, nor from practitioners or potentially affected stakeholders.[24] The absence of any discussion of the threshold element under the ECD stands in marked contrast to the wide-ranging discussions on this under the ELD. Nevertheless, also under the ELD, the correct interpretation of the term "significant" and thus the threshold for its application remains unclear, as will be recalled next.[25]

Under the ELD, the definition of damage to protected species and habitats is closely intertwined with provisions of the BHD. However, it is clear from the findings of this dissertation that the integration of terms and concepts from the conservation regime established under the BHD into the liability regime of the ELD creates several problems with the assessment of damage.[26]

Firstly, terms used under the HD, such as "favourable conservation status" or "natural range", are by their very nature "vague". Under the HD, these terms serve conservation objectives and thus rightly follow an ecosystem approach that is based on ecological concepts.[27] Ecological concepts, in order to account for the "dynamic" nature of ecosystems, however, often include a degree of vagueness.[28] Under a conservation instrument, such as the HD, this may work well. A regime that triggers liability, however, relies on clear indicators. Otherwise, the threshold indicating liability risks turning into a "moving target"– as has been vividly demonstrated in academic literature for the ELD.[29]

Secondly, while the ELD explains in detail how the significance of the damage is to be assessed (Annex I), it is not clear what constitutes "significant" damage. As a result, the interpretation of the term varies considerably across MS, ranging from severe – almost catastrophic cases to any damage beyond small variations.[30] The history of the ELD and additional arguments from academic literature indicate a low threshold under the ELD, which is aligned with the threshold

[23] For further reference, see Chapter 16.3.2.4, *Application of vague threshold criteria by National Courts*.
[24] See Chapter 16.2., *Significant deterioration of habitat within protected site*.
[25] For full discussion of threshold criteria under the ELD, refer to Chapter 11.1, *Evaluation of damage to protected species and habitats under the ELD*.
[26] See Chapter 11.1 , in particular Chapter 11.1.2, *The significance threshold under the ELD*.
[27] See Epstein, Favourable Conservation Status (Swedish Wolf), 233. Through a case study of the Swedisch Wolfe, the article extensively discusses issues with the application of the concept of FCS in the context of the HD.
[28] For further reference, see Fogleman, *Threshold for Liability in the EU*, 204.
[29] See Chapter 11.1.2.1.2.3, *High threshold for natural range.*
[30] See Chapter 11.1.2.2, *Interpretation of the term "significant".*

requirements under the BHD.[31] This dissertation concluded that in the interest of legal certainty and a more level playing field, a clearer description of what constitutes "significant" damage and thus triggers liability will remain necessary. Ideally the clarification should include reference to the thresholds under the HD and clarify the extent to which these thresholds correspond or deviate from each other. Obviously, this is also the approach currently pursued by the Commission (2021). In its recent "Notice on Environmental Damage", the Commission (2021) has listed specific examples of what constitutes significant biodiversity damage, apparently starting from a low threshold.[32]

In summary, due to the vaguness of the threshold criteria under both the ELD and ECD, a direct comparison hardly leads to clear results. However, it can be assumed that Article 3(h) ECD as a penalty provision should require at least an equivalent, if not higher, threshold than the ELD.

31.2 Threshold for wildlife crime / protected plant and animal species under the ECD vs ELD

The comparison of the threshold criteria of the ECD with the threshold criteria of the ELD raises similar problems. First of all, the determination of the threshold for wildlife crime under ECD is as problematic as for habitat crime.The threshold criteria excludes conduct which concerns a "**negligible quantity**" or has a "**negligible impact**". Again, the ECD contains no further specification of these terms nor can any clarification be derived from reference to the BHD: Neither the HD nor the BD contain an exception for the killing, destruction, possession or taking of strictly protected wild fauna or flora species, if it only concerns a "**negligible quantity"** and has a "**negligible impact"** on the conservation status of the protected species.[33]

In addition, in the case of wildlife crime the threshold criteria lacks an obvious equivalent under the ELD. A provision under the ELD that uses similar threshold criteria does not exist. As was previously the case with Article 3(h) ECD, the relevant provision under the ELD is Article 2 (1)(a) ELD, which requires a "significant adverse effects on reaching or maintaining the favourable conservation status" of a protected species or habitat. But is anything that goes beyond a negligible quantity or a negligible impact already significant? In a ruling of the

[31] See Chapter 11.1.2.4, *Discussion of findings on threshold for damage to protected species and habitats under the ELD.*
[32] European Commission, *Commission Notice on Environmental Damage* [2021] OJ C118/1.
[33] See also discussion in Chapter 16.3.2.3, *Interpretation of v ague notions by reference to the BHD*.

District Court of Steyr of 28 June 2016, the killing of a lynx was found to have a non-negligible impact on the conservation status of the species and thus to meet the threshold requirement of Article 181f Austrian Criminal Code, the norm that transposes Article 3(f) ECD.[34] Arguably, the impact of the killing also qualifies as "significant" within the meaning of the ELD, which requires a "significant adverse effects on reaching or maintaining the favourable conservation status": The direct effect of killing the lynx "B 7" on the population size was stated to be a reduction of 1/6. The actual probability of survival of the population was reduced with an overall uncertain outlook. It was found that a successful continuation of the reintroduction project, of which the killed specimen was part, could only be secured by again purchasing a male lynx. The concrete example of the killing of a lynx illustrates the general difficulties involved in specifying threshold requirements when dealing with the "dynamic" nature of ecosystems.

In conclusion, it can be said that in the case of Article 3(f) of the ECD, too, no definitive statement can be made as to whether the thresholds between the ECD and the ELD correspond. However, it can again be assumed that Article 3(f) ECD as a penalty provision should require at least an equivalent, if not higher, threshold than the ELD.

31.3 Summary of findings on thresholds for liability under the ELD and ECD in comparison

In summary, and based on the preceding analysis—including references to the thresholds under the BHD—the following findings can be summarised:

Firstly, the ELD and thus the polluter-pays principle should apply in all cases where MS are required to prevent or remediate damage under the BHD, assuming the threshold requirements under the BHD and ELD are aligned.

Secondly, the ELD should also apply in all cases where a conduct constitutes wildlife crime or habitat crime under the ECD, assuming that, as penalty provisions, Article 3 (f) and (h) ECD should require at least an equivalent, if not higher, threshold than the ELD.

[34] For further reference, see Chapter 16.3.2.4, *Application of vague threshold criteria by National Courts*.

These conclusions concern threshold levels only. As shown, additional conditions must be met for the ELD to apply. Furthermore, the analysis rests on several assumptions, as the threshold criteria under all four Directives remain vague and require further clarification.

Overall, comparing the approaches to threshold definitions under the BHD, ELD, and ECD, the ELD stands out for its more developed assessment criteria—though these still present certain challenges. Unlike the other Directives, there is an active and ongoing discussion surrounding the ELD's criteria, including proposals for further refinement. With the objective of improving and harmonising biodiversity damage assessment across all four Directives, the ELD's more advanced framework could serve as a useful reference point.[35]

32 Comparing the role of permits under the ELD and ECD

Neither the ELD nor the ECD provide absolute protection for the environment. Instead, certain limits apply. In addition to establishing threshold values, both directives also include provisions that exempt authorised activities from their scope of application. This exemption is based on the acknowledgement that many human activities, even if they have the potential to pollute or harm the environment (such as the construction of transport infrastructure or the operation of waste facilities), are also deemed beneficial to society - within certain limits. These limits are defined by administrative norms, which establish environmental protection standards. Consequently, liability is contingent on decisions made within administrative law. In criminal law, this dependency is also referred to as the administrative dependence of environmental criminal law, a concept amply discussed in Part III of this dissertation.[36]

Under the ECD, this dependency is expressed by the "unlawfulness" requirement, according to which a conduct only constitutes a criminal offence when it violates an administrative norm. Such a violation can be lack of an authorisation (permit) or the violation of environmental standards established under administrative law.

Similarly, the ELD creates a link between authorisations (permits) and liability. Two provisions under the ELD are relevant in this regard. Firstly, the **mandatory "authorisation exception"** stated under the second paragraph of Article 2 (1)(a) Article ELD, which provides for a

[35] For a discussion of necessary amendments under the ELD and ECD, the reader is referred to Part VI.
[36] For further reference, see Chapter 15, *Theoretical Foundations of Environmental Criminal Law*.

mandatory exception to liability for damage caused by an "act" authorised under the Birds and Habitats Directive.[37] Secondly, the **optional** "**permit defence"** available under Article 8(4)(a) ELD, which gives the operator of dangerous activities the right to recover his costs for remedial measures, if the damage was caused by an emission or event expressly authorised under legislation listed in Annex III of the ELD. [38]

This dependency of liability under the ELD and ECD on decisions taken under the BHD means that incorrect implementation and enforcement of provisions under the BHD, such as the issuance of a permit in breach of Article 6(3) and (4) HD, not only undermines protection under the BHD, but also has a direct impact on the effectivenss of the liability rules established under the ECD and ELD. Issuing permits and monitoring compliance, is primarily the responsibility of NCAs. As shown, the lack of necessary controls, the active toleration of violations and the misconduct of administrative authorities are a recurring problem in the occurrence of damage to protected species and habitats. The dependence between liability and permits under both the ELD and ECD once more underlines the crucial role of NCAs in the implementation and enforcement of EU environmental law.

In conclusion, concerning the integration of the ELD and ECD, both Directives are aligned in that they exclude activities authorised under the BHD from their scope of liability.

33 Summary of findings and conclusions on the integration of the ELD and ECD

Introduced within a time frame of less than four years, the **Environmental Administrative Liability Directive** (2004) and the **Environmental Criminal Liability Directive** (2008), have each established a framework of environmental liability. This part of the dissertation investigated to what extent the **design and wording** of the **ELD** and **ECD** are **sufficiently integrated** to use any **complementary aspects** of the two liability regimes in relation to damage to protected species and habitats ("biodiversity damage"). The most evident benefit of such an integration would be a guarantee that damage caused by offences listed under the ECD is remediated in accordance with the provisions of the ELD.

[37] For further reference, see Chapter 11.3.2, *Exceptions to liability for biodiversity damage.*
[38] *Ibid.*

As mentioned at the outset, successful integration requires first and foremost that key terms or concepts of the two directives are sufficiently aligned to allow the ELD to be applied to damages resulting from criminal offences under the ECD. The above analysis has shown that this is the case for a number of key requirements. These include the **scope of protected biodiversity**, the **thresholds** and the **standard of liability**. Although these concepts do not necessarily correspond in the sense that they are identical, the correspondence is such that it allows the ELD to be applied to biodiversity damage resulting from an offence under the ECD. And there is another critical point where the two directives correspond, and that concerns the **role of permits/authorisations.** In the case of the ELD, because damage caused by activities authorised under the BHD fall outside the scope of the Directive. In the case of the ECD, because of the "unlawfulness" requirement, which means that punishment requires infringing administrative provisions, including permits.

A **lack of integration**, on the other hand, was found in the activities or types of conduct that fall within the scope of the Directives and in the determination of the liable person: **Firstly**, concerning the **activities or types of conduct**, in contrast to the ECD, the ELD only applies to activities of an "occupational" nature, which is defined as "any activity carried out in the course of an economic activity, a business, or an undertaking, irrespectively of its private or public, profit, or non-profit character".[39] Consequently, this excludes all (criminal) activities carried out in a purely personal or domestic context.[40] **Secondly**, concerning the **determination of the liable person**, while under the ECD any person can be considered an offender as long as their conduct aligns with the requirements set out in Article 3 of the ECD, the scope of liability under the ELD is confined to persons who fulfil the criteria of an "operator", which is the person "who operates or controls the occupational activity".

This lack of consistency obviously has **far-reaching consequences**, as it ultimately leads to the exclusion of all damage resulting from criminal conduct that does not qualify as "occupational" and where the offender is not the person "who operates or controls the occupational activity". However, to what extent this indeed affects the remediation of damage from wildlife or habitat crime cannot be stated on the basis of these findings alone. Rather, this requires much better

[39] ELD, Art. 2(7).
[40] See Chapter 11.2., *Activities covered under the ELD*.

data and qualitative information on the type of cases recorded in this area of crime at MS level. As has been demonstrated in Part III of this dissertation, however, a lack of data on environmental crime in the MS is currently one of the major shortcomings under the ECD and this especially applies to wildlife and habitat crme, where little information is available.

In conclusion, prior to further aligning the two Directives in the areas of wildlife and habitat crime, qualitative research into the nature of these two crimes is recommended.

PART VI Amendments in the design and wording of the ELD and ECD

This part of the dissertation discusses, whether amendments in the design and wording of the of the ELD and/or ECD could improve their ability to deliver on their stated aims, thus addressing the fifth and final research question. The discussion is grounded in the findings from earlier parts of this dissertation and takes into account:

- The evaluation of the ELD (Part II)
- The evaluation of the ECD (Part III)
- The observations on the role of inspections (Part IV)
- The evaluation of their integration (Part V)

Chapter 34 focuses on the ELD, consolidating the research outcomes from its analysis in Part II and exploring potential amendments to strengthen the Directive. **Chapter 35** then builds on the research findings from the analysis of the ECD in Part III, further examining possible amendments to the Directive and comparing these findings with the amendments introduced under the new ECD (nECD), which came into force in May 2024.

34 Amendments in the design or wording of the ELD

The assessment of the ELD in Part II of this dissertation identified several areas where amendments to its design and wording could enhance its effectiveness in achieving its aim of preventing and remedying environmental damage[1]. Throughout the examination of the ELD, proposals for amendments have been made. The following chapters consolidate the research outcomes derived from the analysis of the ELD in Part II of the dissertation and delve deeper into potential amendments of the Directive.

34.1 The challenges of integrating the ELD with the BHD

The analysis of the ELD identified a significant number of issues that are directly related to the integration of the provisions of the BHD into the provisions of the ELD, shedding light onto the challenges of integrating the ELD with the BHD. This has implications for the **scope of**

[1] ELD, Recital 11

biodiversity protected under the ELD, the **definition of damage** and the granting of **an exception to liability** in cases where the damage resulted from an act authorised under the BHD. The latter is related to one of the most pertinent issues under the ELD, namely the **role of permits**.

The following chapters revisit the most important findings from the examination of the ELD and discuss possible amendments. Next to the issues resulting from the challenging integration of the ELD with the BHD, the proposed amendments also address broader issues under the ELD. They include the **participation and access to justice requirements** included under the ELD, the challenges associated with the **establishment of the causal link** or the **problem of orphan damage**, i.e. when environmental harm occurs but no responsible party can be identified or held accountable for preventing or remedying the damage.

34.2 The problematic role of permits under the ELD and proposals for amendment

The ELD contains exceptions and defences for damage resulting from acts authorised under the BHD or events and emissions authorised under Annex III-legislation ("permit defence").[2] This has a number of repercussions for the protection of biodiversity under the ELD. In the case of the optional permit defence, the operator remains liable to carry out the necessary preventive and remedial measures, but has the right to recover his costs for remedial action ("defences to costs"). [3] In the case of the mandatory exception for acts authorised under the BHD, on the other hand, the operator is released from all liability. [4] In other words, operator liability for the prevention and remediation of damage under the ELD is linked to and made dependent on authorisations issued under the BHD. Similar to the ECD, authorisations, even if in breach of the BHD and therefore unlawful, prevent holding the operator liable for any damage that may result from authorised activities. The conflict between ecological and economic interests, that already weakens the effectiveness of the BHD, is directly transferred to the ELD, thereby disempowering it as an instrument for improving the implementation and enforcement of the

[2] First, the exception stated under the second paragraph of Article 2(1)(a) ELD, which provides for a mandatory exception to liability for damage caused by an "act" authorised under the Birds and Habitats Directive ("authorisation exception"). Secondly, the optional defence available under Article 8(4)(a) ELD, which gives the operator of dangerous activities the right to recover his costs for remedial measures, if the damage was caused by an emission or event expressly authorised under legislation listed in Annex III of the ELD ("permit defence"). For further reference, refer to the discussions in Part II of this dissertation.
[3] See debate in Chapter 10.3.3, *Nature of the defence: Defences to cost or defences to liability?*
[4] ELD, Art. 2 (1)(a).

BHD. The following chapters discuss possible amendments to the ELD that could prevent such undesirable outcomes.

34.2.1 Application of the ELD to "chronic damage" caused by authorised activities

Considering the damage caused to protected species and habitats by authorised activities, it appears necessary to put more emphasis on the application of the ELD to "chronic damage". Chronic damage is damage that is not the result of an accident, but of an activity the MS has authorised and that may have been carried out for many years.[5] The findings of this dissertation suggest that the application of the ELD to activities authorised under the BHD needs further clarification.[6] Such clarification should ensure that MS are not empowered to authorise or accept as management measures activities that are in breach of their conservation obligations under the BHD. Otherwise, MS may find it too easy to legitimise, by way of authorisation, activities that cause significant damage to the natural resources protected under the ELD. The Court's preliminary rulings in *Gert Folk* (C-529/15) and in *Naturschutzbund Deutschland* (C-297/19) provide important points of reference in this regard. In both cases the damage was not the result of an accident, but of activities that had been going on for years and had been authorised by national competent authorities.[7] These could be further developed, for example in the form of ELD guidelines. In line with Fogleman (2020)'s conclusions from the Court's preliminary ruling in *Naturschutzbund Deutschland (2020)* and from the Court's previous ruling in *Gert Folk* (C-529/15), an authorisation would no longer guarantee that damage caused by such activities falls outside the scope of the ELD and thus protects an operator from liability.[8] Damage already caused by these activities would need to be remediated and, to avoid further damage, authorised activities affecting Natura 2000 sites would need to be modified or stopped.[9] Liable operators that successfully demonstrate that they rightfully relied on the lawfulness of the permit should be able to claim the costs incurred by them under the ELD within the framework of state liability. This would also increase the pressure on NCAs to issue

[5] Fogleman, *Biodiversity Damage from Authorised Activities*, 1. For further reference, see Chapter 11.3.2.4 *Discussion of findings on exceptions to liability and the repercussions of the Court's ruling in Naturschutzbund Deutschland*.
[6] For further reference, see Chapter 11.3.2, *Exceptions to liability for biodiversity*.
[7] *Ibid. Naturschutzbund Deutschland* (C-297/19) moreover addressed the exception stated under the third indent of Annex I of the ELD, which provides, that damage can be exempt from liability when it results from the "normal management" of the site.
[8] Fogleman, *Biodiversity Damage from Authorised Activities*, 2, 30. For further discussion of damage resulting from authorised activities, see also Chapter 11.3.4.1., *Permit Defence*. For further discussion of a duty to prevent damage from authorised activities see Fogleman, *Duty to Prevent Environmental Damage*, 707-721, and related discussion in Chapter 11.4.3, *Duty to prevent damage from authorised activities.*
[9] *Ibid.*

permits only if no significant environmental damage can be expected to occur, thus contributing to the underlying aim of the ELD to improve compliance of MS with EU environmental legislation.

34.2.2 Revocation or variation of permit as a preventive measure

Damage resulting from unlawfully authorised activities also raises another question, which is addressed by Fogleman (2019), namely if the variation or revocation of a permit that authorises damaging activities qualifies as a "preventive measure" under the ELD.[10] Fogleman (2019) is right to argue that this is not the case. Firstly, because only a competent authority can vary or revoke a permit, whereas the ELD obliges the operator to take the necessary preventive measures. Secondly, if the damage was caused by activities in the past, the revocation/variation of a permit would be a measure taken in response to an act that has caused damage but not to an act that "has created an imminent threat of environmental damage", as required for preventive measures under Article 2(10) ELD.

While the variation or revocation of a permit currently does not appear to qualify as a preventive measure under the ELD, it may sometimes be a necessary measure to prevent damage, as shown. In this regard, an amendment to the Directive should clarify that the application of preventive measures to a case of environmental damage caused by authorised activities includes the variation or revocation of a permit.

34.2.3 Removal of the optional permit defence

Another proposal for amendment resulting from the examination of the ELD in Part II concerns the removal of the controversial permit defence, which releases the operator from bearing the costs of remedial action for damage caused by emissions or events expressly authorised under Annex III legislation. Unlike the above discussed exception, the permit defence has been the subject of debate from the outset, including repeated calls to remove the defence from the ELD. The most notable points from these discussions relate to the polluter-pays principle and associated incentives on the side of the operator to minimise the risk of environmental damage. From a legal point of view, there is no justification to maintain the permit defence. As shown, the permit defence contradicts central objectives of the Directive including the application of the polluter-pays principle as well as the aim to prevent damage through the incentives created

[10] For further reference, see Chapter 11.4.3, *Duty to prevent damage from authorised activities.*

by operator liability. Operators who benefit from the operation of inherently dangerous activities must be aware that they also bear the associated high risk of environmental damage of these activities. Compliance with a permit is therefore irrelevant. If, on the other hand, due to compliance with a permit, the operator of a dangerous activity is released from financial liability, this results in the general public, rather than the polluter, having to pay for the damage or, in the worst case, the damage never being remedied. Such a result undermines the objectives of ELD and the very essence of the polluter pays principle.[11]

34.2.4 Summary of amendments to resolve problems related to the role of permits under the ELD

In summary, the analysis of the role of permits under the ELD has revealed that in order to improve the Directive's effectiveness, several amendments are necessary. **Firstly**, the application of the ELD to activities authorised under the BHD needs further clarification and should ensure that MS are not empowered to authorise or accept as management measures activities that are in breach of their conservation obligations under the BHD. **Secondly**, legal uncertainties relating to the application of preventive measures to authorised activities need to be resolved. Notably, Article 5 (3) (d) ELD already provides that the NCA may, at any time, take itself the necessary preventive measures. In order to remove any legal uncertainties, it appears necessary to amend the ELD to the effect that it explicitly lists the variation or revocation of a permit by an NCA as a preventive measure under the ELD. **Thirdly**, the optional permit defence should be removed entirely as it threatens to undermine the aims of the Directive. The removal of this optional defence would also lead to a more level playing field across EU MS.

34.3 Balancing Conservation and Liability: the use of vague notions and the threshold for liability under the ELD

The analysis of the ELD has exposed the difficulties that arise when attempting to combine a conservation approach with a liability approach by integrating vague notions and concepts from a conservation regime into a liability tool. Taking a closer look reveals why. Although both, the BHD and the ELD, aim to protect biodiversity, their approach fundamentally differs. The BHD, both classic nature conservation instruments, aim to maintain and restore protected species and

[11] See Chapter 11.3.4.1., *Permit Defence*. See also in this regard, De Sadeleer, *Environmental Principles*, 40.

habitats. To account for the dynamic nature of ecosystems, their approach requires flexibility, resulting in the use of terms and concepts that involve a certain vagueness. The ELD, on the other hand, aims to hold operators liable for the prevention and remediation of damage to protected species and habitats. As a liability instrument and to ensure operators understand their liabilities, the ELD relies on clear definitions, thereby providing legal certainty. As has been shown, it is difficult to reconcile these two fundamentally different approaches, which essentially represent a need for vagueness on the one hand and a need for clarity on the other, in one instrument. This becomes particularly evident in the case of the ELD's damage definition. Both, the ELD and the HD, use the concept of favourable conservation status (FCS) as their main point of reference, albeit for different purposes. While the ELD requires significant adverse changes to the FCS in order to trigger the application of its liability regime, the HD uses the concept of FCS to guide proactive measures towards protecting natural habitats and species from deterioration and disturbance.[12] Under the HD, the concept may provide an important and sufficiently clear basis for the establishment of management plans and other measures. Within the framework of the ELD, however, it is clear from the findings of this dissertation, that using a concept like FCS as a reference point results in significant challenges. The resulting lack of clarity risks leading to an excessively high threshold for liability or, at its worst, transforming the threshold value into an ever-shifting target, ultimately undermining the application of the ELD to a case of biodiversity damage.

The lack of clarity relating to ecological concepts such as "FCS" or "natural range" is further exacerbated by problems with the interpretation of the term "significant", which establishes the threshold for the application of the ELD. The findings of this study indicate that the way MS currently interpret the term "significant" does not reflect the high level of protection for protected species and habitats set out in Article 6 of the HD. As a result, the threshold under the ELD is substantially higher than under the BHD. This means that in many cases where the BHD requires preventive or restorative action from MS, the ELD will not apply, simply because the thresholds differ. The outcome is that the public at large pays for measures that should have been carried out at the expense of a liable operator. Obviously, such an outcome is not aligned with the legislator's intention to implement the polluter-pays principle and ensure that operators bear the costs for the prevention and remediation of damage to protected species and habitats caused by their activities.

[12]For further reference, see Part II, Chapter 11.1.2.1.2, *Assessing the impact of the damage.*

The assumption of a high significance threshold under the ELD also leads to problems with the application of preventive measures or emergency remediation measures. These measures must be carried out "without delay" in the case of preventive measures, and "immediately" in the case of emergency remediation measures. The assumption of a high significance threshold makes it almost impossible for the operator to determine whether the damage falls within the scope of the ELD - especially if an operator wrongly assumes that preventive measures need only be taken when it is known that the damage will be significant.[13]

In summary, it is clear from the above findings that the vagueness in the definition of the threshold criteria results in substantial problems with the application of the ELD. The following sections discuss options to clarify the evaluation criteria and thus improve the effectiveness of the ELD.

34.3.1 Addressing ambiguity and clarifying biodiversity damage assessment under the ELD

Before evaluating options to clarify the criteria for assessing damage to protected species and habitats, it is essential to recall that the history of the ELD, together with the arguments presented in Part II of this dissertation, indicates that the threshold for biodiversity damage under the ELD was meant to be low and aligned with the threshold requirements set out in the BHD.[14] Any amendment to the Directive should therefore ensure that MS apply a low threshold that corresponds to the thresholds applied under the BHD. The following sections first discuss amendments to the definition of the territorial scope and then to the definition of the significance threshold.

34.3.1.1 Territorial scope of the assessment

The findings of this dissertation indicate substantial problems with the definition of the territorial scope of the damage assessment under the ELD. The current wording of the Directive creates ambiguity regarding the appropriate territorial scope for the assessment ("the European territory of the MS to which the treaty applies or the territory of a MS or the natural range"). In

[13] For further reference, see Chapter 11.4.2, *The significance threshold in the context of preventive measures*.
[14] For further reference, see Chapter 11.1.2.4, *Discussion of findings on threshold for damage to protected species and habitats under the ELD*.

line with the current practice of MS, [15] the ELD should therefore be amended to clarify that the assessment is to be carried out **at site level**, replacing the current wording. There are good reasons to keep the assessment of damage under the ELD at site level: **Firstly**, assessment at site level sets a clear common standard, removing all ambiguities concerning the correct territorial scope. **Secondly**, it avoids setting the threshold too high as it may be the case when using "natural range" as a point of reference. **Thirdly**, baseline data for the assessment should generally be available, given that MS are obliged to regularly report data on their protected sites under the HD. **Finally**, any damage that needs to be prevented or restored/remediated under the BHD would automatically fall within the scope of the ELD, so that given all other requirements under the ELD are met, the operator is held financially liable to prevent and remediate the damage it caused (instead of the public at large).

34.3.1.2 Interpretation of the significance threshold

The findings of this dissertation suggest that a lack of clarity in the interpretation of the term "significant" undermines consistent application of the ELD liability regime across MS. One conceivable solution would be to completely remove the requirement for a threshold value in the case of biodiversity damage and no longer require significance, as has been suggested by the eNGO ClientEarth (2015). [16] Consequently, in the case of protected species and habitats, any impact would be considered to have a "significant adverse effect" - except for *de minimis* impacts and natural recovery. ClientEarth (2015) argues with the Environmental Impact Assessment Directive[17], under which - due to their added vulnerability and sensitivity - impacts on protected species and habitats are likely to be significant *per se*. [18] Any remaining uncertainties concerning the threshold requirement under the ELD would be resolved by observing the precautionary principle, as is also the case under the BHD. This approach, however, bears the risk of merely shifting the problem, as it would then become necessary to determine whether an incident of damage has caused "de minimis impacts" or if "natural recovery" can be assumed.

In the interest of legal certainty and a more level playing field, a clearer description of what constitutes "significant" damage and thus triggers liability will therefore remain necessary.

[15] Milieu et al., *REFIT ELD Key Terms and Concepts*, 19.
[16] ClientEarth, *Reviewing the ELD*, 8.
[17] Directive 2011/92/EU.
[18] ClientEarth, *Reviewing the ELD*, 8, with reference to European Communities (2001) Guidance on EIA Screening: Screening checklist and Checklist of criteria for evaluating the significance of environmental effects.

Ideally any clarification should include a reference to the threshold requirements under the BHD and clarify the extent to which these thresholds correspond or deviate from each other. This is also the approach currently pursued by the Commission (2021). In its recent "Notice on Environmental Damage", the Commission (2021) has listed specific examples of what constitutes significant biodiversity damage, apparently starting from a low threshold.[19]

In addition, the criteria set out in Annex I of the ELD could be further substantiated, ideally aligning it with the level of protection warranted under the BHD. Remaining uncertainties should be resolved by observing the precautionary principle, as is the case under the BHD.[20] Such an approach would guarantee that any damage that needs to be prevented or restored by a MS under the BHD also falls within the scope of the ELD, so that given all other requirements under the ELD are met, the polluter can be held financially liable to prevent and remediate the damage it causes – instead of the public at large.

That said, it should be recalled that the results of this dissertation point more generally to difficulties in applying ecological concepts such as favourable conservation status (FCS) and natural range in the context of a liability regime. As shown, these concepts, which have their origins in a conservation regime, serve as important indicators for the establishment of management plans and other measures to maintain or restore the FCS of protected species and habitats under the BHD. However, a regime that triggers liability, such as the ELD, most certainly benefits from clearer indicators.

34.3.2 Leveraging emerging biodiversity measurements, metrics, and indicators

Against the backdrop of rapid developments in biodiversity indicators in recent years, there is abundant room to further develop and clarify indicators for a regime that creates liability for biodiversity damage. Driven by the increasingly pressing need to monitor and assess biodiversity loss and its impacts on ecosystems and human well-being, there have been significant advancements in the field of biodiversity measurements, metrics, and indicators in the last few years. Several organisations are actively involved in these efforts, spanning government agencies, non-governmental organizations (NGOs), research institutions, and

[19] European Commission, Commission Notice on Environmental Damage [2021] OJ C118/1.
[20] See also in this regard Chapter 11.1.2.3.3, *Discussion of findings on divergent threshold requirements in ELD and BHD* with reference to ClientEarth, *Reviewing the ELD*, 8.

private sector entities.[21] Considering these developments and related advancements in the area of biodiversity measurement, a further study with a focus on developing biodiversity indicators and standards in the context of a liability regime, ideally in an interdisciplinary context, is suggested. Such a study could create a comprehensive set of indicators and corresponding standards to evaluate and guide the assessment of biodiversity damage under the ELD.

34.4 Removing the two standards of liability for biodiversity damage

The findings of this dissertation suggest that, in order to improve the effectiveness of the ELD, the distinction between Annex III and non-Annex IIII activities under the Directive should be removed. Instead, strict liability should apply to all activities causing biodiversity damage.

As has been demonstrated, the scope of activities covered under the ELD is generally confined to activities that are listed in Annex III of the Directive and considered **dangerous or potentially dangerous**. Only in the specific case of biodiversity damage, the Directive also applies to non-Annex IIII activities. However, where the damage was caused by a non-Annex III activity, a different standard of liability applies: fault-based liability. As a result, in the case of biodiversity damage, two standards of liability apply: strict liability and fault-based liability. Strict liability applies to biodiversity damage caused by any of the dangerous occupational activities listed in Annex III. Fault-based liability applies to biodiversity damage caused by any occupational activities other than those listed in Annex III.

This distinction has consequences for the level of proof required in the case of damage caused by non-Annex III activities. As shown, applying a **fault-based standard of liability** requires proof that the operator has acted wrongly intentionally or by negligence, or by insufficient care.[22] Applying **strict liability**, on the other hand, means that only the causal link between the damage and the occupational activities of the identified individual operator(s) needs to be established: There is no need to prove that the operator has been at fault or negligent**.**[23]

[21] An example is the recent development of biodiversity-disclosure frameworks and standards, both regulatory and voluntary, linked to corporate biodiversity performance. Regulatory initiatives include the European Sustainability Reporting Standard (ESRS) E4 on biodiversity and ecosystems—part of the Corporate Sustainability Reporting Directive (CSRD)—the Sustainable Finance Disclosure Regulation (SFDR), and France's Energy and Climate Law, in particular Article 29. Voluntary initiatives include the Taskforce on Nature-related Financial Disclosures' and related guidance, the Global Reporting Initiative's Biodiversity Standard, and the biodiversity-disclosure requirements of CDP (formerly the Carbon Disclosure Project).

[22] For further reference, see Chapter 11.3.1, *The two standards of liability in the case of biodiversity damage*.

[23] Concerning the requirement for a causal link under the ELD, see Recital 13 and ELD Article 4(5). For further reference, see Chapter 11.3.3, *Requirements for establishing the causal link.*

Reportedly, much of the damage to biodiversity is caused by smaller operators engaged in non-Annex III activities (e.g. agriculture, forestry, fisheries or construction activities).[24] It is therefore reasonable to assume that the requirement to prove operator fault or negligence will apply in a considerable number of cases – namely in all those cases, where damage to biodiversity was caused by non-Annex III activities.[25]

Based on the findings of this dissertation, to improve the effectiveness of the ELD, the distinction between Annex III and non-Annex III activities under the Directive should be removed. Instead, strict liability should apply to all activities causing biodiversity damage. There are a number of arguments that support the removal of the fault or negligence requirement for non-Annex III activities. The main argument is linked to the difficulties in providing evidence in environmental liability cases. While more data may be necessary to determine the impact of the fault requirement, the findings of existing studies appear to confirm that its removal is likely to simplify the application of the ELD to biodiversity damage in a considerable number of cases and thus improve the effectiveness of the ELD.[26]

Another argument against the prescription of fault or negligence concerns its apparent contradiction with the administrative liability systems of the MS. Administrative liability regimes that require proof of fault or negligence or distinguish between different types of activities are exceedingly rare in the MS.[27] It appears that the application of two different standards of liability is no more than a remnant of the genesis of the ELD for which there is no real justification under the ELD in its current design.[28] As demonstrated, the ELD was initially conceived as a civil liability regime. In contrast to administrative liability regimes, in civil liability regimes applying strict liability to dangerous activities and fault-based liability to other activities is common. Civil liability as such was later explicitly removed from the scope of the ELD. Obviously, however, this was not consistently taken into account in the subsequent revision of the draft Directive, so that remnants of the Directive originally conceived as a civil law regime have survived, now undermining its effectiveness.

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[24] BIO Intelligence Service, *ELD Scope and Exceptions*, 12, with further references; ClientEarth, *Reviewing the ELD*, 10-11.
[25] Milieu & IUCN, *ELD Biodiversity Damage Report*, vi and 83.
[26] *Ibid*. For further reference, see Chapter 11.3.1, *The two standards of liability in the case of biodiversity damage*.
[27] BIO Intelligence et al, *Study on ELD Effectiveness, Scope and Exceptions*, 63.
[28] For further reference on the genesis of the ELD, see Chapter 8, *History and evolution of the Environmental Administrative Liability Directive.*

Finally, by removing the distinction between different types of activities, the ELD is harmonised with the BHD, which also does not make such a distinction.

34.5 Rebuttable presumption of a causal link under the ELD

Environmental cases are well-known for the difficulties that arise with the establishment of a causal link. The findings of this dissertation indicate that, in line with ECJ case law, the ELD should be amended to provide for a rebuttable presumption of causality in cases where the operator is located close to the damage and the competent national authority provides "plausible evidence" to justify the presumption. As demonstrated in Part II of this dissertation, the requirement of establishing a causal link complicates proceedings under the ELD, leading to prolonged and costly procedures. Often, the adverse impacts of detrimental activities manifest over years, making it challenging to attribute the damage to specific acts or activities and establish the requisite causal link. These challenges are amplified in the case of fault-based liability that applies to biodiversity damage resulting from non-Annex III activities. Consequently, instances may arise where neither the operator nor the NCA takes remedial action due to the inability to establish a causal link.

In order to improve the Directive's effectiveness, the wording should therefore be revised to align it with ECJ case law. Such an amendment should clearly state that "the causal link should be assumed, if the operator is located close to the pollution and that "plausible evidence" should be provided by the competent authorities to justify the rebuttable presumption of a causal link under the ELD". [29] This would simplify the implementation of the ELD, thereby reducing the time needed to establish liability and the costs for implementing the Directive.

34.6 Clarifying application of the third party defence and the nature of the defences

Article 8(1) ELD provides that the operator must bear the costs for the preventive and remedial actions taken under the Directive. Article 8 (3) and (4) ELD provide the operator with a number of defences.[30] As has been demonstrated, the defences available under the ELD have raised a number of issues.[31] They concern both the application as well as the nature of the defences. The

[29] Milieu & IUCN, *ELD Biodiversity Damage Report*, 90.
[30] See Chapter 11.3.4, *Defences under the ELD.*
[31] Possible amendments concerning issues with the permit defence have already been discussed above under Chapter 34.2.3, *Removal of the optional permit defence*.

findings of this dissertation indicate that enhancing the effectiveness of the ELD requires both a clarification of the term "third party" as well as a clarification of the nature of the defences. The Directive should therefore be amended to, on the one hand, include a definition of the term "third party" and, on the other hand, clearly state that the defences listed in Article 8 ELD are defences to costs and not defences to liability.

Concerning the third party defence, the ELD in its current version fails to clearly demarcate the scope of persons covered by the term "third party". Does a "third party" have to be an "operator" within the meaning of the Directive, or does the term include all natural and legal persons who access the operator's site without authorisation? The discussion concerning the personal scope of the third party defence is closely related to the continuing debate about the nature of the defences: Are the defences available under Article 8 ELD "defences to liability", releasing the operator from the obligation to take preventive and remedial measures or, alternatively, "defences to costs", giving the operator merely the right to recover his costs after he has undertaken the necessary preventive or remedial action? Obviously, a broad definition of the term "third party" makes it easier for the operator to use the defence. If the defences are furthermore interpreted as defences to liability and not just defences to cost, the environmental damage may never be prevented or remediated.

This dissertation concluded that, firstly a third party can be any person, legal or natural, thus applying a broad definition of the term and that secondly the defences are to be understood as defences to costs. If the rules were interpreted as "defences to liability", this would mean that in the case of the third party defence neither the operator, nor the third party would be required to prevent or remediate the environmental damage until a court had decided on the liability and, throughout this time, the damage would not be remedied and could even aggravate. Such an interpretation is clearly against the intent of Articles 5(1) and 6(1) ELD, which both require the operator to take the necessary preventive and remedial measures "without delay" where environmental damage has occurred or where there is a threat of environmental damage.

In conclusion, the Directive should therefore be amended to, firstly, include a definition of the term "third party" stating that the term includes all natural and legal persons who access the operator's site without authorisation. And, secondly, to clearly state that the defences available under Article 8 ELD are "defences to costs", giving the operator merely the right to recover his costs after he has undertaken the necessary preventive or remedial action.

34.7 Improving the prevention of damage to protected species and habitats under the ELD

The prevention of environmental damage is one of the central objectives of the ELD. Where environmental damage has not yet occurred but there is an imminent threat of such damage, the ELD obliges the operator to take the necessary preventive measures.[32] From the examination of the provisions relating to preventive action under the ELD, it appears that the interpretation of the concept "preventive measures" needs further clarification.

Firstly, such clarification should ensure that the difference between preventive measures and "emergency remedial" measures is clear and that preventive measures are also adopted to prevent the damage from becoming "significant" and therefore minimising it. Differences in the interpretation of these two concepts in the MS indicate, that it is not clear when a measure is of a "preventive" nature, i.e. "where environmental damage has **not yet occurred** but there is an imminent threat of such damage occurring"[33] and when it is of an "emergency remedial" nature, i.e. when environmental damage **has occurred** and the measures shall limit or prevent further environmental damage.[34] It therefore needs to be clarified that preventive measures are prior in time and taken before the damage has turned significant in order to prevent it from becoming significant.[35] Emergency remedial measures, on the other hand, apply once the damage has turned "significant". In addition, any clarification of preventive and emergency remedial measures and their differences must ensure continuous application of the ELD to a case of environmental damage, since discontinuity **in the application** of the ELD interrupts the application of the ELD in favour of sectoral legislation. The resulting execution of preventive measures by public authorities under sectoral legislation means that the operator is not subjected to the polluter-pays principle and the costs are borne by the public at large. Clarification could be achieved in the form of guidelines or amendments.

Secondly, it needs to be clear that measures to prevent damage to biodiversity from becoming significant are taken when there is a "reasonable belief" instead of certainty that the damage may be significant. This is because measures to prevent damage to biodiversity from becoming

[32] ELD, Art. 5(1).
[33] ELD, Art. 5.
[34] ELD, Art. 6 (1)(a).
[35] Milieu & IUCN, *ELD Biodiversity Damage Report*, 63.

significant are often not taken because it is wrongly assumed that preventive measures must only be taken when it is known that the damage will be significant.[36]

Thirdly, as already discussed in the chapter addressing the problematic role of permits under the ELD, the legal uncertainties relating to the application of preventive measures to authorised activities must be resolved. Notably, Article 5 (3) (d) ELD already provides that NCA may, at any time, take itself the necessary preventive measures. In order to remove any legal uncertainties, it appears necessary to amend the ELD to the effect that it explicitly lists the variation or revocation of a permit by a competent authority as a preventive measure under the ELD.

More generally, inconsistencies in the design and application of the provisions of the ELD and the BHD on preventive measures highlight the need to clarify and harmonise the interpretation of certain key terms in both regimes. As has been demonstrated, these inconsistencies relate, amongst others, to the interpretation of the threshold requirements under Article 6(2) HD on the one hand and the ELD on the other hand, which often leads to a fragmented application of the two instruments.[37] Furthermore, the ELD does not currently provide for a subsidiary obligation on the NCA to prevent damage in cases where an operator has failed to fulfil its obligations under the Directive or where it cannot be held liable for damage prevention for other reasons. In such cases, MS may still be obliged to prevent the damage under Article 6(2) of the Directive but, unlike under the ELD, this obligation will be limited to protected species and habitats within Natura 2000 sites. [38]

34.8 Improving transparency on the remediation of damage under the ELD with better monitoring and collection of data

Remediation of environmental damage is a key objective of the ELD, with the overall aim of restoring damaged resources to baseline level. As demonstrated, the ELD sets out a detailed framework to be followed by the operator and the NCA, which distinguishes between three different types of remedial measures: primary, complementary and compensatory remediation.

[36] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 53.
[37] For further reference, see discussions in Chapter 11.1., especially 11.1.2., *The significance threshold under the ELD*" and Chapter 34.3.1.2, *Interpretation of the significance threshold*.
[38] For further reference, see Chapter 34.10, *Lack of mandatory financial security and the problem of orphan damage.*

The assessment of the remediation rules under the ELD concluded that the Directive contains significantly more detailed information on what is expected of the remediation process, concerning both the methods to be used as well as the results to be achieved, than the BHD does on offsetting requirements. Moreover, the involvement of the public and the role of the NCA in the process suggest better monitoring and follow up under the ELD than under the BHD. However, while the ELD regime on remedial measures appears superior in a number of aspects to the minimal requirements formulated under Article 6(4) HD, the existing (scarce) data on its implementation in the MS suggests that the regime established under the ELD would substantially benefit from greater transparency, better follow up and far more comprehensive data on its actual implementation in the MS. In fact, little is known about its actual implementation and success to date. This finding once again underlines the important function of monitoring and evaluation in assessing the success of EU measures.

To enable proper monitoring and evaluation of the remediation measures taken under the ELD, the Directive should be amended to require regular reporting on the implementation of ELD measures, especially with regards to the remediation requirements. In its present version, the only information required from MS was a report that had to be submitted by 30 April 2013, see Article 18 (1) ELD. This report had to include the information and data set out in Annex VI. Concerning remediation measures taken under the ELD, Annex VI simply required to report on the "[o]utcome of the remediation process". This broad definition of what is required of MS is unlikely to provide the information and data needed to properly assess the effectiveness of the remedial measures under the ELD. Any amendment to the Directive should therefore ensure that MS reports contain detailed information on the remediation process. This information and data could reflect the criteria listed in Annex I for the assessment of the significance of damage to protected species or natural habitats. This is the only way to compare the data from the damage assessment with the data from the remediation process. With reference to Annex II, the reports should also state to what extent the restoration was achieved through primary, complementary or compensatory restoration measures.

34.9 Participation and access to justice requirements

One of the most progressive and strongest features of the ELD is the inclusion of explicit participation and access to justice requirements in Articles 12 and 13 ELD.[39] As shown, citizens

[39] For further reference, see Chapter 11.8, *Rights of affected persons and environmental organisations*.

and NGOs are important actors for the implementation and enforcement of environmental legislation and powerful agents of EU environmental law enforcement at national and EU level.[40] The fact that in most cases ELD procedures were initiated by a request from private parties and not from operators is further evidence that the provisions of Articles 12 and 13 ELD are indeed necessary for the ELD procedure to work. The findings of this dissertation, however, suggest that Articles 12 and 13 ELD suffer from two main shortcomings. **Firstly**, MS, in their transposition of the ELD, have the discretion to exclude cases of an imminent threat of damage from the scope of Articles 12 and 13 ELD. Considering that NGOs are often the first to become aware of a threat of environmental damage, confining these rights to actual environmental damage does not appear to act in favour of the prevention aim of the Directive. There is no obvious justification for this differentiation. The removal of MS' discretion in this regard would further strengthen preventive action under the ELD. **Secondly**, another significant shortcoming is the lack of access to information rights, which potentially undermines the ability of NGOs and citizens to intervene and make use of their rights under Article 12 and 13 ELD. The general lack of information on ELD cases at national level is well documented and has been highlighted as one of the "major challenges" for the evaluation of the ELD.[41] The persistent lack of ELD cases in EU MS highlights the importance to increase transparency on ELD cases and further empower private citizens and NGOs by improving access to information under the ELD.

Improved access to information could be achieved by a provision that mandates MS to collect and publish information on national ELD cases and related data in a national ELD register. Such a database should also include environmental damage cases dealt with under pre-existing sectoral legislation to improve an understanding how these are related to the application of the ELD.

As demonstrated, a lack of data on environmental damage and associated procedures is also a prominent issue under the ECD. Ideally, in the case of biodiversity damage, information on cases should be published in such a way that the application of the BHD on the one hand and the ELD and ECD on the other can be easily traced in a centralised register.

[40] For further reference, see Chapter 5.1.3, *The Role of Private Parties (Citizens and NGOs).*
[41] For further reference, see Chapter 10, *National Transposition and Implementation of the ELD.*

34.10 Lack of mandatory financial security and the problem of orphan damage

Two issues that emerged in the examination of the ELD, which are interrelated to some extent, are the absence of mandatory financial security and the problem of orphan damage, which refers to damage for which no party is ultimately responsible for preventing or remedying.[42] Especially problematic are cases where poorly capitalised operators with a high risk of insolvency cause the damage or even deliberately behave in an environmentally harmful manner. Due to the lack of financial means, the costs for prevention and remediation cannot be borne by the operator. The ELD risks losing its desired preventive effect and the costs of preventing and remedying the damage cannot be recovered from the operator. As shown, where the operator fails to comply with its obligations, cannot be identified or is not obliged to bear the costs under the provisions of the Directive, MS are not obliged to take the necessary measures. This creates the problem of "orphan damage", a situation where ultimately nobody is obliged to prevent or remedy the damage inflicted on the natural resources.[43]

While in the case of biodiversity damage, the BHD may mandate MS to prevent or remediate the damage, this obligation falls short of the regime set out under the ELD. To begin with, the preventive or remedial action required under the BHD is limited to the protected species and habitats located or present in designated nature protection areas (Natura 2000), whereas under the ELD they extend beyond Natura 2000 sites.[44] Moreover, as has been demonstrated, when invoking the BHD instead of the ELD, distinctive features of the ELD, such as the detailed prescription of the necessary remediation measures, the explicit requirement of compensation for interim losses, the involvement of the public in the remediation process[45] and the participation and access to justice rights set out under Articles 12 and 13 ELD do not apply. MS' restoration obligations under the BHD are consequently not able to compensate for the lack of subsidiary state liability under the ELD.

In order to avoid "orphan damage" and thus ensure that significant environmental damage is effectively prevented and remedied in accordance with ELD standards, the ELD should therefore be amended to require NCAs to prevent and remedy damage where the operator fails

[42] For further reference, see discussion in Part II, Chapters 11.6, *Lack of Mandatory Financial Security,* and, 11.7, *Orphan Damage.*
[43] *Ibid.*
[44] As previously shown, in some aspects the protection under the ELD is broader than under the Birds and Habitats Directives. For further reference, see Chapter 11.1.1, *Scope of biodiversity protected under the ELD.*
[45] ELD, Art 7(4).

to meet its obligations under the Directive. Obviously, the costs of such measures would be borne by the tax payer. However, making the MS subsidiary liable does not counter the objective of the ELD to promote the polluter-pays principle, since the incentives and obligations for the operator remain in principle intact.

To tackle cases where poorly capitalised operators with a high risk of insolvency deliberately behave in an environmentally harmful manner and where therefore the prospect of financial liability cannot act as a disincentive, criminal (non-monetary) sanctions may serve as a deterrent and ensure accountability of the responsible operator in the form of criminal liability.

34.11 Enforcement & Sanctions

Obviously, a central prerequisite for the effectiveness of the ELD is that the Directive is effectively enforced. While the ELD does not include an explicit requirement for MS to punish breaches of duties under the ELD, penalties are a prerequisite to secure enforcement. In order to enable public authorities to enforce the ELD regime, some but not all MS have enacted varying levels of penalties for breaches of specific duties under the ELD.[46] The results of this dissertation, however, show, that sanctions for breaches of the transposing legislation in the MS differ widely; some MS impose relatively low administrative fines; other MS impose criminal sanctions including imprisonment.[47] The incentives to comply with the ELD regime may thus vary between the MS.

Presently, the ELD refers to the importance of proper enforcement only in its Recitals, where Recital 15 states "public authorities should ensure the proper implementation and enforcement of the scheme provided for by this Directive". This statement should be brought into the main body of the Directive, obliging MS to ensure proper enforcement with "effective, dissuasive and proportionate sanctions".

34.12 Conclusions on scope of amendments under the ELD

This chapter consolidated the research outcomes derived from the analysis of the ELD in Part II of the dissertation and delved deeper into potential amendments of the Directive. In summary, the findings of this dissertation and a closer inspection of possible amendments show ample

[46]Fogleman, *Study on Integrating the ELD*,96; BIO Intelligence Service, *ELD Implementation Report*.
[47] BIO Intelligence Service, *ELD Implementation Report*.

room for improvement and options to improve the effectiveness of the ELD. While some of the proposed amendments may be achieved via guidelines, the majority would require a revision of the Directive.

35 Amendments in the design or wording of the ECD

The assessment of the ECD in Part III of this dissertation identified several areas where amendments to its design and wording could enhance its effectiveness in achieving its aim of ensuring "a more effective protection of the environment". The following chapters consolidate the research outcomes from the analysis of the ECD in Part III of the dissertation and further explore amendments to the Directive, contrasting the findings of this dissertation with the amendments introduced under the new ECD (nECD), which entered into force in May 2024.

35.1 The New Environmental Criminal Liability Directive (nECD)

On May 20, 2024, ECD 2008/99/EC was replaced by a new Directive: ECD 2024/1203 (nECD)[48]. The following chapters discuss the amendments introduced under the nECD and how these compare to the needs for amendment identified in Part III of this dissertation. The discussion starts with an introduction to the nECD, outlining the path leading to its adoption, describing its main aims and highlighting key provisions. Next, the identified areas for amendment under the ECD are contrasted with the amendments introduced under the nECD.

35.2 The path leading to the adoption of the nECD

From 2019-2020, several EU institutions carried out a comprehensive evaluation of the ECD, resulting in a number of publications.[49] In October 2020, the European Commission published its own evaluation of the ECD.[50] Based on the findings of its evaluation, the Commission decided to revise the Directive and scheduled a legislative proposal in its Work Programme

[48] Directive (EU) 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law and replacing Directives 2008/99/EC and 2009/123/EC, OJ L 1203, 30.4.2024.
[49] Council of the EU, *EU Environmental Criminal Law - Presidency Report 12801/19*); Council of the EU, *Final Report on Environmental Crime* (14852/19 EESC, *Evaluation on Environmental Crime Directive*. For further information on these reports, refer to Chapter 14.4, *Evaluations of the Environmental Criminal Liability Directive (ECD) from 2019-2020*.
[50] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final.

2021 for December 2021.[51] On 15 December 2021, the Commission issued a proposal for a Directive replacing the existing ECD. [52] Along with the proposed Directive (pECD), the Commission published a Staff Working Document[53] and Communication entitled "Stepping up the fight against the environmental crime", explaining the policy objectives of its legislative proposal.[54]

Two years later, on 16 November 2023, the European Parliament and the Council reached political agreement on the Commission's proposal. The Parliament subsequently adopted the Directive on Protection of the Environment through Criminal Law (the New Directive – short: nECD) on 27 February 2024, followed by the Council, which formally adopted the nECD on 26 March 2024. The Directive came into force on May 20, 2024,[55] after which the MS - with the exception of Ireland and Denmark - [56] will have 24 months to transpose it into national law.[57] The nECD replaces Directive 2008 in its entirety.[58]
Before assessing the nECD and comparing it to the needs for amendment identified under ECD 2008, the following chapter sets the stage by outlining the primary aims and main provisions of the nECD.

In the following, ECD 2008/99/EC, which was the subject of this dissertation, will be referred to as "ECD 2008", while the new Directive will be referred to as "nECD" and the Commission's proposal as "pECD".

35.3 Aim and main provisions of the nECD

The nECD states as its primary aim "to protect the environment more effectively".[59] This is to be achieved by establishing minimum rules with regard to the "definition of criminal offences

[51] European Commission, Commission Work Programme 2021: *A Union of Vitality in a World of Fragility* — Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions COM(2020) 690 final, Brussels, 19 October 2020.
[52] European Commission, Proposal on Environmental Crime Directive COM(2021) 851 final. Based on the findings resulting from its evaluation of the ECD in 2019/2020, the Commission decided to revise the Directive and consequently scheduled a legislative proposal in its Work Programme for the year 2021.
[53] European Commission, Assessment Report on Environmental Crime Directive SWD(2021) 465 final.
[54] European Commission, Stepping up the Fight Against Environmental Crime, Communication from the Commission to the European Parliament and the Council COM(2021) 814 final, Brussels, 15 December 2021.
[55] Article 29 nECD provides that the nECD enters into force on the twentieth day after its publication in the Official Journal of the European Union.
[56] nECD, Recitals 69, 70.
[57] nECD, Art. 28.
[58] nECD, Art. 26.
[59] nECD, Art. 1

and penalties" and with regard to "measures to prevent and combat environmental crime and to effectively enforce Union environmental law". [60] Unlike the ECD 2008, the nECD addresses both, procedural as well as substantive criminal law.

The nECD is based on Article 83(2) TFEU, which explicitly endows the EU legislator with the power to "establish minimum rules with regard to the definition of criminal offences and sanctions". As previously demonstrated, these relatively new competences, introduced by the Lisbon Treaty in 2009 and thus after the adoption of the ECD in 2008, allow for harmonisation of criminal law in areas of particularly serious cross-border crime as well as in areas where harmonisation "proves essential" for the implementation of EU policies. Concerning the latter, which is the relevant provision in the present context, Article 83 (2) TFEU states in full that [**emphasis added**]

> "[i]f the approximation of criminal laws and regulations of the MS proves essential to ensure the effective implementation of a Union policy in an area which has been subject to harmonisation measures, directives may establish **minimum rules** with regard to the **definition of criminal offences and sanctions** in the area concerned".

In other words, the provision empowers the EU legislator to determine both: the types of offences that must be criminalised as well as the type and level of sanctions for those offences.[61]

The nECD aims to amend and expand the provisions of Directive 2008/99/EC.[62] From a quantitative standpoint alone, the scope of the nECD has significantly expanded. In total, the nECD comprises 30 Articles, a substantial increase compared to the ECD 2008, which only consists of 10 Articles. Similarly, the range of offences listed in Article 3 of the Directive has experienced a substantial increase, growing from nine offences in the ECD 2008 to twenty in the nECD. Some of the recently introduced offences also pertain to the broader protection of biodiversity, although they are not directly connected to the BHD. These offences include Article 3(p), which concerns illegal logging and Article 3 (r), which relates to invasive alien species.

[60] nECD, Art. 1
[61] For further reference, see Chapter 18.6, *Scope for further harmonisation of criminal penalties for environmental crime in the EU MS.*
[62] nECD, Recital 71.

The two offences directly relating to the BHD, i.e. **wildlife crime** and **habitat crime** have been retained, however, with some amendments. Under the nECD, wildlife crime is now listed under Article 3(l), while habitat crime is listed under Article 3(o).
In the interest of clarity and considering the substantial number and nature of amendments introduced under the nECD, Directive 2008 is replaced in its entirety.[63]

The following chapters start with a review of the two offences relating to the BHD (Chapter 35.4), addressing critical issues such as the scope of protected species and habitats, the model of criminalisation or the threshold criteria employed under both the replaced ECD 2008 and the nECD. The comparison then moves on to the rules on penalties for natural and legal person (Chapter 35.5), the highly problematic area of enforcement of environmental criminal law in the MS (Chapter 35.6). The area of enforcement includes a range of noteworthy additional provisions introduced under the nECD, such as the special protection offered to so-called "whistleblowers" or the rights of members of the public to "act on behalf of the environment as a public good".[64] Next the use of administrative and criminal sanctions under the nECD is addressed (Chapter 35.7). The assessment concludes with final remarks on the assessment of the ECD and the ability of the nECD to resolve (some of) the identified problems (chapter 35.8).

35.4 The offences related to the BHD

Two offences directly relate to breaches of the BHD under the ECD 2008: Article 3(f) ECD 2008 which refers to the killing, destruction, possession or taking of specimens of protected wild fauna or flora species ("wildlife crime") and Article 3 (h) ECD 2008 which refers to the significant deterioration of a habitat within a protected site ("habitat crime"). This has not changed under the nECD. However, the wording of both offences has been amended.

Wildlife crime is now listed under **Article 3(n) nECD** and punishes the following conduct:

> "the killing, destruction, taking of, possession, sale or offering for sale of a specimen or specimens of a species of wild fauna or flora listed in Annex IV, or in Annex V where species in that Annex are subject to the same measures as those adopted for species in Annex IV, to [the Habitats Directive] and of a specimen or specimens of the species referred to in Article 1 of the [Birds Directive] of the European Parliament and

[63] nECD, Recital 71, Art. 26.
[64] nECD, Recitals 54, 57.

of the Council, except where such conduct concerns a negligible quantity of such specimens;"

Habitat crime, on the other hand, is now listed under **Article 3(q) nECD** and punishes:

> "any conduct which causes the deterioration of a habitat within a protected site, or the disturbance of animal species listed in Annex II, point (a), to [the Habitats Directive] within a protected site, within the meaning of Article 6(2) of that Directive, where such deterioration or disturbance is significant;

In the following, the two offences as amended under the nECD are discussed, comparing needs for amendments identified in PART III of this dissertation with the amendments introduced under the nECD.

The analysis of the two offences in Part III of this dissertation focused on three elements: the **scope of biodiversity** protected under the offences, the **model of criminalisation** and the **threshold criteria** that triggers criminal liability. The following comparison of the ECD in its 2008 design and wording with the amendments introduced under the nECD follows the same order, thus starting with the **scope of protected species and habitats** (35.4.1.) and then moving to the **model of criminalisation** (35.4.2.) and the **threshold criteria** that triggers criminal liability (35.4.3.) Next, two qualifications newly introduced under the nECD are addressed (35.4.4.). After that, the requirement for establishing a causal link under both offences is addressed (35.4.5.). Lastly, the findings are summarised and conclusions are drawn (35.4.6.).

35.4.1 Scope of protected species and habitats

Concerning the scope of protected species and habitats, the nECD has introduced amendments that have broadened the scope of species and habitats covered under the Directive. They are discussed in the following, starting with a recollection of the findings in Part III of this dissertation.

35.4.1.1 Scope of protected species and habitats under the ECD 2008

To determine to what extent species and habitats protected under the BHD are also covered by the liability regime established under the ECD, Part III compared the species and habitats protected under the BHD with those covered under the ECD. Under the ECD, the relevant provisions are Article 2 (b) and (c), which provide for general definitions that apply under the

Directive and Article 3(f) and (h), which define the offences of wildlife crime and habitat crime. The only remarkable difference that emerged from this comparison was that the hunting of Annex II wild bird species during their most vulnerable period is not penalised under Article 3(f) ECD ("wildlife crime"), while it is prohibited under the BD. Other differences in the protected biodiversity under the ECD on the one hand and the BHD on the other hand could not be identified.[65]

35.4.1.2 Scope of protected species and habitats under the nECD

Under the nECD, the definition of "protected wild fauna and flora species" for the purpose of wildlife crime has been completely removed from Article 2. Instead, the scope of protected wild fauna and flora species for the purpose of wildlife crime is now exclusively defined under Article 3(l) nECD and thus included in the provision that sets out the definition of wildlife crime.

Concerning the **protection of wild bird species protected under the BD**, the now relevant Article 3(l) nECD no longer confines protection to the regularly occurring migratory species referred to in Article 4(2) of the BD and the particularly threatened 194 wild bird species set out in Annex I BD. Instead Article 3(l) nECD refers to Article 1 BD and thus extends the scope of wildlife crime to include "all species of naturally occurring birds in the wild state". Therefore, in theory, under the nECD the identified divergence in the scope of protected wild bird species observed under the ECD should be removed. However, as has been demonstrated in Part III, comparing the scope of protected species under the ECD to that of the BHD is a difficult endeavour, not least because not all practices prohibited under the BHD are punished under the ECD and the wording of the Directives differs in almost all cases. This has not changed under the nECD and thus some uncertainties as to the exact coverage of the nECD and how it overlaps with the BHD remain.

Concerning the **protection of the species of wild fauna and flora protected under the HD**, Article 3(l) nECD extends the scope. In addition to the Annex IV species already included in the ECD, it also includes Annex V species, provided these are subject to the same measures as those adopted for Annex IV species. To recap, Annex IV lists over 400 animal and plant species of Community Interest in need of strict protection, for which a system of strict protection must

[65] For further reference, refer to Chapter 16.1.1.1, *Species protected under the Birds Directive*

be applied across their entire natural range within the EU, both within and outside Natura 2000 sites. Annex V, on the other hand, lists over 90 animal and plant species of Community Interest whose taking in the wild and exploitation may be subject to management measures. In the case of Annex V species, the HD requires MS to ensure that their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

In summary, the nECD expands the scope of protected species. However, as previously noted, the difficulties in comparing the scope of the two Directives remain due to the different wording used under the Directives. The nECD has not changed this.

Concerning the **protection of habitats**, the general definition of "habitat within a protected site" has been maintained under Article 2 nECD, albeit with an amendment. In addition to the "Special Protection Areas" (SPAs) classified under the BD and the Special Area of Conservation (SACs) designated under the HD, the nECD now extends its protection to include Sites of Community Importance (SCI), i.e. those sites that have been identified as sites of high conservation value but still await formal designation as a SAC. This is aligned with the HD, where a site is protected as soon as it is selected as a Site of Community Interest (SCI).[66]

The reason for maintaining the definition of "habitat within a protected site" as a general definition under Article 2 nECD is most likely linked to the fact that it is no longer only relevant for the definition of "habitat crime", which is now listed under Article 3(2)(q) nECD. But also, for the newly inserted qualification included in Article 3(3) nECD that refers to offences that cause the "destruction of, or widespread and substantial damage which is either irreversible or long-lasting to, an ecosystem of considerable size or environmental value or a **habitat within a protected site**".

In conclusion, the nECD expands the scope of protected species and habitats and, any remaining uncertainties apart, it more fully aligns the coverage of the nECD with the BHD.

[66] For further reference, Part I, Chapter 5.2.2, *Site designation and declassification under the BHD.*

35.4.2 Model of criminalisation and the problem of unlawfully issued authorisations

35.4.2.1 Model of criminalisation and the problem of unlawfully issued authorisations under the ECD

Among the most important findings to emerge from the analysis of the ECD is the controversial role of authorisations and permits, which directly relates to the Directives' requirement, that a conduct only constitutes a criminal offence when it is "unlawful", i.e. in breach of decisions made by national authorities under administrative law. As demonstrated, the resulting dependency between administrative decision-making and criminal liability has paved the way for the conflict between economic and ecological interests, as observed in the analysis of the BHD, to permeate into the fabric of the ECD. Particularly in the case of protected habitats, this dependency threatens to become a gateway for a severe weakening of the ECD. Political pressure, [67] poor understanding of the legal framework[68] and lack of transparency[69] are among the factors identified to influence poor decision-making in the permitting procedure of projects affecting protected habitats. Authorisations and permits are either issued without the necessary appropriate assessment or based on an inappropriate assessment ("incorrect application of those assessments"). The conflict between economic and ecological interests discussed in the context of the BHD and any poor decisions by NCAs resulting from this may thus directly transpire into the ECD.

As has been demonstrated, solutions to the problems resulting from administrative dependency are not obvious: Attaching criminal liability to an activity that has been authorised under a permit undermines legal certainty for the permit holder who relies on the lawfulness of the permit. Upholding a permit that legitimises unlawful conduct and infringes environmental law undermines justice. Any attempt at a solution is thus challenged to find a balance between those two fundamental values: the value of legal certainty, on the one hand, and the value of justice on the other.

In a situation where an unlawfully issued permit legitimises an otherwise criminal act, the question inevitably arises, whether the public official, who (knowingly) issued the unlawful permit, may be held criminally liable. However, the exemplary investigation of the situation in

[67] ENEC, *Habitat Destruction 2016*, 4-5.
[68] ENEC, *Habitat Destruction 2016*, 5.
[69] *Ibid*.

Austria and Germany suggests that significant criminal liability gaps exist in the prosecution of unlawfully issued permits and other conduct by public officials that facilitates environmental crime.[70]

Taken together, the evidence from the study of the ECD indicates that in the case of unlawfully authorised activities, the ECD, in its 2008 design, has failed to ensure compliance with the BHD. At the same time, solutions are not evident, especially when it comes to resolving the tension between legal certainty and justice. The following chapters examine the model of criminalisation introduced under the nECD and assesses the extent to which the observed problems with unlawfully issued permits have been taken into account.

35.4.2.2 nECD on model of criminalisation and the problem of unlawfully issued authorisations

The nECD clearly adheres to a model of criminalisation that requires the unlawfulness of the conduct and thus maintains dependence of criminal liability on administrative decisions. The relevant provision addressing the administrative dependence remains Article 3 (1) nECD, which states that conduct listed in the Directive constitutes a criminal offence where that conduct is "unlawful".[71] What constitutes "unlawful" is now equally defined in Article 3 (1) nECD.[72] For the purpose of the nECD, conduct shall be unlawful where it breaches [**emphasis added**]:

> "(a) **Union law** which contributes to pursuit of one of the objectives of the Union's policy on the environment as set out in Article 191(1) TFEU; or
>
> (b) a law**, regulation or administrative provision of a Member State**, or a **decision taken by a competent authority of a Member State**, which gives effect to the Union law referred to in point (a).
>
> Such conduct shall be unlawful even where it is carried out under an authorisation issued by a competent authority of a Member State if such authorisation was **obtained fraudulently or by corruption, extortion or coercion**, or if such authorisation is **in manifest breach of relevant substantive legal requirements**."

[70] For further reference, see Part III, Chapter 16.3.1.3, *Criminal liability of public officials for issuance of unlawful permits.*
[71] nECD, Article 3 (1), first sentence.
[72] nECD, Article 3 (1), second sentence, (a)-(b).

For comparison, under Article 2 ECD 2008, a conduct is considered "**unlawful**", when it infringes [**emphasis added**]:

> "(i) the **legislation** adopted pursuant to the EC Treaty and **listed in Annex A** to the Directive,
>
> (ii) the **legislation** adopted pursuant to the Euratom Treaty and **listed in Annex B** to the Directive **or** when it infringes
>
> (iii) a national law, an administrative regulation of a MS or a decision taken by a national competent authority of a MS that gives effect to the aforementioned EU legislation."

From a direct comparison of Article 2 in the ECD 2008 and in the nECD 2024 version, the following three observations can be made: **Firstly**, the proposal retains the controversial "unlawful requirement". **Secondly**, the reference to legislation listed in Annexes to the Directive has been removed. Instead, Article 3 (1) refers in more general terms to EU legislation that contributes to the EU environmental policy objectives set out under Article 191(1) TFEU. **Thirdly** and most importantly, the nECD creates two exceptions from the dependency of administrative decisions. On the one hand, an exception applies in cases where the conduct is carried out under an authorisation that has been "**obtained fraudulently or by corruption, extortion or coercion**". On the other hand, an exception applies, where such authorisation is **"in manifest breach of relevant substantive legal requirements"**. In these cases, the conduct will be considered unlawful even if it has been authorised by a competent authority in a MS.

The amendments introduced under the nECD, at least in part, appear to represent a radical departure from the prevailing model of criminalisation for environmental crime in EU MS, which heavily rely on administrative dependence to address environmental crime. This especially applies to the amendment that an authorisation "**in manifest breach of relevant substantive legal requirements**" will no longer release an offender from criminal liability. While the meaning of "manifest breach" is not further specified, Recital 10 of the nECD states that this requirement should be interpreted as referring to an "**obvious and substantial breach**". Breaches of procedural requirements or minor elements of the authorisation, in contrast, would not qualify. While the wording "obvious and substantial" still leaves room for interpretation, it helps clarify the general intent of the legislator.

One might be tempted to conclude from these amendments that in the future the operator will have a duty to ensure that their authorisations are indeed lawful. However, this is not quite clear under the Directive. On the contrary, Recital 10 expressly states that the amendments do "not shift the duty to ensure the lawfulness of authorisations from competent authorities to operators". Does this statement merely seek to clarify the continued duty of NCAs to ensure lawfulness – alongside the operator?

Given the implications of relying on an unlawful authorisation under the nECD, particularly the risk of criminal liability, it is expected and advisable for operators to ensure their activities comply with all relevant legislative, regulatory, and administrative provisions related to environmental protection, regardless of whether an authorisation exists. [73] This should also include the responsibility of the authorisation holder to update and renew their authorisation.[74]

In summary it appears that in the future, the mere existence of an authorisation no longer ensures impunity. Instead any holder of an authorisation will have a strong incentive to ensure that their authorisation and activities comply or continue to comply with applicable legal requirements. Considering the systematic nature of the problems that have evolved with the issuance of unlawful authorisations under the BHD (and other environmental legislation) and the heavy impacts this has on the protection of biodiversity (and other protected environmental interests), this amendment promises to significantly strengthen the effectiveness of the ECD and thus the protection of biodiversity.

Another noteworthy amendment is the removal of the annexes. Unlawfulness is no longer defined as a breach of legislation specified in Annex A or B. As demonstrated in Part III, this reference technique not only created the risk of legal uncertainty, but also that the Directive quickly becomes outdated by excluding subsequent legal developments and legislation. The nECD, instead, confines itself to require "Union law which contributes to pursuit of one of the objectives of the Union's policy on the environment as set out in Article 191(1) TFEU" and in this way includes both present and future legislation.[75]

[73] nECD, Recital 10.
[74] *Ibid.*
[75] nECD Article 3 (1)(a).

As is apparent from the above, the term "operator" has been introduced under the nECD, a term that is also being used under the ELD. However, in contrast to the ELD, the term is not being defined under the nECD and only appears in the Recitals.[76]

In conclusion, the amendments relating to the model of criminalisation strike a promising balance between legal certainty and justice, addressing one of the most challenging shortcomings identified under the ECD 2008. While the nECD generally retains the model of criminalisation based on administrative dependency and thus upholds the value of legal certainty, it effectively addresses the resulting problems by lifting the veil of dependency in cases where authorisations have been obtained fraudulently or through corruption, extortion or coercion, or where such authorisations are in manifest breach of the relevant substantive requirements, thereby not only ensuring justice but also - as shown - promising to significantly improve the effectiveness of the Directive.

35.4.2.3 nECD on liability of public officials involved in the crime

Another issue related to the problem of unlawfully issued permits is addressed under the newly introduced Article 8 (d) nECD: the liability of a public official involved in the crime.
Article 8 nECD lists the aggravating circumstances that can be considered when imposing sanctions. One of the listed aggravating circumstances is that "the offence was committed by a public official when performing his/her duties".[77] While at first glance, this could be a useful tool for tackling the issue of unlawfully issued permits, application of aggravating circumstances always requires a principal offence. It is not clear for what crime or conduct the official would be held liable in relation to the offences listed in Article 3 of the Directive. As the analysis in Part III has shown, criminal liability of public officials for issuing unlawful authorisations is extremely controversial and by no means a given. Apart from a few exceptions, the national environmental criminal law of the EU MS does not address criminal liability of public officials for participation in environmental offences. The issuance of an unlawful permit neither qualifies as commission nor as participation in the offence. [78] Commission of the offence as principle perpetrator is ruled out because the public official does not harm the environment itself. Participation, on the other hand, fails because there is no principle offence:

[76] nECD, Recitals 10,11 and 59.
[77] pECD Article 8e).
[78] Reindl-Krauskopf & Salimi, *Umweltstrafrecht*, 33, assessing the situation in Austria. For further reference, see Part III, Chapter 16.3.1.3, Criminal liability of public officials for issuance of unlawful permits.

For as long as the conditions of the unlawfully issued permit are complied with, there is no breach of environmental law and thus no principle offence.[79]

Article 8(d) nECD was already included in the Commission's original proposal for the new Directive and left unchanged throughout the legislative process. However, the Commission has not provided any further information on its proposal on aggravating circumstances for public officials. Therefore, is not clear what the proposal was intended to achieve or resolve and under what circumstances the aggravating circumstances should apply.

However, there are two case constellations in which these aggravating circumstances may apply. Both relate to the two newly introduced exceptions to the dependency of administrative decisions under the nECD. As shown above, exceptions apply where the authorisation has been "**obtained fraudulently or by corruption, extortion or coercion**" or where it is "**in manifest breach of relevant substantive legal requirements"**.[80] In these cases, the conduct will be considered unlawful even if it has been authorised by a competent authority in a MS. As a result, and if all other requirements are met, a principal offence has now been committed. This means that the public official may now be liable to prosecution for participation in the offence and, in this constellation, his status as a public official may be taken into account as aggravating circumstances.

35.4.3 Threshold criteria and the use of vague notions

35.4.3.1 Threshold criteria and the use of vague notions under the ECD

The investigation of the threshold criteria under the ECD found, that the ECD defines the threshold criteria under Article 3 (f) and (h) ECD using rather vague notions. This concerns terms such as "negligible quantity" and "negligible impact" in the case of wildlife crime or "significant deterioration" in the case of habitat crime.[81] The threshold criteria are important since they determine whether a conduct falls within the scope of Article 3(f) and 3(h) ECD and thus constitutes a crime. A vague formulation of the criteria may not only undermine the

[79] This is, as previously demonstrated, the prevailing opinion in German and Austrian literature. For further reference, see Saurer, *Verwaltungsakzessorietät des Umweltstrafrechts* 358 et seq.; Heger, *Europäisierung des Umweltstrafrechts*, 177-184.
[80] nECD, Article 3 (1), last sentence.
[81] For further reference, see Chapter 16, especially Chapter 16.3.2, *Use of vague notions in the threshold criteria under Article 3(f) and 3(h)*.

application of the Directive to a case of environmental crime, but also lead to large discrepancies in its application in the MS, as has been observed in the application of the ELD thresholds. Practitioners have confirmed that the use of vague terms in environmental criminal law would make it difficult to determine whether a particular incident falls under an offence unless it is clarified by case law or guidelines.[82]

Part III has examined the arguments for and against the use of vague notions in environmental criminal law in great detail. Altogether, the research identified good arguments both in favour and against keeping vague notions under the ECD: While too detailed normative specifications may fail to capture the broad variety of environmental harm and thus undermine bringing environmental crimes to justice, overly vague formulations may make it difficult to determine whether an incident falls within the scope of a criminal offence, thus undermining certainty. As before with the administrative dependency of criminal law, in finding a solution it will therefore be necessary to strike a balance between two fundamental principles. On the one hand, the need to provide for legal certainty. On the other hand, the need to ensure that criminal conduct is indeed brought to justice.

Amendments introduced under the nECD address the threshold criteria and the need for more precise definitions. They are critically examined and discussed in the following.

35.4.3.2 Threshold criteria and the use of vague notions under the nECD

Concerning the **need for more precise definitions**, the nECD has introduced amendments under both offences. These amendments are discussed next. As before, in the case of both offences, the use of vague notions is relevant in relation to the definition of the threshold criteria.

35.4.3.2.1 Threshold criteria for wildlife crime under Article 3(n) nECD

The revised definition of wildlife crime under Article 3(n) nECD no longer operates with a combination of two threshold criteria. Instead, Article 3(n) nECD now excludes cases where the conduct only concerns a **negligible quantity of specimens**. In addition, a newly inserted

[82] EnviCrimeNet, Intelligence Project, 13-14. For further reference, see Chapters 19.3, *Importance of technical knowledge, specialisation and training*, and 16.3.2, *Use of vague notions in the threshold criteria under Article 3(f) and 3(h).*

provision added under Article 3(8) nECD attempts to further clarify the threshold. It stipulates the elements that need to be taken into account when assessing whether the quantity is negligible. These include [**emphasis added**]:

> "(a) the number of items concerned;
>
> (b) the extent to which a regulatory threshold, value or another mandatory parameter set out in Union or national law referred to in paragraph 1, second subparagraph, points (a) and (b), is exceeded;
>
> (c) the conservation status of the fauna or flora species concerned;
>
> (d) the cost of restoration of the environment, where it is feasible to assess that cost."

For comparison: Under Article 3(f) ECD 2008, two thresholds applied in combination. Criminal liability was excluded when, **firstly**, the "killing, destruction, possession or taking" concerned a negligible quantity of specimens of protected wild fauna or flora species and, **secondly**, had a negligible impact on the conservation status of the species. What constituted a "negligible quantity" or a "negligible impact" was not further defined under the Directive.

Under the nECD, in contrast, the impact on the conservation status, is no longer part of the threshold criteria. Instead, it is now referred to as an element that may be taken into account when assessing whether the quantity is to be considered "negligible".

Recalling the discussion in the examination of Article 3(f) ECD 2008, neither the HD nor the BD exempt cases where the conduct only concerns a "negligible quantity" or has a "negligible impact" on the conservation status of the protected species and thus no meaningful criteria for the clarification of these terms could be derived from the BHD. [83] Although the elements included in the newly inserted Article 3(8)(a) to (d) nECD provide some clarification, they still leave plenty of room for interpretation.

35.4.3.2.2 Threshold criteria for habitat crime under Article 3(q) nECD

Similar observations can be made regarding the revised threshold criteria for habitat crime. The vague notion "significant" has not been further specified under the nECD. However, an attempt has been made to further integrate the offence and its interpretation with the HD. The amended provision now explicitly refers to Article 6(2) of the HD, requiring the [**emphasis added**]

[83] For further reference, see Chapter 16.3.2.2, *Admissibility of v ague notions in criminal law.*

> "the deterioration of a habitat within a protected site, […], within the meaning of Article 6(2) of [the Habitats Directive], where such deterioration […] is significant;

In this revised version, it is not clear, if the clarification that is to be gained from a reference to Article 6(2) HD relates (a) to the different types of deterioration covered by Article 6(2); or (b) to the interpretation of what constitutes "deterioration"; (c) to what constitutes a "significant" deterioration; or (d) to all of the above.

For reference, Article 6(2) HD is provided again below:

Article 6(2) HD requires MS to [**emphasis added**]

> "take appropriate steps to **avoid**, in [SPAs, SCIs, and SACs], the **deterioration of natural habitats** and the **habitats of species** as well as **disturbance of the species** for which the areas have been designated, in so far as such **disturbance** could be **significant** in relation to the objectives of this Directive".

Notably, this dissertation demonstrated that "significance" of the deterioration is not an expressive requirement under Article 6(2) Habitats Directive. Indeed, **Article 6 (2) HD**, which requires MS to **avoid the deterioration of habitats**, does not require significance, nor does it contain any other specification indicating a threshold requirement.[84] In the further analysis of the threshold criteria for Article 6(2) HD, the relevant information on a threshold criterion for habitat deterioration under BHD originated from the Commission. According to the Commission, deterioration under the Habitats Directive is any form of degradation affecting a habitat. This indicates a low threshold under Article 6(2) HD. But is this low threshold indeed the threshold that the nECD intends to apply in the context of criminal liability?

Since Article 6(2) HD does not require "significance" in order for Article 6(2) HD to apply to the deterioration of habitats, it is doubtful to what extent the interpretation of the threshold criteria under Article 6(2) HD should be relied on in order to derive a threshold for criminal liability under the nECD.

[84] See Chapter 5.2.3.2.2, *Threshold requirements under Article 6(2) HD*. As has been demonstrated, the requirement to be "significant in relation to the Directive's objectives" under Article 6(2) HD does not apply in the case of habitats. The Commission concludes from this that a deterioration of conservation parameters of habitats must therefore "simply be avoided altogether" and that deterioration could be considered to have occurred if, considering all the influences on the habitat, these influences would result in making conservation parameters for the habitat worse than they were before. See European Commission, *Managing Natura 2000 Sites* C(2018) 7621 final, §3.

It appears that the issue of what constitutes "significance" in the case of habitat deterioration remains unresolved, even with the explicit, yet very general reference to Article 6(2) HD.

In addition to the deterioration of habitats, the revised version of habitat crime under Article 3 (2)(q) also criminalises any conduct which causes

> "the disturbance of animal species listed in Annex II, point (a), to [the Habitats Directive] […] within a protected site, within the meaning of Article 6(2) of that Directive, where such […] disturbance is **significant**;"

Annex II, point (a), to the HD lists the **animal species of Community Interest** whose conservation requires the designation of Special Areas of Conservation.

Regarding the **disturbance of species**, Article 6(2) HD specifies that the disturbance needs to be "**significant**" in relation to the conservation objectives of the Directive. As has been demonstrated, the term "significant" is not further defined under the HD. The Commission suggests that in order to assess whether a disturbance is "significant" in relation to the objectives of the HD, MS could refer to the definition of favourable conservation status of a species in Article 1(i) of the HD. For example, any event, which would contribute "to the long-term decline of the population of the species on the site" could be considered as a significant disturbance. Similarly, any activity contributing to "the reduction or to the risk of reduction of the range of the species within the site" or to "the reduction of the size of the available habitat of the species" could be considered a significant disturbance. Again, this indicates a low threshold under Article 6(2) HD.

In summary, while the reference to the HD itself is desirable, especially to achieve a harmonised understanding of biodiversity damage, such reference would need further specification in order to resolve the uncertainties related to the interpretation of habitat crime under the nECD.

35.4.3.3 Conclusions on threshold criteria and the use of vague notions under the nECD

In conclusion, comparing the threshold criteria and approaches to evaluating damage under the nECD with those under the BHD or ELD, it is evident that the ELD stands out for its advanced assessment criteria, albeit still facing certain issues. The question is why the revision of the criteria for damage assessment under the nECD was not used to achieve better integration with the ELD. Instead, under Article 3(8) nECD new criteria has been introduced, for which no

reference exists, neither in the BHD nor in the ELD. It is probable that once more, these criteria will provide ample opportunity for speculation and thus contribute minimally to enhancing legal clarity or justice. This is especially noteworthy given reports that the use of ambiguous concepts has caused complications in the investigation and prosecution of environmental crimes.

35.4.4 Qualifications and the introduction of the term "ecocide"

The nECD introduces "qualified offences" for conduct that leads to "catastrophic results" for the environment, such as "such as widespread pollution, industrial accidents with severe effects on the environment or large-scale forest fires".[85] In the recitals, the nECD describes such offences as "comparable to Ecocide".[86] The relevant provision is Article 3(3)(a)-(b) nECD: An offence constitutes a qualified offence, where the criminal conduct listed under Article 3(2) results in

> "(a) the destruction of, or widespread and substantial damage which is either irreversible or long-lasting to, an ecosystem of considerable size or environmental value or a habitat within a protected site, or
>
> (b) widespread and substantial damage which is either irreversible or long-lasting to the quality of air, soil or water."

The newly introduced term "ecosystem" is defined in the Directive as "a dynamic complex of plant, animal, fungi and microorganism communities and their non-living environment, interacting as a functional unit, and includes habitat types, habitats of species and species populations".[87]

The following chapters deal with these newly introduced qualifications in more detail, discussing firstly their definition and application and secondly the penalties provided for these qualified offences.

35.4.4.1 Use of vague notions in the definitions of the qualified offences

Concerning the definitions of the qualifying offences, it is worth noting that the definitions include a number of terms that are not further defined in the Directive. This can lead to ambiguities and threatens to undermine the application of the Directive. Terms such as "widespread, "long-lasting", "considerable size" or "environmental value" are not further

[85] nECD, Article 3(3) (a)-(b) and Recital 21, first sentence.
[86] nECD, Recital 21, last sentence.
[87] nECD, Article 2(2)(c).

described. As has been demonstrated in Part III of this dissertation, the vague formulation of criteria may not only undermine the application of the Directive to a case of environmental crime, but also lead to large discrepancies in its application in the MS, as has been observed in the application of the ELD thresholds.[88]

In the search for guidance on the interpretation of these terms, it may be helpful to examine the origins of these qualified offences. Some of the terms used in these newly introduced qualified offences are reminiscent of language used in the Rome Statute, especially for the war crime of "intentionally launching an attack in the knowledge that such attack will cause […] widespread, long-term and severe damage to the natural environment".[89] As will be shown next, this is no coincidence.

35.4.4.1.1 Interpretation of vague notions and the proposal for an international peace time crime of ecocide

The introduction of qualified offences under Article 3(3) of the nECD can be linked to efforts aimed at introducing a so-called "crime of ecocide" as a stand-alone crime under the nECD. At the international level, the recognition of "ecocide" as an environmental crime is currently being advocated by the Stop Ecocide Foundation (SEF).[90] The SEF principally aims for the recognition of a crime of ecocide via amendment of the Rome Statute of the International Criminal Court (ICC). However, it has also pushed for an inclusion of the crime of ecocide in the nECD.[91] This initiative was taken up by the European Parliament (EP). In March 2023, the EP proposed including the offence of "ecocide" in the nECD.[92] This proposal referred to ecocide as one of the "most severe offences," relying on the definition proposed by the SEF.

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[88] For a discussion of the use of vague notions under the nECD, refer also to Chapter 35.4.4.1.1, *Interpretation of vague notions and the proposal for an international peace time crime of ecocide*.

[89] Rome Statute of the International Criminal Court, 2187 UNTS 3, adopted 17 July 1998, entered into force 1 July 2002, last amended 26 November 2010, Art. 8(2)(b)(iv).

[90] The stated aim of the initiative is "*to make those individuals who are responsible for acts or decisions that lead to severe environmental harm liable to criminal prosecution*." The proposed definition of the crime of ecocide is: "*unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts."* For more information about the proposal of an international crime against the environment, see https://www.stopecocide.earth/making-ecocide-a-crime. The definition of the crime of ecocide is available at https://www.stopecocide.earth/legal-definition.

[91] Stop Ecocide Foundation, *Position Paper with Regard to the Revised EU Directive on Protection of the Environment through Criminal Law* (2021) [online] [Stop Ecocide Foundation, *Position Paper on EU Environmental Crime Directive*].

[92] European Parliament, *Report on the Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law and Replacing Directive 2008/99/EC (COM(2021)0851 – C9-0466/2021 – 2021/0422(COD))* (2023), Amendment 20.

The EP suggested that this offence should be considered a crime of particular gravity and sanctioned accordingly within the legal systems of the MS, noting that the United Nations (UN) is currently working on an official international definition for ecocide. Notably, the EP put forward a definition that was closely modelled on the SEF proposal for an international crime of ecocide, with additional definitions for terms included therein, such as widespread, or severe and long-term.[93] Obviously, in the political processes leading up to the adoption of the Directive, a decision was made not to include these definitions in the final version of the nECD.

35.4.4.1.2 The concept of an environmental crime of ecocide and its origins

The concept of an environmental crime of ecocide has its origins in the early 1970s, when it was first used to describe the massive environmental damage caused by the use of chemical defoliants such as Agent Orange during the Vietnam War.[94] In June 1972, at the United Nations Conference on the Human Environment, Swedish Prime Minister Olof Palme described the environmental damage caused by the Vietnam War as ecocide and called for it to become an international crime. Over the decades, ecocide increasingly became a focal point in political and legal discussions regarding environmental protection. In 1998, with the adoption of the Rome Statute, "widespread, long-term and severe damage to the natural environment" was declared as a war crime under Article 8 of the Rome Statute. The adoption of "ecocide" as a crime during peace time, however, remains controversial to this day. Advocates for the recognition of ecocide as an international crime argue that severe environmental destruction should be prosecuted similarly to genocide, war crimes, and crimes against humanity. One of the most prominent advocates for the criminalisation of ecocide was the late British lawyer Polly Higgins. In 2010, she proposed to the UN that ecocide be recognized as the fifth crime against peace, alongside genocide, war crimes, crimes against humanity, and crimes of aggression.[95] Her work inspired a global movement aiming to hold individuals and corporations accountable for severe environmental damage. In recent years, there has been growing momentum to recognize ecocide at the international level. In 2021, a panel of international lawyers, convened by the SEF, drafted a legal definition of ecocide and proposed its inclusion

[93] *Ibid.*, Amendments 41-43.
[94] This herbicide, used by the U.S. military, led to widespread destruction of forests and devastating long-term health effects on both the Vietnamese population and U.S. soldiers.
[95] P Higgins, *Eradicating Ecocide: Laws and Governance to Stop the Destruction of the Planet*, Shepheard-Walwyn Ltd, London (2010) [Higgins, *Eradicating Ecocide*].

in the Rome Statute of the ICC.[96] Various countries and political leaders have expressed support for the recognition of ecocide as an international crime.[97]

35.4.4.1.3 Conclusions on the interpretation of vague notions in the newly introduced qualified offences

In conclusion, for the interpretation of the newly introduced vague notions, ranging from "widespread and "long-lasting" to "considerable size" or "environmental value", neither the legislative history nor a contextual analysis offer much guidance. While the origins of the newly introduced qualified offences may be traced back to the international proposal for a peace time crime of ecocide, it appears that the EU legislator was not prepared to include the term "ecocide" in the operational part of the Directive. And while there is overall resemblance with the definition of a crime of ecocide put forward by the SEF, it deviates in several aspects and lacks the additional definitions of the terms used therein. As a result, a number of terms under the newly introduced qualified offences remain vague, suggesting that their application will provoke problems similar to those identified under other offences containing vague terms in the Directive.

35.4.4.2 Penalties for qualified offences

The qualified criminal offences covered by Article 3(3) nECD must be punishable by a maximum term of imprisonment of at least eight years. [98] In the case of legal persons, penalties must be more severe than those applicable for the criminal offences covered by Article 3(2) nECD. [99]

It is clear from the wording of the nECD that with the introduction of qualified offences the Directive intends to acknowledge that certain crimes stand out due to their "catastrophic" impacts on the environment and should, therefore, "be punished with more severe penalties

[96] Chaired by Philippe Sands QC and Dior Fall Sow. For further reference, see Stop Ecocide Foundation, *Independent Expert Panel for the Legal Definition of Ecocide: Commentary and Core Text*, June 2021 [online] [Stop Ecocide Foundation, Legal Definition of Ecocide].
[97] For example, French President Emmanuel Macron, Pope Francis, and Swedish climate activist Greta Thunberg have publicly endorsed the initiative. Several island nations, which are particularly vulnerable to environmental degradation and climate change, have also been vocal supporters of criminalising ecocide. For further reference, see: BBC Future, *Ecocide: Should killing nature be a crime?*, 5 November 2020 [online].
[98] nECD, Art. 5(2)(b).
[99] nECD, Art. 7(4)).

than those applicable in the event of other criminal offences defined in this Directive". [100] Remarkably, however, this intention to express the particular seriousness of the qualified offences with higher penalties was not implemented in the operational part of the Directive. A number of criminal offences covered by Article 3(2) are punishable by a maximum term of imprisonment of at least ten years and thus by higher penalties.

35.4.5 The requirement of establishing a causal link

35.4.5.1 The requirement of establishing a causal link under the ECD 2008

The offences under Article 3(f) ECD 2008 ("wildlife crime") and Article 3(h) ECD 2008 ("habitat crime") are mainly designed as "concrete harm" crimes, meaning that they do not simply require the endangerment of the protected natural resources, but instead a concrete result such as the "killing or destruction" of specimens of protected wild fauna or flora or the "significant deterioration" of a habitat. As demonstrated, using a concrete harm model instead of an endangerment model has certain consequences.[101] Firstly, it makes criminal liability dependent on the outcome of an act (or omission) – the mere (abstract or concrete) endangerment is not enough. Secondly, concrete harm crimes require the **establishment of a causal link** between the harm and the act (or omission) of the accused. Proving a causal link, however, is often difficult and time-consuming, especially in environmental cases.[102] In practice this often means that crimes are not being (successfully) investigated and brought to justice.

35.4.5.2 nECD on the requirement of establishing a causal link

For the analysis of the causal link requirements under the nECD, it is helpful to revisit the Commission's proposal for a nECD. In its proposal for a nECD, the Commission discussed the question of the causal link and the difficulties linked to it in relation to its Objective No. 2, which aims for improving the "effectiveness of investigations and prosecutions by clarifying or eliminating vague terms used in the definitions of environmental crime". [103] One option discussed by the Commission in this context is working with [abstract] endangerment crimes.[104]

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[100] nECD, Recital 21, second sentence.
[101] See Chapter 16, *Offences related to the BHD*, the analysis under Chapters 16.1. and 16.2., as well as the discussion in Chapter 16.3.1, *Model of criminalisation under Article 3(f) and 3(h).*
[102] For further reference on problems related to establishing a causal link in environmental cases, refer to Part II (ELD), Chapter 11.3.3, *Requirements for establishing the causal link*.
[103] European Commission, *Assessment Report on Environmental Crime Directive* SWD(2021) 465 final, 36.
[104] *Ibid*., 44-45.

As shown in Part III of this thesis, **abstract endangerment crimes** confine themselves to the punishment of non-compliance with requirements of environmental administrative law (such as the violation of permit conditions), instead of punishing damage to the environment directly.[105] Unlike concrete harm crimes, they do not require **evidence of an actual harm** to the environment or that a **causal link** can be established between the harm and the activities of the defendant in a criminal trial. Altogether, the abstract endangerment crime model, as rightly noted by the Commission, has therefore the lowest evidentiary requirements.[106] It eliminates the need to prove harm, establish a causal link, or demonstrate that the perpetrator intended to cause damage. This model also has the advantage of allowing prosecution of crimes where harmful effects only become evident years after the offense.[107] This time delay, known as latency, can make it difficult to prove that a crime occurred or to establish the necessary causal link between the crime and environmental harm.[108] According to the Commission, endangerment crimes are favoured by practitioners, with Europol particularly advocating for this approach.[109]

The Commission, however, also pointed out that there is no evidence suggesting that endangerment crimes are more successfully investigated than other types of crimes.[110] It rightly acknowledged the limitations of the endangerment crime model, which would "not fit all situations and objectives".[111] Indeed, not all environmental crimes are best addressed by criminalizing risky behaviour, i.e., endangerment. The choice of the most suitable model also depends on the typical nature of the crime. As highlighted by Faure (2020) in the context of habitat and wildlife offences, classifying these crimes as concrete harm crimes may be appropriate due to the inherent nature of natural resource crimes.[112] Such offences often result in concrete harm to protected natural resources, exemplified by activities such as illegal deforestation or unauthorised hunting.

[105] For further reference, see Chapter 15, *Theoretical foundations and underlying rationale of environmental criminal law*, which discusses different models of criminalisation in environmental criminal law.
[106] For further reference on problems related to proving intent in environmental cases see Part II (ELD), Chapter 11.3, *Liability rules*, especially Chapter 11.3.1, *The two standards of liability in the case of biodiversity damage*.
[107] See also European Commission, Assessment Report on ECD, SWD(2021) 465 final, 45.
[108] See Faure *Environmental Liability* in *Tort Law and Economics*, 261; For further reference on the problem of latency, see Chapter 19.2.2, *Dark figure of unrecorded environmental crime*.
[109] European Commission, Assessment Report on ECD, SWD(2021) 465 final, 45.
[110] *Ibid.*, 46
[111] *Ibid.*
[112] Faure, *Criminal Liability for Exploitation of Natural Resources*.

In summary, there are both benefits and drawbacks that need to be considered when deciding on the design of an offence. Obviously, it is impossible to design an (abstract) endangerment crime without creating a dependence on administrative decision-making. Indeed, it is in the case of (abstract) endangerment crimes where the dependence of environmental criminal law on administrative law and thus on authorisations or permits issued by national competent authorities is most pronounced. As has been demonstrated, this dependency creates a range of problems for the prosecution of environmental crime in cases where permits were issued unlawfully - with the already discussed repercussions on bringing environmental crime to justice.[113]

For the time being, the nECD has retained a model of criminalisation that requires either harm (e.g. "killing and destruction" or "deterioration of a habitat") or concrete endangerment (e.g. "possession" and "taking"). As has been noted, little information is available about (experiences in) the implementation and enforcement of these two offences in the EU MS. Further research into wildlife and habitat crime will be required to better establish the nature of these crimes and to identify necessary amendments to the design of Article 3 (n) and 3(q) nECD. A further study with a focus on habitat and wildlife crime and practical problems with their implementation and enforcement in the MS is recommended.

35.4.6 Summary of findings and conclusions on amendments of the offences related to the BHD under the nECD

The assessment of the ECD 2008 in Part III of this dissertation identified several areas where amendments to the design and wording of the two relevant offences—wildlife crime under Article 3(f) and habitat crime under Article 3(h)—could improve its effectiveness. The previous chapters contrasted the research findings from Part III with the recently adopted nECD to explore whether the amendments introduced under the nECD resolve (some of) the identified issues. From this comparison, the following findings can be summarised:

Firstly, and most remarkably, the nECD works with a model of criminalisation that, at least in part, appears to represent a radical departure from the prevailing model of criminalisation for environmental crime in EU MS, addressing one of the most challenging shortcomings identified

[113] See Chapter 16.3, *Discussion of findings on model of criminalisation and threshold criteria under Article 3(f) and 3(h) ECD.*

under the ECD 2008: the dependence of criminal liability on unlawfully issued permits. While the nECD generally retains the model of criminalisation based on administrative dependency, it effectively addresses the identified problems by removing dependency in cases where authorisations have been obtained fraudulently or through corruption, extortion or coercion, or where such authorisations are in manifest breach of the relevant substantive requirements, striking a healthy balance between legal certainty and justice. In the future, the mere existence of an authorisation no longer ensures impunity. Instead any holder of an authorisation will have a strong incentive to ensure that their authorisation and activities comply or continue to comply with applicable legal requirements. Considering the systematic nature of the problems that have evolved with the issuance of unlawful authorisations under the BHD (and other environmental legislation) and the heavy impacts this has on the protection of biodiversity (and other protected environmental interests), this amendment promises to significantly strengthen the effectiveness of the ECD and thus the protection of biodiversity.

Secondly, as far as **the scope of protected species and habitats** is concerned, the difficulties in comparing the scope of the directives remain due to the different wording in the ECD, on the one hand, and the BHD, on the other. The nECD has not changed this.

Thirdly, **concerning the threshold criteria** in the two offences, the nECD fails to remove the ambiguities resulting from the use of vague notions. While it has addressed the issue by inserting new or additional criteria, no reference exists for these criteria, neither in the BHD nor in the ELD. It is therefore probable that once more, these criteria will provide ample opportunity for speculation and contribute minimally to enhancing legal clarity or justice. This is especially noteworthy given reports that the use of ambiguous concepts has caused complications in the investigation and prosecution of environmental crimes. Similar observations apply to a number of terms that have been introduced with the newly inserted qualified offences.

Fourthly, **concerning the requirement of establishing a causal link** and the advantages and disadvantages of using a model of (abstract) endangerment crime to overcome problems of proof, this dissertation found that the choice of the most adequate model also depends on the typical nature of a crime. In the context of habitat and wildlife offenses, the classification of these crimes as concrete harm crimes may be warranted due to the inherent nature of natural

resource crimes, [114] since these offences often lead to concrete harm. Against the background of the very limited information available about (experiences in) the implementation and enforcement of these two offences in the EU MS, a further study with more focus on habitat and wildlife crime (Article 3 (n) and 3(q) nECD) and practical problems with their implementation and enforcement in the MS is recommended.

Finally, the nECD introduces "qualified offences" for conduct that leads to "catastrophic results" for the environment, describing such offenses as "comparable to Ecocide".[115] However, the intention to reflect the particular seriousness of these offences through higher penalties was not implemented in the operational part of the Directive, as higher penalties apply to a number of offences.

In conclusion, concerning the model of criminalisation, the nECD has addressed a central problem under the ECD by removing the administrative dependency in certain case, which promises to significantly strengthen the effectiveness of the ECD and thus the protection of biodiversity. However, concerning the offences related to the BHD – wildlife crime and habit crime -, the amendments fail to take sufficient account of the problems identified in this dissertation or to take advantage of the opportunities offered by the revision of the ECD. This applies in particular to the definition of the threshold criteria. Comparing the approaches for evaluating biodiversity damage under the BHD, ELD, and ECD, it has become evident that, while still facing certain issues, the ELD stands out for its advanced assessment criteria. The revision of the ECD would have been an opportunity to align its criteria with those of the ELD or at least explicitly acknowledge the ELD criteria and clarify their relationship. This would have simplified and clarified both the assessment of damage under the ECD as well as the interplay between the ECD and ELD. Unfortunately, this opportunity has not been seized.

[114] Refer also to Faure, *Criminal Liability for Exploitation of Natural Resources*.
[115] nECD, Recital 21, last sentence. See Chapter 35.4.4, *Qualifications and the introduction of the term "ecocide"*.

35.5 Penalties for legal and natural persons

35.5.1 Findings on penalties for legal and natural persons in law and in practice under ECD 2008

Under the ECD 2008, Articles 5 and 7 prescribe "**dissuasive, proportionate and effective sanctions**" for both natural and legal persons. The most obvious finding to emerge from their assessment in Part III of this dissertation is that there is no uniform interpretation of these terms in the MS. This means that the Directive has not led to the desired approximation of sanction levels in the MS, but rather to further discrepancies.[116] For both natural and legal persons, **very different types and levels of penalties** continue to apply to the same offence.

Another noteworthy finding pertains to **the lack of remediation requirements for damage resulting from environmental crime**.[117] Only in a limited number of countries, accessory criminal measures are reported to have a remedial function.[118] The procedures under the ECD also do not appear to be linked to the procedures under the ELD. That said, any damage resulting from a criminal offence should "automatically" trigger the application of the ELD and thus lead to remediation of the damage - provided it meets the ELD criteria. This requires, of course, that the two directives are appropriately integrated. The important question of the integration of the two Directives has been dealt with in Part IV of this dissertation.[119]

In summary, the examination of the ECD concluded that to rectify the observed variations in both the types and severity of sanctions and to achieve the harmonisation objectives set out in the Directive, it seems imperative to provide more detailed specifications for sanctions under the ECD, as already proposed by the Commission in its 2007 proposal for a Directive.

[116] See also European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 38, which comes to a similar conclusion.
[117] This finding may also be attributed to a lack of data, highlighting the critical need for comprehensive reporting requirements under the ECD.
[118] Milieu, *Evaluation Study on Directive 2008/99/EC*, 76.
[119] As has been demonstrated, a lack of consistency between the two Directives results in the exclusion of all damage resulting from criminal conduct that does not qualify as "occupational" and where the offender is not the person "who operates or controls the occupational activity." However, to what extent this actually affects the remediation of damage from wildlife or habitat crime cannot be stated on the basis of these findings alone. For further reference, the reader is referred to Part IV of this dissertation.

35.5.2 nECD on penalties for legal and natural persons

For the assessment of penalties under the nECD, it is again helpful to revisit the Commission's 2021 proposal for a nECD (pECD).[120] In its 2021 proposal, the Commission rightfully acknowledged that the existing approach to penalties has failed to achieve adequate harmonisation of sanction levels across MS and that national sanction levels, under the current generic framework, would not consistently meet the criteria of effectiveness and dissuasion.[121]

The Commission discussed possible amendments under its Objective 3, which addressed "Improving the proportionality and dissuasiveness of sanction types and levels".[122] According to the Commission, three options were considered to achieve this objective: **Firstly**, to introduce minimum maximum sanction levels (*Option 3a*). **Secondly**, Option 3a plus aggravating circumstances and accessory sanctions (*Option 3b*). Or **thirdly**, Option 3b plus an obligation to link the level of fines to the financial situation of legal person and/or illegal profits (*Option 3c*).

The Commission opted for the latter, arguing that all measures address important aspects of effective sanctioning and mutually strengthen each other. This is consistent with the findings of this dissertation that the penalties prescribed under the ECD need further specification.

The measures proposed by the Commission have been incorporated into the nECD. The nECD introduces minimum maximum sanction levels with an obligation to link the level of fines to the financial situation of the offender (Chapter 35.5.2.1), accessory sanctions (Chapter 35.5.2.2), as well as aggravating and mitigating circumstances (Chapter 35.5.2.3). These amendments are discussed in the following in more detail.

35.5.2.1 Introduction of minimum maximum sanction levels for natural and legal persons

The nECD retains the general obligation to punish the offences listed under Article 3 and 4 nECD with "effective, proportionate and dissuasive criminal penalties".[123] In addition, it introduces minimum maximum sanction levels for both natural and legal persons.[124] For natural

[120] European Commission, Proposal on Environmental Crime Directive COM(2021) 851 final.
[121] European Commission, Assessment Report on Environmental Crime Directive SWD(2021) 465 final, 47.
[122] European Commission, Proposal on Environmental Crime Directive COM(2021) 851 final,12.
[123] nECD, Art. 5 (1).
[124] nECD, Arts. 5 and 7 respectively.

persons, the prison penalties range from at least three years to at least ten years.[125] For both wildlife crime and habitat crime, the minimum maximum penalty is stipulated with three years and thus at the lower end of the newly prescribed penalties.[126] This extends to eight years in cases where the conduct leads to catastrophic results ("ecocide").[127]

For both natural and legal persons, the penalties prescribed under the nECD include fines.[128] In both cases, the level of fines must be linked to the offender's financial situation.

For natural persons, fines are not the primary penalty. Instead, they are listed as a possible accessory sanction.[129] Fines for natural persons must be proportionate to the severity of their conduct and their individual, financial and other circumstances. Where relevant, these fines should also take into account the gravity and duration of the environmental damage caused, as well as any financial benefits gained from the offense.

For legal persons, fines are the primary penalty. Similar to fines for natural persons, the nECD requires that fines for legal persons be proportionate to the gravity of the conduct and to the individual, financial and other circumstances of the legal person. Additionally, for legal persons the Directive specifies different levels of fines for the offences listed under Article 3(2) nECD. The minimum maximum level of fines ranges from 5 % of the legal person's total annual worldwide turnover (or an amount corresponding to EUR 40 000 000) for the offences listed in Article 3(2), points (a) to (l), and points (p), (s) and (t) to 3 % of the legal person's total annual worldwide turnover (or an amount corresponding to EUR 24 000 000) for the offences listed in Article 3(2), points (m), (n), (o), (q) and (r) nECD.[130] Again, the penalties for wildlife and habitat crime are thus at the lower end of the spectrum.

Where the conduct leads to catastrophic results ("ecocide") and is therefore covered by the qualified offences listed under Article 3(3) nECD, the new Directive simply requires MS to

[125] nECD, Art. 5 (2) (a)-(e).
[126] nECD, Art. 5 (2)(e).
[127] nECD, Art.5 (2)(b) in connection with Art.3(3) nECD.
[128] nECD, Art.5(3)(b) for natural persons; Art.7 (3) for legal persons.
[129] nECD, Art.5(3)(b).
[130] nECD, Art.7 (3)(a)-(b).

ensure that the legal person is punishable by more severe penalties than those applicable for the offences covered by Article 3(2) nECD.[131]

Whether the introduction of minimum maximum sanction levels under the nECD achieves the desired harmonisation of sanction levels across MS remains to be seen. As demonstrated in Part III of this thesis, already the Commission's 2007 proposal for an environmental crime directive specified minimum maximum penalties for each offence, considering the mental element ("intent" or "serious negligence"). [132] However, research into the feasibility of such sanctions has shown that prescribing minimum maximum penalties at the EU level creates various difficulties. [133] Experience so far suggests that they are not particularly effective for achieving greater harmonisation of penalties across MS. Importantly, this finding was also recognized in the Commission's 2021 proposal. To address the issue, the Commission, in its 2021 proposal, suggested combining the prescription of minimum maximum penalties with other supportive measures. This included proposing option 3c), which integrates minimum maximum penalties with accessory sanctions and aggravating circumstances.

Another noteworthy amendment under the nECD is the link that has been created between the level of fines and the financial situation of the offender. Evidently, the deterrent effect of a fine will (also) depend on the financial situation of the offender. The ECJ has repeatedly ruled that an effective deterrent system should consider the financial circumstances of the offender.[134] In order to assess whether a sanction is truly dissuasive, the Court found that it is necessary to compare the situation of a person who complies with his legal obligations with the situation of a person who breaches those obligations.[135] If such a comparison shows that the violation of a legal rule still results in an advantage for the offender regardless of the penalty system in place, the system does not ensure that the penalties applicable to the offender are truly dissuasive.[136]

[131] Also refer to discussion about level of penalties for qualified offences under Chapter 35.4.4.2, *Penalties for qualified offences*.
[132] See discussion in Chapter. 18.6.2, *Potential measures for the harmonisation of penalties across MS*. See also Proposal for a Directive of the European Parliament and of the Council on the Protection of the Environment through Criminal Law, COM (2007) 51final, 9 February 2007.
[133] See discussion in Chapter. 18.6.2, *Potential measures for the harmonisation of penalties across MS.*
[134] For further reference, refer to Chapter 18.2, *The requirement for "effective, proportionate and dissuasive" penalties under the final version of the ECD*
[135] *LCL Le Crédit Lyonnais* (Case C-565/12), para 50.
[136] *Ibid.*, para 51

As the Commission rightly notes, such an approach must also differentiate between legal and natural persons. Companies, more so than individuals, are often able to absorb financial fines by offsetting them against illegal profits or treating them as part of operating expenses.[137]

35.5.2.2 Accessory sanctions

The nECD introduces a broad range of accessory sanctions under Articles 5 and 7 nECD, which stipulate penalties for natural and legal persons.[138] MS must ensure that natural as well as legal persons who have committed criminal offences referred to in the Directive may be subject to accessory criminal or non-criminal penalties or measures. These accessory sanctions may include the restoration of environmental damage, withdrawal of permits or authorisations, exclusion from access to public funding, unwinding of the company or publication of the judicial decision. Of these accessory sanctions, three are particularly noteworthy in the context of this dissertation. **Firstly**, the obligation to "**restore the environment** within a given period, if the damage is reversible.[139] **Secondly**, the obligation to **pay compensation for the damage to the environment**, if the damage is irreversible or the offender is not in a capacity to carry out such restoration. [140] **Thirdly**, the "**withdrawal of permits and authorisations** to pursue activities that resulted in the relevant criminal offence".[141] In the following, these amendments are discussed in more detail.

35.5.2.2.1 Restoration of or compensation for damage to the environment

For both natural and legal persons, accessory sanctions may include an obligation to either restore the environment within a given period, if the damage is reversible, [142] or pay compensation for the damage to the environment, if the damage is irreversible or the offender is not in a capacity to carry out such restoration.[143]

The proposal for an accessory sanction that obliges natural or legal persons to restore the environment was already included in the 2021 Commission's proposal (pECD). Remarkably, the requirements for such a restoration of the environment are not further detailed in the nECD

[137] European Commission, Assessment Report on ECD, SWD(2021) 465 final, 52.
[138] nECD, Arts. 5(3) and 7 (2).
[139] nECD, Art. 5 (3)(a)(i) for natural persons and Article 7 (2)(a)(i) for legal persons.
[140] nECD, Art. 5 (3)(a)(ii) for natural persons and Article 7 (2)(a)(ii) for legal persons.
[141] nECD, Art. 5 (3)(e) for natural persons and Article 7 (2)(e) for legal persons.
[142] nECD, Art. 5 (3)(a)(i) for natural persons and Article 7 (2)(a)(i) for legal persons.
[143] nECD, Art. 5 (3)(a)(ii) for natural persons and Article 7 (2)(a)(ii) for legal persons.

– nor were they in the Commission's proposal. However, the Commission discussed the proposal for an "obligation to restore nature" in its Staff Working Document, notably in relation to the ELD under the heading "The restoration of nature as accessory sanction – coherence with the ELD".[144] The discussion starts with some general observations. Firstly, the Commission notes that the proposed obligation to restore the environment would be the first of its kind in EU criminal legislation, not least because it is strongly linked to environmental crime.[145] Secondly, it refers to a joint statement by IMPEL, EnviCrimeNet, ENPE, and EUFJE from 21 May 2021 where the four networks strongly argued in favour of empowering judges in the MS to impose not only financial penalties and imprisonment but also remedial sanctions, such as the restoration of nature. [146] In this regard, the Commission suggests that this would "imply an integrated approach of both administrative and criminal sanction types creating systemic coherence". It appears that by "administrative sanctions" the Commission is referring to the remediation requirements of the ELD – even though it is important to recall that from a systematic point of view, the remediation requirement under the ELD do not qualify as a sanction. This is because their primary aim is to ensure that polluters pay for the damage they cause and not to punish – even if orders to prevent and remediate damage under the ELD may de facto result in very high costs and thus also act as a deterrent. [147]

Finally, the Commission makes explicit reference to the ELD, expressing concern that an obligation to restore the environment under the ECD could overlap with obligations under the ELD. It therefore sees a need to ensure coherence between the two instruments.[148] Basically, the Commission makes two observations concerning the relationship of the two Directives: Firstly, that the two instruments differ in their requirements, with the ECD requiring "criminal conviction". Secondly, that their "environmental scope of application" would "overlap" but not be "identical". These rather vague observations are not further substantiated. The Commission then notes the scope for synergies between the two Directives referring, on the one hand, to the procedural rules under the ELD and, on the other hand, the "definition of the concept "restoration of the environment" and how to achieve it". These elements of the ELD could be referenced by the ECD if the obligation to restore damage were imposed during criminal

[144] European Commission, Assessment Report on ECD SWD(2021) 465 final, 50.
[145] *Ibid.*
[146] *Ibid.*
[147] See Chapter 20.1, *The use of administrative penalties in the EU MS*.
[148] European Commission, Assessment Report on ECD SWD(2021) 465 final, 50-51.

proceedings by a criminal judge. However, it appears that the Commission ultimately decided against such referencing of the ELD in its proposal.

The alternative to pay compensation for the damage to the environment was only added after the Commission's proposal. [149] Again, there is nothing in the nECD that further clarifies how such compensation is to be calculated. In the final version of the nECD, a Recital has been added according to which an obligation to restore the environment or to pay compensation should be without prejudice to the requirements of the ELD. [150]

Altogether, neither the nECD nor the Commission's 2021 proposal clarify the relationship between the ECD and ELD. At the very best, the need for "coherence" has been acknowledged. Disappointingly, however, no steps were taken to seize the revision of the ECD as an opportunity to better integrate any restoration requirements under the two Liability Directives.

35.5.2.2.2 Withdrawal of permits and authorisations

In the context of this thesis, another notable accessory sanction included in the nECD is the "withdrawal of permits and authorisations to pursue activities which have resulted in committing the offence". [151] Concerning the withdrawal of permits and authorisations, the recitals further state that "if the withdrawal of permits and authorisations […]can be imposed as a penalty under national law, MS should ensure that judges or courts are able to either impose such a penalty themselves or that another competent authority is informed and can act in accordance with national procedural rules". [152]

The motivation or rationale for this accessory sanction is not further explained in the nECD. Similarly, the Commission, which already included it in its 2021 proposal, has not further commented on it. It is, however, interesting with regards to a discussion taking place under the ELD - in the context of preventive measures. As shown, prevention of environmental damage is one of the central objectives of the ELD: Where there is an imminent threat of environmental damage, the ELD obliges the operator to take the necessary preventive measures. [153] As

[149] nECD, Art. 5 (3)(a)(ii) for natural persons and Art. 7 (2)(a)(ii) for legal persons.
[150] nECD, Recital 32.
[151] nECD, Art. 5 (3)(e) for natural persons and Art. 7 (2)(e) for legal persons.
[152] nECD, Recital 42, last sentence.
[153] ELD, Art. 5(1)

demonstrated in Part II, Fogleman (2019*)* investigated if **the variation or revocation of a permit that authorises damaging activities** qualifies as a preventive measure under the ELD.[154] She concluded that this was not the case. **Firstly**, because only an NCA can vary or revoke a permit, whereas the ELD obliges the operator to take the necessary preventive measures. [155] **Secondly**, if the damage was caused by activities in the past, the revocation/variation of a permit would be a measure taken in response to an act that has caused damage but not to an act that "has created an imminent threat of environmental damage", as required for preventive measures under Article 2(10) ELD.

The discussion of Fogleman's observations in Part II of this dissertation concluded, that the application of preventive measures to environmental damage caused by authorised activities under the ELD would need further clarification.[156] Obviously, in the case of the nECD, the authorisation is also only withdrawn after the damage has occurred. However, while further explanations of this newly inserted accessory sanction are missing, it would appear that with the "withdrawal of permits and authorisations to pursue activities which have resulted in committing the offence", this measure is also seeking to prevent future damage.

35.5.2.3 Aggravating and mitigating circumstances

In Articles 8 and 9 nECD, a number of aggravating and mitigating circumstances have been introduced, mandating MS to ensure that the circumstances listed thereunder are taken into consideration when sanctions are applied to an offence under the nECD.

Article 8 (a)-(h) nECD lists altogether eight aggravating circumstances that are considered to increase the severity of the criminal conduct. In the context of this study, three proposals for aggravating circumstances stand out. **Firstly**, the "offence caused destruction or irreversible or long-lasting substantial damage to an ecosystem". [157] **Secondly**, "the offence was committed by a public official when performing his or her duties",[158] which relates to questions concerning the issuance of unlawful permits, that has already been amply discussed in Chapter 35.4.2.3 above in relation to the question of liability of public officials involved in the crime. **Thirdly**,

[154] Fogleman, *Duty to Prevent Environmental Damage*, 717.For further reference, see Chapter 11.4.3, *Duty to prevent damage from authorised activities*.
[155] ELD, Art. 5(1).
[156] See Chapter 10.3.2.4, *Discussion of findings on exceptions to liability and the repercussions of the Court's ruling in Naturschutzbund Deutschland*.
[157] nECD, Art. 8 (a).
[158] nECD, Art. 8 (d).

the offence was committed within an area classified as a special protection area pursuant to Article 4(1) or (2) Birds Directive, or a site designated as a special area of conservation in accordance with Article 4(4) Habitats Directive or a site listed as site of Community importance in accordance with Article 4(2) Habitats Directive.[159]

Notably, the Commission's proposal additionally included an aggravating circumstance that directly related to a failure to fulfil obligations under the ELD, namely where the offender's conduct gave rise to liability for environmental damage but did not fulfil their obligations to take remedial action under Article 6 ELD. [160] Obviously, such a measure would have helped to further strengthen the enforcement of measures under the ELD. However, this provision was removed from the final version of the nECD.

Concerning mitigating circumstances, Article 9 nECD considers it as a mitigating factor if the offender restores the environment to its previous condition, where such restoration is not an obligation under the ELD, [161] or, where the offender takes steps to minimise the impact and extent of the damage or remediates the damage offender before the start of a criminal investigation.[162]

Altogether, it is noteworthy that the restoration of environmental damage caused by criminal conduct is considered several times in the nECD. Firstly, as an accessory sanction under Articles 5 and 7 nECD. Secondly as a mitigating factor under Article 9 (a) nECD. Lastly, in the Recitals, which draw attention to the importance of restoring the environment in several instances. This includes statements that in order to contribute to the restoration of the environment MS should consider introducing penalties or measures that are an alternative to imprisonment[163] or should consider taking measures allowing confiscated property to be used to finance restoration of the environment or remediation of any damage caused. [164]

[159] nECD, Art. 8 (h).
[160] pECD, Art. 8 (h).
[161] nECD, Art. 9 (a), first alternative.
[162] nECD, Art. 9 (a), second alternative.
[163] nECD, Recital 39.
[164] nECD, Recital 49, second sentence.

35.5.3 Compatibility with the current competences of the EU in the area of environmental criminal law

The newly introduced measures also appear to be compatible with the current competences of the EU in the area of environmental criminal law. While the ECJ judgment in Ship-Source Pollution (, C-440/05) still held that the "definition of the types and levels of criminal penalties are outside the Community's sphere of competence" amendments introduced under the Treaty of Lisbon (2009) have changed this. As demonstrated, the EU's powers in the area of criminal law have been expanded and **Article 83 TFEU** explicitly endows the EU legislator with the power to "**establish minimum rules with regard to the definition of criminal offences and sanctions**". The Lisbon Treaty has thus created the legal basis for a far-reaching criminal annex competence, which enables the EU to not only determine the types of offences that must be criminalized, but also the type and level of sanctions for those offenses.[165] That said, the EU still lacks the power to adopt directly applicable criminal law provisions. This means that MS must be given sufficient discretion to integrate any new criminal law standards into their national legal systems, allowing them to choose between several approximately equivalent transposition measures and to preserve the coherence of their national criminal law systems. A closer assessment of the new powers after Lisbon in this dissertation found that: **Firstly**, at EU level **minimum maximum penalties** are as such supported by Article 83(2) TFEU. **Secondly**, other stipulations, including the prescription of **accessory sanctions**, must leave sufficient discretion to choose between several approximately equivalent transposition measures. The nECD meets this requirement with the wording that [**emphasis added**] "accessory criminal or non-criminal penalties or measures […] **may** include" in the case of both natural and legal persons.[166] **Thirdly**, the same requirement for sufficient discretion is likely to apply to the obligation for MS to take into account **aggravating and/or mitigating circumstances**. Again, the provisions are formulated in such a sway that they leave enough discretion between several approximately equivalent transposition measures.[167]

[165] For further reference, see Chapter 18.6.1, *Competences after Lisbon – The new powers of the EU legislator*.
[166] nECD, Arts. 5(3) and 7 (2).
[167] nECD, Art. 8(1): "Member States shall take the necessary measures to ensure that, […], one or more of the following circumstances can, in accordance with national law, be regarded as an aggravating circumstance"; Article 9(1): "Member States shall take the necessary measures to ensure that, […], one or more of the following circumstances can, in accordance with national law, be regarded as a mitigating circumstance.

35.5.4 Summary of findings & conclusions on penalties for legal and natural persons under the nECD

In summary, the amendments introduced under Article 5 and Articles 7-9 nECD promise to greatly improve the design of the Directive, addressing the discrepancies in the types and levels of penalties across MS and hopefully contributing to more appropriate sanctions for environmental crime. **Firstly**, the nECD specifies penalties for both natural and legal persons by combining the prescription of minimum maximum sanctions with aggravating circumstances and accessory sanctions. **Secondly**, the restoration of environmental damage caused by the criminal conduct is considered several times in the nECD, although, as shown, an opportunity to further specify these restoration requirements and link them with the ELD has been missed.[168] **Finally**, the withdrawal of permits or authorisations is put forward as an accessory sanction – emphasizing the role of permits in environmental destruction.

35.6 Enforcement and practical relevance of environmental criminal law

As explained in the introductory part of this dissertation, the persistent enforcement deficit in the area of EU environmental law and the assumption that the "sharp weapon" of criminal law would help overcome that deficit in the MS, was one of the driving forces behind the adoption of the ECD.[169] This, of course, implies that the ECD itself is enforced effectively. The findings in Part III of this dissertation, however, suggest that the enforcement of the ECD (or a lack thereof) has likely been its greatest weakness. In the following, the most important findings from the analysis of enforcement under ECD 2008 are recalled. Next, the needs for amendment identified under the ECD 2008 are contrasted with the amendments introduced under the nECD.

35.6.1 Findings on enforcement under ECD 2008

The investigation of national enforcement measures in Part III of this dissertation revealed considerable deficits, demonstrating that correct transposition of the ECD 2008 into the national legal framework of the EU MS is not a guarantee for its enforcement. If efforts to investigate, prosecute and convict environmental offences are kept to a minimum, there is a risk that the instrument will remain little more than good intentions on paper with little impact on the ground. Additionally, uneven enforcement practices across MS may seriously compromise the

[168] Firstly, as an accessory sanction under Articles 5 and 7 nECD. Secondly as a mitigating factor under Article 9 (a) nECD. Lastly, in the Recitals, which draw attention to the importance of restoring the environment in several instances.
[169] For further reference, see Introduction.

level playing field between MS: If some MS invest in specialised police forces, prosecution services, courts, data collection, and communication, while others do not, the enforcement of the ECD and related environmental laws will vary significantly among MS.[170]

The problem is further exacerbated by the fact that under the ECD 2008 MS are under no obligation to collect data or report on the actual enforcement of the Directive. The resulting lack of information makes an assessment of the actual enforcement situation in individual MS and the allocation of failures in their national enforcement chains nearly impossible.

The investigation of national enforcement measures in Part III of this dissertation revealed considerable deficits, including significant **shortcomings in the collection, management and evaluation of data** on the detection, prosecution and conviction of environmental crime, a **lack of transparency, collaboration and information sharing** between the main actors in the national enforcement, **insufficient training and capacity building** as well **a lack of formal specialised structures** to support the detection, prosecution and adjudication of environmental crime in the MS. Finally, the dissertation revealed the **absence of national strategies** and a **lack of political will to enforce environmental criminal law**.

Based on the research findings and existing good practices in EU MS, Part III of this dissertation concluded that, the ECD could be amended to the effect that:
Firstly, in the area of **communication, collaboration and information sharing**, MS create a national body of representatives comprised of the different actors along the enforcement chain, that convenes regular meetings and promotes cooperation between the main environmental law enforcement authorities, including the publication of annual reports with detailed information on enforcement activities.

Secondly, for the **collection, management and evaluation of data**, MS create a national online portal, that centrally records, manages and evaluates data on environmental crime and provides data on what compliance authorities actually do and what they achieve.[171] This should improve the availability of statistical data for the allocation and remediation of problems along national the enforcement chain;

[170] For similar conclusions, see Gerstetter et al, *Status quo Umweltstrafrecht*, 82.
[171] European Commission, Environmental Compliance Assurance SWD(2018) 10 final, 18.

Thirdly, in the area of **training, specialisation and capacity building**, MS ensure that formalised structures, training, and capacity-building as well as the availability of sufficient resources provide the main actors in the enforcement chain with the necessary expertise and ability to successfully handle the technical and often highly complex cases in the area of environmental criminal law.

Fourthly, for the enforcement of environmental criminal law, MS adopt a **national strategy** to combat environmental crime.

Lastly, to strengthen **political will,** MS ensure that private actors, including non-governmental organisations and investigative journalists, are equipped with the rights, resources and protection to contribute to the detection, prosecution and adjudication of environmental crime.

35.6.2 Enforcement measures under the nECD

The nECD provides for a series of measures that MS must take to improve national enforcement of the nECD. The measures address both prevention and enforcement of criminal offences, including provisions on **data collection and statistics** (Chapter 35.6.2.1) **training and resources** (Chapter 35.6.2.2), **communication and coordination** (Chapter 35.6.2.3), **investigative tools, freezing and confiscation** (Chapter 35.6.2.4.), the implementation of a **national strategy** (Chapter 35.6.2.5) as well as measures concerning **the role of private parties and NGOs**, such as the protection whistleblowers and strengthening the rights of private parties, such as NGOs (Chapter 35.6.3) and finally an obligation of MS to take preventive measures, including awareness raising, research and education (Chapter 35.6.4).

35.6.2.1 Data on enforcement levels in the EU MS and for different levels of the enforcement chain

This dissertation identified significant shortcomings in the collection, management and evaluation of data on the detection, prosecution and conviction of environmental crime as a central problem in the enforcement of the ECD.[172] The available data to date also suggests that problems with the enforcement of environmental crime are located at different levels of the

[172] For further reference, see Chapter 19.2, *Data on enforcement levels in the EU MS and for different levels of the enforcement chain*.

enforcement chain. The lack of statistical data, however, makes it difficult to properly allocate and remediate these problems.

Amendments introduced by Articles 22-23 nECD address the identified problems in a number of ways. They set common minimum standards, ensure comparability and transparency, and promise to greatly improve the assessment of enforcement, including the identification of issues along the enforcement chain. **Firstly**, regarding the **availability of data**, the nECD requires MS to have a system for recording, producing, and providing anonymized statistical data. MS should use the statistical data for strategic and operational planning of enforcement activities, for analysing the level and trends of environmental offences and for informing citizens.[173] **Secondly**, concerning the **quality of the data**, the nECD specifies detailed data collection requirements. This includes data on the number of registered and adjudicated offences, dismissed cases, prosecutions, convictions, fines, and the types and levels of penalties imposed.[174] A consolidated review of the statistics must be published every three years. [175] In addition, MS are obliged to annually transmit their statistical data to the Commission.[176] **Thirdly**, to ensure consistent data collection across MS, the Commission is required to establish a standard, easily accessible, and comparable format through an implementing act.[177]

35.6.2.2 Technical knowledge, specialisation, training and resources

Environmental crime cases are demanding. Practitioners often describe the application of criminal law to environmental crime cases as particularly complex. [178] They require a high degree of both legal and scientific expertise (such as the ability to identify different plant or animal species), are technically challenging and present problems of proof, especially in the area of long-term damage and cumulative causality. Technical knowledge, specialisation and training of key actors are therefore critically important for the operational effectiveness of national enforcement chains.

The findings of this dissertation suggest that in most MS, resources, technical knowledge, specialisation, and training of key actors in enforcing environmental criminal law are

[173] nECD, Recital 66, nECD, Art. 22 (1).
[174] nECD, Art. 22 (2) (a)-(e).
[175] nECD, Art. 22 (3).
[176] nECD, Art. 22 (4).
[177] nECD, Art. 23 (1).
[178] For further reference, see Chapter 19.3, *Importance of technical knowledge, specialisation and training*.

insufficient.[179] The nECD acknowledges and addresses the identified need for expertise, training and resources as well as specialized units to varying degrees.

Firstly, concerning the lack of **resources** in the enforcement chain, the recitals acknowledge that insufficient resources in national authorities hinder the prevention and prosecution of environmental crimes, allowing offenders to avoid liability or receive lenient sentences.[180] Establishing minimum criteria for resources is therefore seen as essential to address these issues effectively. [181]

Secondly, effective enforcement of environmental crimes is acknowledged to require specialized skills, multidisciplinary approaches, legal knowledge, technical expertise, financial support, and extensive training. [182] MS should therefore ensure that relevant authorities receive appropriate training to handle the detection, investigation, prosecution, and adjudication of such crimes. [183] This is mirrored in Articles 17 – 18 nECD, which oblige MS to ensure that the actors along the enforcement chain receive sufficient resources and training, including a sufficient number of qualified staff and sufficient financial, technical and technological resource (Article 17) and regular specialised training with respect to the objectives of the Directive (Article 18).

Thirdly, concerning the need for **formal specialised structures,** the recitals call on MS to consider setting up **specialised investigative units, prosecutors and criminal judges** and to provide for **specialised chambers of judges** within the general criminal courts. [184] This is translated in Article 17, albeit in rather vague terms. MS are required to assess the need for an increased specialisation of authorities in environmental criminal law, "taking into account the constitutional traditions and structure of their legal system legal system, as well as other national circumstances".[185] It is notable that both the recital as well as Article 17 use rather vague language with regard to these commitments. In addition, Recital 61 essentially anticipates the outcome of such assessments for smaller MS, stating that small MS might conclude that specialisation is "not possible or advisable".

[179] See Chapter 19.3, *Importance of technical knowledge, specialisation and training*.
[180] nECD, Recital 60.
[181] *Ibid.*
[182] nECD, Recital 61
[183] *Ibid.*
[184] *Ibid.*
[185] nECD, Article 17, second paragraph

In summary, the nECD addresses the shortcomings identified in the area of technical knowledge, specialisation and training in a comprehensive manner. Evidently, the need for specialized units is addressed, even if only in the form of a call to evaluate the necessity in the individual MS. The implementation of this assessment could have been formalised further and combined with a mandatory report to the Commission. This would have provided a clearer understanding of whether specialized measures are always the best solution or if similar results could be achieved through other methods. However, this step was not taken.

35.6.2.3 Communication and cooperation between different actors in the enforcement chain

Concerning the **cooperation and communication between different actors of the enforcement chain**, the evidence created by numerous studies and reports suggests a lack of communication and cooperation in national enforcement chains with serious repercussions for the effective prosecution and enforcement of environmental criminal law in the MS.[186]

A closer look at the different MS has also revealed considerable differences in the approach taken to the management of the enforcement chain.[187] Exemplary in terms of successful cooperation and communication in the enforcement chain appear to be the **Flemish High Enforcement Council for Spatial Planning and Environment (VHRM)** in the Flemish Region of Belgium as well as the **Dutch National Environmental Law Enforcement Strategy** by the Dutch Ministry of the Environment. A combination of both, i.e. the establishment of a central coordination body in conjunction with a national strategy, would probably be the most effective approach to address the communication and coordination deficiencies identified in most MS.

The nECD addresses the need for better coordination and cooperation as well as for a national strategy. Better coordination and cooperation are addressed in the following, whereas national strategies and the respective measures under the nECD are discussed separately in Chapter 35.6.2.5.

As regards the need for better **coordination and cooperation**, the nECD stipulates measures targeting both national communication as well as communication with EU institutions: Firstly,

[186] For further reference, see Chapter 19.4, *Communication and cooperation between different actors in the enforcement chain*.
[187] For further reference, see Chapter 19.4.1, *Examples for communication and cooperation in selected EU MS*.

MS are required to take the necessary measures to establish appropriate mechanisms for coordination and cooperation among NCAs within a MS and, secondly, between MS, the Commission, and Union bodies, offices, or agencies. [188]

Concerning the **coordination and cooperation among NCAs within a MS**, MS are required to establish mechanisms for both strategic and operational collaboration among their authorities involved in preventing and fighting environmental crimes. These mechanisms should aim to align priorities, understand the relationship between criminal and administrative enforcement, exchange information for strategic and operational purposes, consult on individual investigations, share best practices, and assist European networks of practitioners working on related issues. [189] The mechanisms can include specialized coordination bodies, memoranda of understanding between authorities, national enforcement networks, and joint training activities.[190]

Concerning **cooperation between MS and the Commission, and Union bodies, offices or agencies**, the nECD mandates that where there is suspicion of cross-border environmental criminal offences, relevant MS should consider sharing related information with appropriate competent bodies. [191] MS, Eurojust, Europol, the European Public Prosecutor's Office, the European Anti-Fraud Office, and the Commission are mandated to cooperate within their competences to combat criminal offences outlined in Articles 3 and 4 nECD, with Eurojust offering technical and operational assistance to aid coordination of investigations by national authorities, and the Commission offering assistance where deemed suitable. [192]

Next to improved coordination and cooperation, the nECD also addresses the need for national strategies. The respective measures are discussed further below. In the following, investigative tools for the for the investigation and prosecution of offences covered under the nECD are addressed.

[188] nECD, Arts. 19-20.
[189] nECD, Art. 19, first sentence, (a)-(e).
[190] nECD, Art. 19, second sentence.
[191] nECD, Art. 20, first sentence.
[192] nECD, Art. 20, second and third sentence.

35.6.2.4 Investigative tools, freezing and confiscation

The nECD highlights the need for effective **investigative tools** for environmental crimes, such as those existing in the national law of the MS to combat organised crime or other serious crimes, stressing the principle of proportionality, the right to the protection of personal data and respect for the Charter of Fundamental Rights of the European Union.[193] MS must ensure that effective and proportionate investigative tools are available for investigating or prosecuting the offenses covered under the nECD. [194] Such tools could include the interception of communications, covert surveillance, including electronic surveillance, controlled deliveries, the monitoring of bank accounts and other financial investigation tools. [195] In addition, MS must take the necessary measures to enable the **tracing, identification, freezing, and confiscation** of instrumentalities and proceeds from criminal offenses.[196] As previously noted, MS are encouraged to allow confiscated property to be used to finance restoration of the environment or remediation of any damage caused, or to provide compensation for the environmental damage. [197]

35.6.2.5 National strategy

To ensure a coherent approach,[198] Article 21 nECD requires MS to establish and publish a national strategy within three years of the nECD's entry into force to combat environmental criminal offences. This strategy should outline objectives and priorities, define the roles and responsibilities of NCAs and address coordination with Union bodies. Furthermore, the strategy must address how it will support the specialisation of enforcement professionals, allocate resources to combat environmental crime, and assess future requirements in this regard. Finally, MS are required to review and update their strategy every five years to adapt to relevant developments and trends in environmental crime. MS are free to adopt one or more strategies, provided that their overall content covers the entire territory of the MS.[199]

Overall, the specification of a national strategy in Article 21 nECD is an important step towards ensuring that the new measures set out in the nECD, ranging from better training and resource

[193] nECD, Recital 53.
[194] nECD, Article 13.
[195] nECD, Recital 53.
[196] nECD, Art. 10.
[197] nECD, Recital 49, second sentence.
[198] nECD, Recital 65, first sentence.
[199] nECD, Recital 65, last sentence.

allocation to coordination and cooperation, are implemented in a transparent framework, regularly reviewed and updated where necessary.

35.6.3 Preventive measures: Awareness-raising, research and education

Another noteworthy amendment in the context of this dissertation is the introduction of a provision that requires MS to take preventive action for the reduction of environmental crimes. The newly introduced Article 16 nECD obliges MS to implement measures, such as information and awareness campaigns awareness-raising campaigns and research and education programs. According to the nECD, the objective of such measures should be to reduce environmental criminal offences and the risk of environmental crime. Awareness-raising campaigns must be directed at relevant stakeholders from both the public and private sector. Where appropriate, MS are also required to collaborate with relevant stakeholders in the implementation of these actions.

35.6.4 Measures concerning the role of citizens and NGOs under the nECD

The nECD also introduces a number of additional provisions that are relevant in the area of law enforcement and of particular interest in the context of this dissertation. These include, **firstly**, the protection of individuals such as whistleblowers and environmental defenders, **secondly**, procedural rights to participate in criminal proceedings for the "public concerned", **thirdly**, an obligation for MS to take preventive measure, such as awareness-raising campaigns and education. They are discussed in the following.

35.6.4.1 Protection of persons who report environmental offences or assist the investigation

Any practical enforcement of environmental law requires that NCAs become aware of violations. This dissertation found that the detection of environmental crime is one of the biggest challenges in the field of environmental crime.[200] The number of undetected cases in the area of environmental crime is significantly higher than for other areas of crime. As previously demonstrated, estimates assume that 20%-40% of all environmental crimes remain undetected.[201] In some cases, the figure is estimated to be as high as 90%.[202] Therefore, if

[200] See Chapter 19.2.2, *Dark figure of unrecorded environmental crime*.
[201] European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 24; Gerstetter et al, *Status quo Umweltstrafrecht*, 43.
[202] *Ibid.*

enforcement through criminal sanctions is to succeed, the significant dark figure of environmental crime needs to be tackled.

Next to inspections, the activities of private actors, such as NGOs, environmental defenders, investigative journalists and whistleblowers often play an important role in bringing attention to criminal activities. As demonstrated, it was thanks to the activities of NGOs and investigative journalists, that the critical situation in Poland and in Romania attracted public attention.[203] However, persons who report environmental crime often face threats, intimidation or even death. Romania serves as a particularly stark and extreme example of this troubling reality. Foresters and activists who have reported illegal logging have been attacked and, in some cases, killed.[204] Reportedly, between 2014 and 2020, six forest rangers were killed and 184 cases of violence against rangers were registered.[205]

In its recitals, the Directive expressly acknowledges the importance of persons reporting breaches of EU environmental law, the key role they play in exposing and preventing such breaches as well as the need to provide them with the necessary assistance and protection.[206] These can be individuals in the context of their work-related activities ("whistleblowers"), which are protected under the EU Whistleblower Directive[207].[208] Or members of affected communities or society at large who possess important information about potential environmental crimes. According to the Recitals, they should receive support and assistance during criminal proceedings to ensure they are not penalized for their cooperation and protected from harassment or undue prosecution. [209]

In the body of the Directive, this is translated in Article 14 nECD. The newly inserted provision obliges MS to ensure that, without prejudice to the EU Whistleblower Directive[210], persons

[203] See Chapter 19.5, *Lack of political will to enforce environmental criminal law.*
[204] EEB, *Crime and Punishment*.
[205] S Walker, *Violence Escalates as Romania Cracks Down on Illegal Timber Trade*, The Guardian (8 January 2020). [online]
[206] nECD, Recitals 54, 55.
[207] Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons who report breaches of Union law, OJ L 305, 26.11.2019, p. 17.
[208] nECD, Recital 54.
[209] nECD, Recital 55.
[210] Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons who report breaches of Union law, OJ L 305, 26.11.2019, p. 17.

reporting criminal offences under the nECD, providing evidence or otherwise cooperating with NCAs receive the necessary support and assistance during criminal proceedings.

The insertion of Article 14 nECD marks an important step towards improving the protection of whistleblowers, environmental defenders and others who report information or provide evidence for an investigation into environmental offences. It lays an important foundation for better protection of those members of society who to this day must fear for their jobs, their health or even their lives when they report environmental crime. If successfully implemented, this should contribute to an increase in the number of detected offences and thus the enforcement of environmental criminal law.

35.6.4.2 Publication of information and access to justice for the public concerned

Another important feature introduced under the nECD concerns the publication of information and access to justice for the public concerned. Article 15 nECD obliges MS to ensure appropriate procedural rights in proceedings concerning the offences listed under the nECD.[211] In addition, MS must ensure that the information on the progress of the proceedings is shared with the public concerned.[212] In the recitals, the amendment is argued on the grounds that nature cannot speak for itself and that the public concerned should therefore be able "to act on behalf of the environment as a public good".[213]

However, the provision of these rights is restricted in a number of ways. To begin with, such procedural rights for the "public concerned" must only be ensured in MS where such rights already exist in proceedings concerning other criminal offences - for instance as a civil party.[214] Indeed, the Directive stresses that it does not intend to introduce new procedural rights for the members of the public concerned.[215] Secondly, the information on the progress of the proceedings must only to be shared with the public concerned, where that is done in proceedings concerning other criminal offences.[216] And lastly, for any person to benefit from such procedural rights, it must meet one of three alternative criteria. These criteria are that the person:

- is **affected or likely to be affected** by the criminal offences; or
- has a **sufficient interest**; or

[211] nECD, Art. 15, first sentence.
[212] nECD, Art. 15, second sentence.
[213] nECD, Recital 57.
[214] nECD, Art. 15, first sentence.
[215] nECD, Recital 58, first sentence.
[216] nECD, Art. 15, second sentence.

- maintains the **impairment of a right**. [217]

Non-governmental organisations that promote environmental protection are also to benefit from "appropriate procedural rights", provided they meet requirements under national law.

The three alternative criteria, which must be met by persons other than NGOs in order to benefit from the procedural rights contained in the nECD, are not further specified. It is, however, notable that they largely mirror the criteria included in Articles 12 and 13 ELD, which entitle qualified natural and legal persons to request authorities to take action against operators (Article 12 ELD) and to challenge the decision or inaction of the authority before a court or tribunal (Article 13 ELD).[218] However, the ELD also does not define in more detail what constitutes a "sufficient interest" and an "impairment of a right". Rather, according to the ELD, this is to be determined by the MS.[219] Notably, in the context of the ELD, studies and reports on the transposition of paragraph (b) of Article 12(1) ELD show that the resulting discretion left to MS regarding the qualifications required for a "sufficient interest" under Article 12(1) ELD has led to substantial differences in MS" transposing legislation. [220]

Altogether, the effect of Article 15 nECD is likely to be very limited from the outset, given that its application is restricted to MS where such rights already exist in proceedings concerning other criminal offences - for instance as a civil party. [221]

What can be expected from these amendments for the effectiveness of the nECD? The discussion in Part I of this dissertation highlighted the important role of citizens and NGOs within the EU governance system for the implementation and enforcement of environmental law. [222] Yet, as shown, the rights of private parties and NGOs are still restricted and their limited access to justice in the national jurisdictions of EU MS remains a problem[223] and EU initiatives

[217] nECD, Art. 15, first sentence.
[218] The persons who can invoke the rights under Arts. 12 and 13 ELD are specified in Art. 12(1) paras. (a) –(c) ELD as persons that are "affected or likely to be affected by environmental damage" or have a "sufficient interest in environmental decision making relating to the damage" or, alternatively allege the "impairment of a right, where administrative procedural law of a MS requires this as a precondition".
[219] ELD, Art. 12 (1) ELD, para. 1.
[220] For further reference, see Chapter 11.8.1.1, *Affected or likely to be affected*.
[221] nECD, Art. 15, first sentence.
[222] See Chapter 5.1, *Key actors in the implementation and enforcement of the BHD.*
[223] For further reference, see Chapter 5.1.3., *The Role of Private Parties (Citizens and NGOs).*

to improve access to justice in the MS have so far been of limited success.[224] In this context, limiting these rights to MS where they already exist does not offer any real progress. Instead, it entrenches the Directive's "new" provisions in a system where access to justice remains problematic. It seems that there is still a lack of political will to take the decisive step of strengthening procedural rights across MS.

35.6.5 Summary of findings and conclusions on amendments for better enforcement of the Directive

The weak enforcement of the ECD in the MS has been one of the most significant findings to emerge from the analysis of the ECD. The nECD tackles the problems identified in the enforcement with a comprehensive approach.

Firstly, concerning the collection and communication of statistical data, the nECD addresses the need for common minimum standards and comparability and thus creates the basis for a much-improved assessment of the enforcement situation in the MS, including the localisation of problems in the enforcement chain.

Secondly, concerning the operational effectiveness of national enforcement chains, the nECD mandates MS to establish a **national strategy** and to ensure **sufficient resources and training** as well as **cooperation and coordination** of enforcement activities at strategic and operational level. It calls on MS to consider setting up specialised investigative units, prosecutors and criminal judges and to provide for specialised chambers of judges within the general criminal courts. Also, worth mentioning is the mandatory strengthening of investigative tools in the MS.

Thirdly, the nECD contains a number of amendments concerning the **role of citizens and NGOs**, which create an important basis for the prevention of environmental crime on the one hand and for better enforcement of environmental criminal law on the other. They concern the protection of individuals such as whistleblowers and environmental defenders, rights to participate in criminal proceedings for the "public concerned".

Finally, the nECD introduces an obligation for MS to take preventive measures such as **awareness-raising, education** and **research**.

[224] See Chapter 5.1, *Key actors in the implementation and enforcement of the BHD*.

In some cases, the language is more of a declaratory than a committal nature, such as in the case of specialised units or procedural rights. However, overall the measures represent a significant step towards better enforcement. If successfully implemented, the amendments promise not only better enforcement of environmental criminal law, but also the prevention of environmental crime and thus environmental damage in general.

35.7 Combined use of administrative and criminal penalties for the enforcement of environmental law

35.7.1 Findings on use of administrative and criminal penalties for the enforcement of environmental law under ECD 2008

This study's research into the use of administrative and criminal penalties found that MS use both administrative and criminal penalties to enforce environmental law with recent developments showing an increasing tendency for MS to rely on administrative penalties for environmental offences. [225] Against the background of these findings, Part III of this dissertation further discussed the use of administrative penalties versus criminal penalties. This comparison found that both criminal and administrative penalties have their strengths and limitations in meeting these requirements. It also found that MS increasingly combine administrative and criminal sanctions to achieve better compliance with environmental law. However, it appears that problems exist with their **differentiation** and **interplay**, resulting in conflicts of competences, legal uncertainty and delayed proceedings. Clear criteria for their differentiated use are therefore necessary.

The discussion of the use of administrative versus criminal penalties concluded in favour of a smart mix. Consequently, in order to strengthen the effectiveness of the ECD, the Directive should be amended to not only allow but also encourage the use of a "smart mix" of administrative and criminal sanctions under the ECD, including criteria for their delineation and interplay as well as reporting requirements on the use of both administrative as well as criminal sanctions for environmental offences.

[225] For further reference on research findings, see Chapter 20, *Administrative versus criminal penalties for environmental offences*.

35.7.2 The role of administrative penalties for environmental offences under the nECD

The nECD expressly addresses the relationship between administrative and criminal penalties in the recitals, apparently aiming to improve coherence between administrative and criminal sanctioning systems. **Firstly**, it asserts that MS should not use the obligations outlined in the Directive, which introduce criminal sanctions, as a reason to exempt themselves from establishing administrative sanctions and other measures for breaches of EU environmental law in their national legislation.[226] **Secondly**, MS should clearly delineate the scope of administrative and criminal enforcement for environmental offenses under their national laws.[227] Specifically, they should ensure that, when implementing the national laws transposing this Directive, they adhere to the principles of the Charter of Fundamental Rights of the European Union, including the ne bis in idem principle, when imposing both criminal and administrative sanctions.[228] **Lastly**, MS should establish internal cooperation and communication mechanisms among all actors involved in the administrative and criminal enforcement chain, in order to ensure an effective, integrated, and coherent enforcement system that encompasses administrative, civil, and criminal law measures.[229] In the body of the Directive, this has been mainly translated under Article 19 nECD, which obliges MS to ensure that NCAs involved in the prevention of and fight against environmental crime cooperate and coordinate their activities at strategic and operational level.

Notably, the Commission's 2021 proposal still required national strategies to clarify the application of administrative and criminal law to breaches of environmental law related to offenses covered by this Directive.[230] In the event that a breach of EU environmental legislation triggered both administrative sanctions (under sectoral legislation) and criminal sanctions (under the nECD), the criteria to select between the two was suggested to include the severity of the harm or the difference in the burden of proof that applies in administrative and criminal law.[231] The Commission's proposal to actively address the criteria for the delineation between the use of criminal, administrative and civil law, however, did not make it into the final version of the nECD.

[226] nECD, Recital 45.
[227] nECD, Recital 46.
[228] *Ibid.*
[229] nECD, Recital 62.
[230] pECD , Art. 20(1)(d).
[231] European Commission, Assessment Report on ECD, SWD(2021) 465 final, 66, footnote 169.

35.7.3 Summary of findings and conclusions on the combined use of administrative and criminal penalties under the nECD

In summary, although the legislator emphasises the need for greater consistency between the application of administrative and criminal sanctions in the nECD, it has clearly decided against a "smart mix" of criminal and administrative sanctions in the operational part of the Directive. Instead, Article 5 pECD mandates MS to guarantee that the offences specified in the Directive are subject to criminal penalties. Considering an increasing tendency for MS to rely on administrative penalties for environmental offences, with the available evidence suggesting overall higher levels of enforcement where administrative penalties are applied, [232] this seems inadequate. As has been demonstrated, the current parallel use of administrative and criminal penalties in the MS suffers from conflicts of competences, legal uncertainty and delayed proceedings.[233] To help ensure that criminal and administrative penalties are indeed applied where they are most effective, the exclusive use of criminal penalties for individual offenders should have been removed from the ECD and a "smart mix" in the application of both types of penalties promoted through the introduction of criteria for their respective use. Simultaneously, reporting requirements on the use of both administrative and criminal penalties for environmental violations in MS could have been introduced to assess whether their use actually leads to more effective enforcement.

35.8 Conclusions on the amendments introduced under the nECD

The nECD introduces some remarkable amendments and, on the whole, appears to address the issues identified under the ECD 2008, albeit with varying levels of effectiveness. This chapter summarises key findings and draws conclusions. It also assesses, whether the nECD impacts the relevance of existing research or creates need for new research.

Firstly, and most remarkably, the nECD works with a **model of criminalisation** that in part represents a radical departure from the prevailing model of criminalisation for environmental crime in EU MS, addressing one of the most challenging problems identified under the ECD 2008: the **dependence of criminal liability on unlawfully issued permits**. While the nECD generally retains a model of criminalisation based on administrative dependency, it effectively addresses the problems related to it by removing this dependency in two cases: firstly, where

[232] See Chapter 19.2.3, *Summary of findings on data on environmental crimes*.
[233] See Chapter 20.3, *Smart mix of administrative and criminal penalties*.

authorisations have been obtained fraudulently or through corruption, extortion or coercion, and, secondly, where such authorisations are in manifest breach of the relevant substantive requirements. This approach strikes a healthy balance between two fundamental values of our legal system: legal certainty and justice. On the one hand, it ensures that the holder of an authorisation may, in principle, rely on its validity, providing protection from criminal liability and safeguarding any investments made on its basis. On the other hand, it ensures that the trust in the validity of the permit is worthy of protection, which is excluded if the permit was obtained either fraudulently or through corruption, extortion or coercion, or if there was an obvious violation of the relevant substantive legal requirements.

The mere existence of an authorisation will thus no longer guarantee impunity. Instead any holder of an authorisation will have a strong incentive to ensure that their authorisations and activities comply with applicable legal requirements. Considering the systematic nature of the problems that have evolved with the issuance of unlawful authorisations under the BHD (and other environmental legislation) and the impacts this has had on the protection of biodiversity (and other protected environmental interests), these amendments promise to significantly strengthen the effectiveness of the ECD and thus the protection of biodiversity.

Another notable finding in relation to the problem of unlawfully issued authorisations is that the role and potential liability of **public officials** involved in issuing unlawful authorisations is now better reflected in the Directive. On the one hand, a public official who knowingly issued an unlawful authorisation may now be liable to prosecution for participation in the offence. On the other hand, his status as a public official may be taken into account as aggravating circumstances.

The model of criminalisation also plays an important role for the **evidentiary requirements**, which are significantly higher in the case of concrete harm crimes than in the case of abstract endangerment crimes, especially because they require proving a causal link. As shown, for wildlife crime and habitat crime the nECD has retained a model of criminalisation that requires either harm or concrete endangerment. Concerning the related problems of proof and the advantages and disadvantages of using a model of abstract endangerment crime instead, this dissertation found that the choice of the most adequate model depends on a number of factors, including the typical nature of the crime. With the information currently available, the classification of wildlife and habitat crime as concrete harm or concrete endangerment crimes

appears justified. That said, at present, the available information on the implementation and enforcement of these two offences in the EU MS is very limited. Little is known about typical cases of wildlife and habitat crime and experiences with their prosecution. To further improve the design of these two offences, a further study with a stronger focus on habitat and wildlife crime (Article 3 (n) and 3 (q) nECD) and practical problems with their implementation and enforcement in the MS is therefore recommended.

Secondly, the nECD has introduced extensive amendments to strengthen the **enforcement of the Directive**. In a comprehensive approach, the nECD tackles shortcomings in the operational effectiveness of national enforcement chains. It addresses the critical importance of data, the need for sufficient resources, technical knowledge, specialisation and training as well as measures to improve cooperation and coordination of activities along the enforcement chain. Particularly noteworthy are the amendments concerning **the role of citizens and NGOs**, especially the protection of individuals such as whistleblowers and environmental defenders. Also worth highlighting is the introduction of preventive measures, such as awareness-raising, education and research as well as the mandatory strengthening of investigative tools in the MS.

In conclusion, while there are instances where the wording is declarative rather than binding, such as in the context of special units or procedural rights, these newly introduced measures aimed at enhancing the operational effectiveness of national enforcement chains promise better enforcement of the nECD and, consequently, the BHD if successfully implemented.

Thirdly, as demonstrated the nECD introduces a broad range of **accessory sanctions**. Of these accessory sanctions, three are particularly noteworthy in the context of this dissertation. The obligation to restore the environment,[234] the obligation to pay compensation for the damage to the environment where the damage is irreversible or the offender cannot carry out the restoration,[235] and the withdrawal of permits and authorisations.[236]

Lastly, the importance of **restoring environmental damage** caused by criminal conduct is acknowledged throughout the nECD. Firstly, in the Recitals, which repeatedly draw attention to the importance of restoring the environment and call on MS to consider measures that allow

[234] nECD, Art. 5 (3)(a)(i) for natural persons and Article 7 (2)(a)(i) for legal persons.
[235] nECD, Art. 5 (3)(a)(ii) for natural persons and Article 7 (2)(a)(ii) for legal persons.
[236] nECD, Art. 5 (3)(e) for natural persons and Article 7 (2)(e) for legal persons.

confiscated property to be used to finance restoration of the environment or remediation of any damage caused.[237] Secondly, as mentioned above, as an accessory sanction. And lastly, as a mitigating factor.[238]

Remarkably, however, the nECD neither defines requirements for restoration nor clarifies how compensation is to be calculated if restoration is not possible. Since it is not clear what must be achieved, there is a risk that in cases where the ELD and thus its remediation requirements do not apply, remediation will be inadequate – a case in point being the poor offsetting results under the BHD, where similar to the nECD, any specifications are lacking. It is disappointing that this opportunity to further integrate the nECD and the ELD by linking the restoration requirements of the nECD with the remediation requirements of the ELD has not been seized.

Notably, the Commission's proposal still included an aggravating circumstance that directly related to a failure to fulfil obligations under the ELD, namely where the offender's conduct gave rise to liability for environmental damage but did not fulfil their obligations to take remedial action under Article 6 ELD. [239] However, this provision was removed from the final version of the nECD.

The nECD also falls short in a number of other areas.

Firstly, and most importantly in the context of this dissertation, the amendments fail to resolve a crucial issue that concerns the design and wording of the offences of wildlife and habitat crime: a clearer definition of the **threshold criteria**. It is astonishing that a whole catalogue of new criteria has been introduced for their definition, but that none of these new criteria are further defined in the nECD or can be found in other directives such as the BHD or ELD. Their interpretation is therefore bound to be unclear, meaning the determination of the threshold value, which is decisive for the application of the offences, is likely to remain problematic. This is particularly noteworthy given that there is ample evidence that the use of ambiguous terms has led to complications in the investigation and prosecution of environmental offences under the ECD 2008.

[237] nECD, Recital 49, second sentence.
[238] nECD, Art. 9(a).
[239] pECD, Art. 8 (h).

Similar observations apply to a number of terms introduced with the newly introduced qualified offences. Newly introduced notions, such as "widespread", "long-lasting", "considerable size" or "environmental value" lack further guidance or reference.

Secondly, as far as **the scope of protected species and habitats** under wildlife and habitat crime is concerned, the nECD fails to address the wording that creates difficulties in comparing the scope of the nECD with the scope of the BHD. Here, it would have been important to provide clarifications to ensure comparability.

Thirdly, the intention to express the particular seriousness of the newly introduced **qualified offences** with higher penalties[240] was not implemented in the operational part of the Directive. Instead, higher penalties apply to a number of the (unqualified) offences listed in Article 3 (2) nECD. In addition, the definitions of these newly introduced qualified offences lack clarity in several respects and their application is therefore likely to cause problems in the future.

Fourthly, concerning the **use of administrative versus criminal penalties**, the nECD fails to adequately address the increasing tendency for MS to rely on administrative penalties for environmental offences, with the available evidence suggesting that the application of administrative penalties results in overall higher levels of enforcement of environmental criminal law in the MS.[241]

To help ensure that criminal and administrative penalties are indeed applied where they are most effective, the exclusive use of criminal penalties for individual offenders should have been removed from the nECD and a "smart mix" in the application of both types of penalties promoted through the introduction of criteria for their respective use, including reporting requirements on their use.[242]

Curiously, and as a final point of observation, the term **"operator"** was introduced under the nECD, [243] a term that is also being used under the ELD. However, in contrast to the ELD, the

[240] nECD, Recital 21.
[241] See Chapter 20.2.3, *Summary of findings and conclusions on the use of administrative penalties versus criminal penalties*. As demonstrated, the parallel use of administrative and criminal penalties suffers from conflicts of competences, legal uncertainty and delayed proceedings.
[242] See Chapter 20.2.3, *Summary of findings and conclusions on the use of administrative penalties versus criminal penalties.*
[243] nECD, Recitals 10,11 and 59.

term is left undefined under the nECD and no reference is made to its use under the ELD or how it may relate to it.

In conclusion, assessed against the background of the findings in Part III of this dissertation, the nECD has introduced some remarkable amendments that promise to improve both the implementation and enforcement of the nECD as well as the basis for evaluating its effectiveness. It is, however, particularly in the area of biodiversity protection and the two related offences of wildlife crime and habitat crime, where essential shortcomings remain. This particularly applies to the determination of the threshold criteria, for which new terms have been introduced without any further definition or points of reference in other EU law, such as the ELD or BHD.

Concerning the **relevance of existing research** or the **need for new research**, the questions essentially remain the same. To begin with, it is evident from the results of this study, that a need for further research into the nature of wildlife and habitat crime in the MS remains. As has been noted, little information is available about experiences in the implementation and enforcement of these two offences in the EU MS. A further study with more focus on habitat and wildlife crime and practical problems with their implementation and enforcement in the MS is therefore recommended. The newly introduced data collection and reporting requirements under the nECD should greatly improve the basis for such an assessment. Such research could further clarify characteristic case constellations, typical problems with the assessment of damage and the establishment of the causal link or the role of unlawful permits. The findings could form the basis for an improved design of these offences, especially concerning the definition of the threshold criteria and the most appropriate model of criminalisation, taking into account the identified advantages and disadvantages with regards to the unlawfulness requirement or the establishment of a causal link.

Concerning more specifically the refinement of threshold criteria under the ECD, the emerging wealth of biodiversity measurements, metrics and indicators could be leveraged to define and further specify the threshold criteria for wildlife and habitat crime.

Ideally, such study on the development of biodiversity damage thresholds in the ECD should be directly linked to a corresponding study for developments recommended for the ELD

threshold criteria.[244] This alignment would help create a standardised framework for determining thresholds.

[244] See also proposal for amendment of threshold criteria under the ELD, where based on the findings of this dissertation a further study with a focus on developing biodiversity indicators and standards in the context of a liability regime, ideally in an interdisciplinary context, is being suggested. For further reference, see Chapter 34.3.2, *Leveraging emerging biodiversity measurements, metrics, and indicators*.

PART VII Discussion of findings and conclusions

Biodiversity is undergoing well-documented and accelerating declines, representing one of the most pressing environmental challenges of our time. As the legal framework continues to evolve in response, assessing the effectiveness of existing instruments for biodiversity protection — and identifying avenues for strengthening them — becomes increasingly imperative.

Through detailed analysis, and taking into account the recent amendments introduced by the revised Environmental Criminal Liability Directive (nECD), this dissertation has identified key gaps, inconsistencies, and limitations within the current liability framework. It has proposed potential amendments aimed at enhancing the effectiveness of these instruments. The findings aim to contribute to the ongoing development of environmental law in the EU by providing insights that could strengthen liability for biodiversity damage and shape future legal reforms, thereby ensuring more effective protection across EU MS.

At present, the Environmental Administrative Liability Directive (ELD) and the Environmental Criminal Liability Directive (ECD/nECD) are the two main instruments governing liability for biodiversity damage in the EU. Introduced within a time frame of less than four years, the ELD (2004) and the ECD (2008) each established a framework of environmental liability, imposing further obligations on MS to implement and enforce EU environmental law. Both Directives cover liability for damage to protected species and habitats and are closely intertwined with the provisions of the Birds and Habitats Directives (BHD).

The aim of this dissertation was to assess the effectiveness of the ELD and ECD in protecting biodiversity within the EU and to explore potential amendments that could enhance their effectiveness, taking into account the recent changes introduced under the revised ECD (nECD 2024).

Part I set the stage for the subsequent analysis of the ELD and ECD. It examined the concept of biodiversity, the drivers of its decline, and the general policies employed for its protection at both international and EU levels. It analysed key provisions of the BHD—the EU's principal legal instruments for biodiversity protection—and the challenges associated with their

implementation and enforcement, exploring the role of different actors and instruments in this process. This provided the foundation for the analysis of the two Liability Directives within the broader context of EU environmental governance.

Building on this, **Parts II and III** assessed whether the ELD (2004) and ECD (2008) have succeeded in achieving their aims, thereby improving the implementation and enforcement of the BHD and strengthening biodiversity protection. Chapters 7 to 12 provided a comprehensive analysis of the ELD (2004), tracing its development, legal foundations, and national transposition, before examining its current design and wording in detail. This analysis identified key challenges in the ELD's application, implementation, and enforcement, highlighting persistent issues that undermine the coherence and effectiveness of the EU's administrative liability framework for biodiversity damage.

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In turn, **Chapters 13 to 21** offered a detailed examination of the ECD, mapping its historical evolution, legal underpinnings, and distinctive features, with particular attention to offences related to biodiversity. This analysis revealed the Directive's conceptual and practical shortcomings—especially its reliance on administrative decision-making, the threshold criteria for liability, limited enforcement capacity within MS, and the ongoing fragmentation between administrative and criminal enforcement mechanisms—underscoring the need for greater harmonisation and reform in EU environmental criminal law.

Next, **Part IV** investigated the critical role of inspections in ensuring the implementation and enforcement of the BHD, with a focus on how inspections complement the frameworks established under the ELD (2004) and ECD (2008). This part also explored proposals for

enhancing inspection practices and the potential establishment of an EU-wide inspection authority.

In **Part V**, the analysis turned to the integration of the ELD (2004) and ECD (2008), examining whether the design and wording of the two Liability Directives are sufficiently integrated to leverage any complementary aspects of administrative and criminal liability for damage to protected species and habitats.

Finally, Part VI assessed whether amendments to the design or wording of the ELD (2004) and ECD (2008) could further improve their effectiveness. This assessment included the amendments introduced in the revised version of the ECD, adopted in May 2024 (nECD 2024).

The final part of this dissertation discusses the key findings and draws conclusions, highlighting their significance and contribution to the field, along with recommendations for further research. **Chapter 36** begins by summarising and critically evaluating the findings in relation to the research questions addressed across Parts I–VI of the dissertation. It establishes cross-references between sections and synthesises the most important outcomes, identifying common themes, challenges, and opportunities within the current legal framework. **Chapter 37** explores the significance of the study's contributions to legal scholarship and policy development. **Chapter 38** acknowledges the study's limitations, and **Chapter 39** sets out recommendations for future steps and further research. **Chapter 40** concludes with final reflections.

36 Discussion of findings

This chapter sets out to summarise and critically evaluate the findings of the dissertation in relation to the research questions addressed across Parts I to VI. It draws connections between the different sections and synthesises the key outcomes, highlighting recurring themes, ongoing challenges, and potential opportunities within the current legal framework. The discussion starts with the findings on the implementation and enforcement BHD in Part I of this thesis, which laid the foundation the subsequent analysis of the ELD and ECD.

36.1 The critical challenge of pushing Member States towards better implementation and enforcement of the Birds and Habitats Directives

The adoption of the BHD in 1979 and 1992, respectively, marked significant progress in biodiversity conservation and protection. However, their effective implementation and enforcement continue to face persistent challenges. The critical analysis of BHD case law in Part I exposed difficulties in achieving harmonised interpretation and implementation, stemming from both ambiguities in the interpretation of key terms and a general reluctance of MS to fully commit to the stringent requirements of the two Directives.[1] The analysis also highlighted the Court's crucial role as an enforcer of the BHD, ensuring that the aims of both Directives are upheld amidst competing pressures from agricultural practices, infrastructure development, and urban expansion, which often conflict with the conservation goals of the Directives.

Particularly notable in this regard were the dynamics that developed around the Court's decision on the Birds Directive in the *Leybucht Dykes* (C-57/89) case. The study of these developments offered valuable background information and helped contextualising the issues related to the implementation and enforcement of the BHD, as well as observations regarding the weak control in the application of the derogation mechanism included in Article 6(4) HD, which allows MS to use social and economic considerations as justification for activities likely to have a damaging impact on protected sites. While the ECJ made it clear that the conditions for an application of the derogation must be interpreted strictly,[2] MS appear to have considerable freedom in their implementation of Article 6(4). There is evidence that the requirements for a derogation are not being properly enforced by MS and that the Commission has so far taken only a cursory look at their adequacy.[3] Noteworthy in this context was also a more general observation about a decline in the Commission's initiative to enforce MS' obligations, especially concerning cases of "bad application", which, at present, are likely to represent the majority of cases requiring referral to the ECJ, considering that the majority of MS have by now fully transposed the BHD into national law.

[1] See Chapter 5.2, *Lessons learnt on the Implementation and Enforcement of the BHD from ECJ Case Law*.
[2] *Commission* v *Italy* (C-304/05), para.82.
[3] See Chapter 5.2.3.4.4, *Implementation and enforcement of Article 6(4) requirements4.2.2.4.4*, with reference to Nollkaemper, *Habitat Protection in EC Law*, 272.

Another important actor in the implementation and enforcement of the BHD, identified through this study, were citizens and NGOs.[4] The analysis found that 85% of the 2,374 reported infringements of the BHD between 1981 and 2015 were based on complaints, with only 15% initiated by the Commission. [5] Moreover, landmark ECJ rulings on the BHD often resulted from preliminary references in cases brought forward by NGOs. Access to justice, therefore, emerged as a critical element for the effective enforcement of the BHD. However, despite their significant contributions, the role of private parties and NGOs remains limited at both the EU and MS levels. This limitation is closely linked to the inadequate implementation of the Aarhus Convention, which guarantees access to justice in environmental matters. A further challenge identified in this study was the lack of financial and human resources available to NGOs, which often hinders their ability to engage in the lengthy and costly environmental litigation necessary to fulfil their watchdog role. This aspect should be considered when developing policies to improve access to justice and enhance environmental protection.

Overall, the findings of this study on the roles of key actors and their contributions to the implementation and enforcement of the BHD over the last decades underscore the crucial role played by the ECJ. However, as demonstrated, referral to the ECJ is not particularly efficient.[6] Infringement proceedings are lengthy and while the ECJ's supranational powers are unparalleled globally, its ability to enforce judgments is limited to imposing fines.

In conclusion, neither the Court, nor the Commission or private parties have the power or the resources to compensate for MS' failure to ensure that the BHD are properly implemented and enforced on the ground.[7] From the significant number of reported breaches under the two Directives it is evident, that a compliance deficit remains.[8] Pushing MS towards better implementation and enforcement thus remains a critical task. In this regard, the use of protected areas for economic or social activities has emerged as a particularly critical issue from the present study.

[4] See Chapter 5.1.3, *The Role of Private Parties (Citizens and NGOs*).
[5] *Ibid*. Numbers retrieved from Milieu et al., *Fitness Check Birds and Habitats Directives,* 38 and 503. The authors emphasise that these figures do not include the number of complaints submitted by NGOs that did not result in infringement proceedings. No source is given for the numbers.
[6] For further reference, see Hall, *Environmental Law EU Enforcement*, 291.
[7] For further reference, see Chapter 5.1.3, *The Role of Private Parties (Citizens and NGOs).*
[8] See Part I, Chapter 5.2, *Lessons learnt on the Implementation and Enforcement of the BHD from ECJ Case Law.*

Against the background of these observations, the following Parts II and III of the dissertation examined the effectiveness of the ELD (2004) and ECD (2008).

36.2 Effectiveness and shortcomings of the ELD 2004 and ECD 2008/2024, and potential amendments

Building on the findings elicited in Part I of this dissertation, the subsequent parts assessed the ELD (2004) and ECD (2008) (**Parts II and III**), their integration (**Part V**), as well as potential amendments, taking into account the changes introduced under the recently adopted nECD (2024) (**Part VI**).

Markedly, the analysis of both the ELD and the ECD revealed similar issues in a number of cases, relating inter alia to the **role of permits and authorisations** under the two Directives, the **use of vague terms** that is sometimes directly attributable to integration with the BHD, or the **need to establish a causal link**. Another noteworthy challenge common to both Directives is the **lack of sufficient data** on their implementation and enforcement in the MS alongside a conspicuous **reluctance among MS to apply the two Liability Directives—** echoing the situation observed with the BHD, although the reasons for this differ in all cases.

The following chapters review key findings of the study on the two Liability Directives, examine observed parallels between the ELD and ECD, and draw conclusions on potential amendments to establish a more effective and cohesive liability framework for biodiversity damage in the EU.

36.2.1 Clarifying thresholds under the ELD and ECD: The need for a cross-cutting approach

Neither the ELD nor the ECD offer absolute protection for the environment. Instead, certain threshold values apply that determine their application. This dissertation has examined in great detail the thresholds that apply under the ELD and ECD, uncovering significant problems with their interpretation and implementation.[9] It is evident from the findings of this study, that in order for the two Liability Directives to work effectively, improving the threshold criteria will be crucial.

[9] For further reference, see the discussions in Parts II (ELD) and III (ECD).

This chapter discusses key findings on the threshold criteria within the ELD and ECD frameworks. It begins by recalling the critical role that thresholds play in environmental liability regimes, followed by an outline of the challenges in setting these thresholds, as evidenced by the specific findings for the ELD and ECD. Next, critical amendments to the threshold criteria in the ELD and ECD identified in this study are reviewed, and conclusions are drawn.

36.2.1.1 The critical role of thresholds and shortcomings in the ELD and ECD threshold criteria

In any society, a myriad of human activities impacts the environment. Consequently, threshold criteria are a crucial component of any environmental liability regime. They establish the boundary markers that distinguishes between acceptable levels of environmental harm and those that trigger liability, ideally providing a clear framework within which activities can occur without incurring liability. The analysis of the threshold criteria in this study has shown that defining clear and effective thresholds poses several challenges.

Both, the ELD and ECD, require the impact on biodiversity to be "significant" or, conversely, exclude cases where the impact is deemed "negligible", thus stipulating which adverse effects on the environment are acceptable and which are not. These rather vaguely formulated threshold values obviously require further clarification in order to be implemented in practice and thus become operational. The challenge in defining these values and developing appropriate indicators is evident in the context of both the ELD and ECD.

Under the ELD, the threshold criteria for environmental damage are closely linked to provisions of the BHD. These criteria, embedded within the ELD's definition of damage, require a "**significant adverse effect on reaching or maintaining the favourable conservation status**" of protected species or habitats. The significance of such an effect is assessed, among other factors, in relation to the species' or habitats' "**natural range**".[10]

This study has demonstrated that, in establishing this threshold, the EU legislator deliberately aligned the ELD with the terminology and concepts of the BHD, evidently in an effort to ensure coherence between these legal instruments. However, the analysis has also shown that the

[10] ELD, Art. 2 (1)(a) subpara. (1), first sentence, Art. 2 (4).

transposition of key HD concepts—such as favourable conservation status (FCS) and natural range—into the liability framework of the ELD presents significant challenges.[11]

While such terms may be appropriate within the context of a nature conservation regime, which must account for the complexity and dynamic nature of ecosystems, they are less suited to a liability regime, which requires clear and unambiguous standards to function effectively.[12] This mismatch illustrates a fundamental tension between the objectives of nature conservation and the requirements of environmental liability, and underscores the need for more tailored threshold criteria within the ELD framework.

The lack of clarity surrounding the use of ecological concepts is further exacerbated by the difficulties in interpreting the term "**significant***"*, which is used in the ELD to delineate acceptable from unacceptable damage.[13] As a result, the interpretation of "**significant**" varies widely across MS, with some requiring damage to be deemed "excessive"[14] or almost "catastrophic"[15] before it qualifies as significant. This interpretation not only misaligns with the high protection standards for species and habitats under the BHD, but also undermines the effectiveness of the liability regime. If the threshold is set too high or its interpretation remains ambiguous, the regime is unlikely to be applied. In most MS, when the threshold for triggering the ELD regime is not met, pre-existing sectoral legislation is applied instead.[16] This, however, means that important provisions, which are often not part of pre-existing sectoral legislation, do not apply, such as the specific access to justice provisions under the ELD.

The assumption of a high significance threshold also complicates the implementation of preventive and emergency remediation measures under the ELD, which must be carried out "without delay" or "immediately", respectively. As illustrated in this dissertation, the assumption of a high threshold makes it nearly impossible for operators to ascertain whether damage falls within the ELD's scope, particularly if they mistakenly believe that preventive measures are only necessary when damage is known to be significant. [17]

[11] See Part II, Chapter 11.1, E*valuation of damage to protected species and habitats under the ELD*, in particular Chapter 11.1.2, *The significance threshold under the ELD*.
[12] For further reference, refer to Part II, Chapter 11.1.2.1.2.2, *Territorial scope in the case of natural range*, especially Fogleman, *Threshold for Liability in the EU*, 205.
[13] For further reference, see Chapter 11.1.2.2, *Interpretation of the term "significant".*
[14] European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 35.
[15] Milieu & IUCN, *ELD Biodiversity Damage Report*, 21.
[16] *Ibid.*, 48.
[17] For further reference, see Chapter 11.4.2, *The significance threshold in the context of preventive measures.*

Under the ECD, the threshold criteria used to determine whether conduct falls within the scope of wildlife or habitat crime present similar challenges.[18] As with the ELD, the criteria are kept vague. In the case of wildlife crime, the criteria exclude harm which concerns a "**negligible quantity**" or has a "**negligible impact**". In the case of habitat crime, they exclude habitat deterioration that does not qualify as "**significant**". Failing further clarification of these terms, their interpretation is left to the national courts. The research on national court cases in the MS carried out in the context of this dissertation indicates that so far only very few cases have dealt with Article 3(f) and (h) ECD, so that to date hardly any conclusions can be drawn on their interpretation. Overall, the findings on Article 3(f) and 3(h) suggest that neither Article 3(f) nor Article 3(h) have so far played a meaningful role at MS level.[19]

The nECD has introduced amendments that address the threshold criteria and the need for more precise definitions. However, a critical examination of these amendments in Part VI of this dissertation concluded that they fail to resolve the identified lack of clarity in the definition of the threshold criteria.[20] Instead, under Article 3(8) nECD new criteria have been introduced, for which no reference exists, neither in the BHD nor in the ELD. It is probable that once more, these criteria will provide ample opportunity for speculation and thus contribute minimally to enhancing legal clarity.

A vague formulation of the threshold criteria may not only undermine the application of liability rules to a case of damage, as has been confirmed by practitioners,[21] but also lead to large discrepancies in their application in the MS, as has been observed in the application of the ELD thresholds.[22]

36.2.1.2 Amendments to the ELD and ECD threshold criteria and recommendations for further research work

This dissertation has identified several options to improve the threshold criteria under the two Liability Directives. In more general terms, it has identified a need to develop a cross-cutting approach that relates the definition of threshold criteria to all four Directives discussed in this

[18] ECD, Art. 3(f) and(h)
[19] See Chapter 16.4, *Summary of findings on the offences related to the BHD*.
[20] See Chapter 35.4.3.2, *Threshold criteria and the use of vague notions under the nECD*.
[21] See Chapter 19.3, *Importance of technical knowledge, specialisation and training*.
[22] See Chapter 11.1.2.1, *Assessing the damage under the ELD*.

dissertation. As demonstrated throughout this dissertation, the provisions of the BHD on the one hand and the ELD and ECD on the other hand are closely interrelated and, in many respects, constitute a unified framework. Their effective interaction relies on the harmonisation of core terms and concepts, such as the definition of harmonised threshold values.

In developing such a unified approach to the definition of threshold criteria, the ELD, due to its more advanced criteria, would well stand as a primary point of reference. Though still facing issues, the findings of this dissertation demonstrate that the ELD, in comparison to the BHD and ECD, distinguishes itself through its advanced assessment criteria and an active scholarly and practitioner debate surrounding their further development.

Importantly, such a unified approach does not mean, that the threshold in all four Directives is fully aligned. One would expect that the threshold that triggers criminal liability under the ECD is, for example, higher than the one that obliges MS to remediate damage under the BHD. Thus, while using a shared point of reference and common terminology, a differentiation would remain necessary.

More specifically, the findings of this thesis suggest that the successful further development of threshold criteria will depend on the definition of clearer indicators. As highlighted, emerging measurements, metrics, and indicators for biodiversity could be effectively leveraged for this purpose.[23] Given the rapid advancements in biodiversity indicators in recent years, there is significant opportunity to further develop and refine indicators for a regime that creates liability for biodiversity damage. Considering these developments and related advancements in the area of biodiversity measurement, a further study with a focus on developing biodiversity indicators and standards in the context of a liability regime, ideally in an interdisciplinary context, is suggested. Such a study could create a comprehensive set of indicators and corresponding standards to evaluate and guide the assessment of biodiversity damage under all four Directives.

36.2.2 Permits and authorisations as self-authorisation tools: a loophole in ELD and ECD enforcement

Next to thresholds, one of the most significant findings of this study pertains to the problematic role of authorisations and permits under the ELD and ECD. Both Directives exempt damage

[23] See Chapter 34.3.2, *Leveraging emerging biodiversity measurements, metrics, and indicators*.

resulting from activities authorised under the BHD. As demonstrated, the resulting dependence of liability under the ELD and ECD on decisions made under the BHD means that incorrect implementation of provisions under the BHD—such as issuing a permit in violation of Article 6(3) and (4) of the HD—not only undermines conservation efforts under the BHD but also directly affects the applicability of the liability rules established under the ECD and ELD. *In extremis*, permits and authorisations become a form of "self-authorisation" tool, rendering efforts to enhance implementation and enforcement through the adoption of the ELD and ECD redundant. In light of these findings, this dissertation proceeded to further explore the role of permits and authorisations under the ELD and ECD, exploring, *inter alia,* whether permits and authorisations issued by NCAs in violation of obligations owed by MS under the BHD (and other EU environmental legislation) should have the power to legitimise damage and, consequently, exempt operators or perpetrators from liability under the ELD and ECD.

The following sections compare the key findings on the problematic role of authorisations and permits under the ELD and ECD, considering the recent amendments to the nECD, and draw conclusions on the need for a more coherent approach to addressing authorisations under both Directives.

36.2.2.1 The problematic role of permits under the ELD and scope for amendments

The ELD establishes the link between authorisations or permits and liability via two provisions. Firstly, the mandatory "authorisation exception", which provides for a mandatory exception to liability for damage caused by an "act" authorised under the BHD.[24] Secondly, the optional "permit defence", which gives the operator of dangerous activities the right to recover his costs for remedial measures, if the damage was caused by an emission or event expressly authorised under legislation listed in Annex III of the ELD. [25] The analysis of the two provisions has demonstrated that the availability of exceptions and defences for damage resulting from authorised acts or emissions significantly undermines the effectiveness of the ELD and contradicts central objectives of the Directive, including the prevention and remediation of damage and the application of the polluter pays principle. This is particularly evident in the exception for activities authorised under the BHD ("authorisation exception"), which exempts

[24] See second paragraph of Article 2 (1)(a) Article ELD. For further reference, see Chapter 11.3.2, *Exceptions to liability for biodiversity damage*.
[25] Available under Article 8(4)(a) ELD. For further reference, see Chapter 11.3.4.1, *Permit Defence*.

the operator from all liability for preventing or remedying damage caused by their activities,[26] while the permit defence, on the other hand, keeps the obligation to prevent and remedy the damage intact, but gives the operator of dangerous activities the right to recover the costs for remedial measures, thus deviating from the polluter pays principle.

The analysis of the role of permits and authorisations under the ELD indicates that several amendments could be made to enhance the effectiveness of the Directive. **Firstly**, the application of the ELD to activities authorised under the BHD needs further clarification and should ensure that MS are not empowered to authorise or accept as management measures activities that are in breach of their conservation obligations under the BHD.[27] Similarly, the exception for authorised activities stated in Article 2(1)(a) ELD should be confined to acts that comply with MS' conservation obligations under the BHD. As demonstrated, two recent ECJ's rulings have provided important points of reference on how to interpret exceptions to liability under the ELD.[28] Removing the legitimising effect of unlawfully issued authorisations raises a pertinent question regarding the protection of the legitimate expectations of operators who have relied on the validity of such authorisations. In these cases, operators who can prove that they rightfully relied on the lawfulness of the authorisation should be able to claim the costs incurred by them under the ELD within the framework of state liability. Such an outcome would also increase the pressure on NCAs to issue permits and authorisations only if no significant environmental damage can be expected to occur, thereby contributing to the underlying aim of the ELD to enhance MS' compliance with EU environmental legislation. **Secondly**, legal uncertainties relating to the application of preventive measures to authorised activities need to be resolved. Notably, Article 5 (3) (d) ELD already provides that the NCA may, at any time, take itself the necessary preventive measures. In order to remove any legal uncertainties, it appears necessary to amend the ELD to the effect that it explicitly lists the variation or revocation of a permit by an NCA as a preventive measure under the ELD.[29] **Thirdly**, the optional permit defence should be removed entirely as it threatens to undermine the aims of the Directive. The removal of this optional defence would also lead to a more level playing field across EU MS.[30]

[26] For further reference, see Chapter 11.3.2, *Exceptions to liability for biodiversity damage*.
[27] For further reference, refer to Chapter 11.3.2.4, *Discussion of findings on exceptions to liability and the repercussions of the Court's ruling in Naturschutzbund Deutschland*.
[28] *Naturschutzbund Deutschland* (C-297/19), *Gert Folk*, C-529/15.
[29] For further reference, see Chapter 11.4.3, *Duty to prevent damage from authorised activities*.
[30] For further reference, refer to Part II, Chapter 11.3.4 on "Defences under the ELD"

36.2.2.2 The problematic role of permits under the ECD and noteworthy amendments introduced under the nECD

Permits and authorisations also play a problematic role under the ECD. The ECD establishes the link between permits and authorisations, on the one hand, and liability, on the other, by requiring that conduct only constitutes a criminal offence when it is deemed "unlawful". This requirement reflects the principle of "**administrative dependence of criminal law**", or "**Verwaltungsakzessorietät des Strafrechts**", a defining characteristic of environmental criminal law across EU MS, whereby the enforcement of criminal law is contingent upon prior administrative decisions or regulations. [31] If an NCA issues a permit or authorisation, even if unlawfully, the conduct covered by that permit or authorisation is no longer considered criminal. [32] Consequently, criminal liability and, with it, the effectiveness of criminal law enforcement, depend on the lawfulness of prior administrative actions. A situation similar to the one previously observed under the ELD: By integrating administrative decision-making into the liability framework, a direct pathway is created for unlawful decisions made under the BHD to permeate the structure of the liability regime and, legitimising conduct that would otherwise be considered criminal.

The study of the role of permits and authorisations under the ECD also exposed another important question, namely whether a **public official** who knowingly issues an unlawful authorisation or permit may be held criminally liable. However, the exemplary investigation of the situation in Austria and Germany suggests that significant criminal liability gaps exist in the prosecution of unlawfully issued permits and other conduct by public officials that facilitates environmental crime.[33]

In light of these findings, the analysis of the **nECD (2024)** revealed several noteworthy amendments that represent significant progress in addressing the challenges posed by the dependency between administrative decisions and liability.[34] While the nECD clearly adheres to a model of criminalisation that requires the unlawfulness of the conduct, a number of

[31] For further reference, refer to Part III, Chapter 15 on the "Theoretical Foundations of Environmental Criminal Law" and subchapter 15.4 on "Autonomous crimes"
[32] For further reference, refer to Chapter 15.5 on "Model of criminalisation under the Environmental Criminal Liability Directiv e" and Chapter 16.3.1 on "Model of criminalisation under Article 3(f) and 3(h)"
[33] For further reference, refer to Part III, Chapter 16.3.1.3 on Criminal liability of public officials for issuance of unlawful permits
[34] For the analysis and critical discussion of the amendments introduced under the nECD(2024), see Chapter 35, *Amendments in the design and wording of the ECD.*

amendments depart from the model of administrative dependence and sever the tie between criminal liability and administrative decisions.[35]

Firstly, an authorisation that has been "obtained **fraudulently** or **by corruption**, **extortion** or **coercion**" or that is "in **manifest breach** of relevant substantive legal requirements" will no longer release an offender from criminal liability.[36] While the meaning of "manifest breach" is not further specified, Recital 10 of the nECD states that this requirement should be interpreted as referring to an "obvious and substantial breach". Breaches of procedural requirements or minor elements of the authorisation, in contrast, do not qualify. While the wording "obvious and substantial" still leaves room for interpretation, it helps clarify the general intent of the legislator.

From these amendments, one might be tempted to conclude that in the future the operator will have a duty to ensure that their authorisations are indeed lawful. However, as shown, this is not quite clear under the Directive. On the contrary, Recital 10 expressly states that the amendments do "**not shift the duty to ensure the lawfulness of authorisations from competent authorities to operators**". Does this statement merely seek to clarify the continued duty of NCAs to ensure lawfulness – alongside the operator?

Secondly, another notable amendment relating to the role of permits and authorisations is the inclusion of the "**withdrawal of permits and authorisations** to pursue activities that have resulted in committing the offence" as an **accessory sanction**.[37] A parallel can be drawn with the discussion under the ELD about whether the revocation of an authorisation should qualify as a preventive measure. While the nECD does not explicitly reference the preventive effects of such a sanction, it appears that the "withdrawal of permits and authorisations to pursue activities that have resulted in committing the offence" also aims to prevent future damage.

Thirdly, the nECD also introduces amendments addressing the **liability of public officials** involved in a crime, now considered under **aggravating circumstances**.[38] One such

[35] For further reference, refer to Chapter 35.4.2.2, *nECD on model of criminalisation and the problem of unlawfully issued authorisations*.
[36] nECD, Article 3 (1), last sentence, second alternative.
[37] nECD, Article 5 (3)(e) for natural persons and Article 7 (2)(e) for legal persons For further reference, see *Chapter 35.5.2.2.2, Withdrawal of permits and authorisations*.
[38] See nECD, Article 8 (d). For a critical discussion of this amendment, see Chapter 35.4.2.3, *nECD on liability of public officials involved in the crime*.

circumstance is that "the offence was committed by a public official when performing his/her duties".[39] As demonstrated, there are two scenarios in which these aggravating circumstances may apply: when the authorisation has been "obtained fraudulently or by corruption, extortion or coercion" or when it is "in manifest breach of relevant substantive legal requirements".[40] In such cases, the conduct is considered unlawful even if authorised by an NCA in a Member State. As a result, if all other criteria are met, a principal offence has been committed. While the public official cannot be charged as the principal perpetrator, as they do not directly harm the environment, they may still be prosecuted for participation in the offence, with their status as a public official serving as an aggravating factor.

In conclusion, under the nECD the mere existence of an authorisation will no longer ensure impunity. Instead, any holder of an authorisation will have a strong incentive to ensure that their authorisation and activities comply with legal requirements. Given the observed problems associated with the issuance of unlawful authorisations under the BHD and other environmental legislation, and the significant impact this has on biodiversity protection, the amendments introduced under the nECD hold the potential to greatly enhance the Directive's effectiveness and, by extension, biodiversity protection.

36.2.2.3 Towards a unified approach to the role of permits and authorisations under the ELD and ECD

The analysis of the role of permits and authorisations in both Directives has revealed an ongoing and complex debate, though discussions have so far been conducted in isolation for each Directive, with surprisingly little effort to integrate the two.

While prior to the adoption of the nECD, both Directives were aligned in that they excluded activities authorised under the BHD from their scope of liability, with the adoption of the nECD in May 2024, this is no longer the case. As shown, the nECD has introduced amendments that sever the tie between administrative decision-making and liability in cases where the authorisation has been "obtained fraudulently or by corruption, extortion or coercion" or where it is "in manifest breach of relevant substantive legal requirements". While under the ELD, debates to the same effect are taking place, they have so far not found their way into an

[39] nECD Article 8e)
[40] See Chapter 35.4.2.2, *nECD on model of criminalisation and the problem of unlawfully issued authorisations*.

amendment of the Directive. Instead two recent ECJ decisions seem to point the way towards an interpretation that confines the exception for authorised activities stated in Article 2(1)(a) ELD to acts that comply with MS' conservation obligations under the BHD.[41] Further clarification of these developments is needed, ideally in the form of amendments to the ELD, to ensure that the approach to permits and authorisations under the ELD aligns with the amendments introduced in the nECD, fostering a unified framework across the two Liability Directives.

In conclusion, the recent developments under the ELD and the nECD promise to significantly enhance the effectiveness of the two Liability Directives, promoting improved compliance with the BHD and other EU environmental legislation. Moving forward, in light of recent ECJ rulings on the ELD and the amendments introduced in the nECD, authorisation and permit holders will have a strong incentive to ensure that their authorisations and permits indeed comply with legal requirements.

36.2.3 The evidentiary struggle: Establishing causality in environmental liability

In environmental liability cases, the evidentiary requirements present considerable challenges. This applies both to criminal and administrative liability. One of the key difficulties is establishing causality between a specific activity and environmental damage, especially in cases involving long-term or cumulative effects.[42] Demonstrating a direct link between the actions of the liable party and the damage caused can be complex, often requiring specialised scientific and technical evidence. Moreover, the need to provide clear and sufficient evidence to meet the legal standards for liability adds further complications to the enforcement process.

This challenge is reflected in the findings of this dissertation concerning both the ELD and the ECD.[43] Under the ELD, the requirement to establish a causal link between an operator's activities and environmental damage is a central issue, complicating enforcement procedures and making them more prolonged, complex, and costly. [44] A particular difficulty arises when

[41] *Naturschutzbund Deutschland* (C-297/19); *Gert Folk*, C-529/15.
[42] See specifically Chapter 11.3.3, *Requirements for establishing the causal link*, and, Chapter 19.2.2, *Dark figure of unrecorded environmental crime*.
[43] For ELD, see Part II, Chapter 11.3.1 on "The two standards of liability in the case of biodiversity damage" and Chapter 11.3.3 on"Requirements for establishing the causal link". For ECD, see Part III, Chapter 19.2.2 on "Dark figure of unrecorded environmental crime" and Chapter 19.3 on the "Importance of technical knowledge, specialisation and training"
[44] See Chapter 11.3.3, *Requirements for establishing the causal link*.

there is a long latency period between the damaging act and the manifestation of harm, a characteristic feature of environmental liability cases. This delay often hinders the ability to prove that the act occurred or to establish the necessary causal connection. In *ERG and others* (C-378/08), the ECJ addressed this challenge, permitting MS to use causal presumptions when supported by plausible evidence, such as proximity between the operator's installation and the pollution or a correlation between identified pollutants and the operator's activities.[45]

In contrast, the ECD presents even higher evidentiary challenges, particularly because of the stricter standards of proof required in criminal law. As demonstrated in this dissertation, the model of criminalisation significantly influences these evidentiary standards: whereas crimes involving concrete harm or endangerment, for instance, require a direct causal link, this is not required for abstract endangerment crimes.[46]

The newly adopted nECD, in the case of wildlife and habitat crimes, retains a model of criminalisation that requires proof of either harm or concrete endangerment.[47] Based on the available information, classifying wildlife and habitat crimes as concrete endangerment or concrete harm offences appears justified. However, as this study has revealed, a significant gap persists in empirical evidence regarding the practical implementation and enforcement of these offences across EU MS.[48] Much remains uncertain about the typical characteristics of wildlife and habitat crime cases, as well as the practical challenges encountered during their prosecution. To enhance the design and effectiveness of these offences, further research is recommended, with particular emphasis on the practical difficulties of enforcing wildlife and habitat crime within MS.

36.2.4 Towards a coherent framework of prevention and remediation under the ELD, ECD and BHD: Overcoming gaps and inconsistencies

All four directives - the ELD, the ECD, and the BHD - contain measures for the **prevention and remediation** of damage to protected species and habitats ("biodiversity damage"). Based on the analysis of the ELD and ECD and by extension BHD, it is clear that these instruments, as a **collective governance framework**, have the potential to operate as an **integrated system**

[45] For further reference, see discussion in Chapter 11.3.3, *Requirements for establishing the causal link.*
[46] See Chapter 15, *Theoretical foundations and underlying rationale of environmental criminal law*.
[47] See Chapters 35.4.5, *Requirements for establishing the causal link*, and 35.8, *Conclusions on the amendments introduced under the nECD.*
[48] For further reference, see Chapter 16, *Offences related to the BHD under the ECD*, especially Chapter 16.4.4, *Threshold criteria, the use of vague notions and the nulla peona sine lege and lex certa principle*.

that ensures the prevention and remediation of biodiversity damage. However, for this potential to be realised, key terms or concepts of these Directives must be aligned and harmonised. This applies, on the one hand, to the integration of the ELD and ECD, on the other to their integration with the BHD. Throughout this dissertation, research into the integration of these Directives has demonstrated, that in various regards integration is insufficient to guarantee an efficient interplay between these different instruments. This becomes particularly evident with regard to the remediation of damage. The following chapters revisit key findings on the prevention and remediation of biodiversity damage under the ELD and ECD, relate them to findings on their integration, and offer recommendations for addressing the observed shortcomings through amendments to the ELD and ECD.

36.2.4.1 The integration gap between the ELD and ECD: Addressing challenges in damage remediation under the ECD

The **integration of the ELD and ECD** was primarily examined in Part V of this dissertation. The aim was to establish the extent to which their design and wording are sufficiently integrated to leverage any **complementary aspects** of these two liability regimes in addressing biodiversity damage. The most evident benefit of such an integration would be a guarantee that damage caused by offences listed under the ECD is remediated in accordance with the provisions of the ELD, given the lack of any specified remediation requirements under the ECD/nECD,

As mentioned at the outset, successful integration requires that key terms or concepts of these two Directives are sufficiently aligned to allow the ELD to be applied to damages resulting from criminal offences under the ECD. The analysis carried out in Part V of this dissertation has shown that for a number of key requirements this is indeed the case. These include the **scope of protected biodiversity**, the **thresholds** and the **standard of liability**. Although these concepts do not necessarily correspond in the sense that they are identical, the correspondence is such that it allows the ELD to be applied to biodiversity damage resulting from an offence under the ECD. This has not changed with the amendments introduced under the nECD.

However, a lack of integration was identified in relation to several other terms and concepts. These include the **activities or types of conduct** that fall within the scope of the Directives, the **determination of the liable person**, and the **role of permits**.

Firstly, concerning the **activities or types of conduct**, in contrast to the ECD, the ELD only applies to activities of an "occupational" nature, which is defined as "any activity carried out in the course of an economic activity, a business, or an undertaking, irrespectively of its private or public, profit, or non-profit character".[49] Consequently, this excludes all (criminal) activities carried out in a purely personal or domestic context.[50]

Secondly, concerning the **determination of the liable person**, while under the ECD any person can be considered an offender as long as their conduct aligns with the requirements set out in Article 3 ECD, the scope of liability under the ELD is confined to persons who fulfil the criteria of an "operator", which is the person "who operates or controls the occupational activity".

Lastly, and most importantly, amendments to the **role of permits** under the nECD (2024) have introduced another significant discrepancy in coverage between the nECD (2024) and the ELD. Previously aligned in excluding activities authorised under the BHD from liability, the nECD (2024) now removes this exclusion in certain circumstances, such as where the authorisation was obtained involving fraud, corruption, or manifest legal breaches.[51] The resulting discrepancy between the ELD and nECD (2024), could, paradoxically, lead to situations where a polluter faces imprisonment but is not required to remediate and thus pay for the damage they caused. Altogether, the observed discrepancies between the two Liability Directives create a significant gap in coverage, leaving no assurance that biodiversity damage resulting from environmental offences will be adequately addressed and remediated.

While the nECD has introduced provisions requiring offenders to restore damage, these remain ambiguous and by no means guarantee restoration of damage. As demonstrated, the restoration of environmental damage caused by an offence has been included as an optional accessory sanction as well as a mitigating factor.[52] However, the opportunity to further specify any restoration and compensation requirements, or to link these provisions more effectively with the ELD, has been missed. A case in point for the need to specify certain requirements is the

[49] ELD, Art. 2(7) ELD.
[50] See Chapter 11.2., *Activities covered under the ELD.*
[51] See also discussion above under Chapter 36.2.2.3, *Towards a unified approach to the role of permits and authorisations under the ELD and ECD*.
[52] For further reference, see Chapter 35.5.2.2.1, *Restoration of or compensation for damage to the environment.*

BHD, where the poorly defined compensatory requirements have led to their ineffective implementation.[53]

In conclusion, the opportunity to better integrate the ECD with the ELD has not been seized in the nECD. Overall, the nECD neither ensures the remediation of damage nor guarantees that, where remediation is undertaken, it is carried out to an adequate standard.

Notably, the Commission's proposal still included a provision for an aggravating circumstance directly related to the failure to comply with the obligation to take remedial action under Article 6 ELD.[54] This proposal was not adopted. Had it been, it would have marked a step towards ensuring remediation – albeit, obviously, only in cases where, despite the discrepancies with the nECD, the ELD is still applicable.

36.2.4.2 The problem of orphan damage under the ELD: Why Member States' obligations under the BHD are no replacement for subsidiary state liability in the ELD

Another problem that has been identified in relation to the prevention and remediation of damage to protected species and habitats is the so-called problem of "orphan damage" under the ELD. It is related to provisions of the ELD in Article 5(4) and Article 6(3), which state that if the operator fails to comply with the obligations, or cannot be identified, or is not required to bear the costs under the provisions of the Directive, "the competent authority **may** take these measures itself".[55] As demonstrated, the Commission's proposal for the Directive originally provided for an obligation of the NCA to prevent and remediate the damage in cases where an operator failed to comply with his obligations under the Directive[56] or where, for different reasons, the operator could not be held financially liable for the prevention and remediation of the damage[57]. In the adopted text of the Directive, this was, however, reduced to a power of discretion.[58] As a result, the Directive in its current form leaves the decision to prevent or remediate the damage to the NCA. This raises the problem of "orphan damage", that is damage

[53] See Chapter 5.2.3.4.4, *Implementation and enforcement of Article 6(4) requirements*.
[54] pECD, Article 8 (h).
[55] Refer also to Chapters 11.4, Prevention of damage to protected species and habitats, and 11.5., *Remediation of damage to protected species and habitats*.
[56] European Commission, Environmental Liability Proposal COM(2002) 17 final, Articles 4-5.
[57] European Commission, Environmental Liability Proposal COM(2002) 17 final, Article 9.
[58] For further reference, see Fogleman, *Enforcing the ELD*, 132.

where ultimately nobody is required to prevent or remedy the damage inflicted on the natural resources.[59]

Considering the lack of a subsidiary obligation of Member State under the ELD to prevent or remediate the damage, this dissertation investigated whether such an obligation could be derived from the BHD and if so, the extent to which the requirements for any preventive or remedial measures carried out within the framework of the BHD are comparable to those stipulated in the ELD.[60]

This study has shown that for a number of reasons MS' obligations under the BHD are not able to fully compensate for the lack of subsidiary state liability under the ELD. [61] **Firstly**, whereas the ELD covers damage to protected species and habitats located both inside and outside Natura 2000 sites, the BHD confines preventive or remedial action to the natural resources located or present in Natura 2000 sites.[62] **Secondly**, when invoking the BHD instead of the ELD, distinctive features of the ELD do not apply. This includes the detailed prescription of the necessary remediation measures, the explicit requirement of compensation for interim losses, the involvement of the public in the remediation process and the participation and access to justice rights set out under Articles 12 and 13 ELD.[63] **Lastly**, while recent ECJ case law appears to suggest an emerging role for Article 6(2) HD as a basis for an obligation of MS to remediate damage in Natura 2000 sites, the compensatory measures under the HD fall short of the remediation framework established by the ELD, failing to guarantee the restoration of damaged natural resources to their baseline condition.

In line with recommendations by the European Parliament (2017) and reports on the implementation of the ELD, subsidiary state liability should therefore be made mandatory, amending the ELD to ensure that NCAs carry out preventive and remedial measures in cases where the responsible operator fails to comply with its obligations or cannot be identified. [64] As the European Parliament (2017) rightly observed, such a measure would also encourage the

[59] For further reference, see Chapter 11.7, *Orphan Damage*.
[60] Refer to Chapters 11.4.5, *Preventive measures under the ELD and BHD in comparison*, 11.5.6. on *Remedial measures under the ELD and BHD in comparison*.
[61] Refer to Chapters 11.4.5, *Preventive measures under the ELD and BHD in comparison* and 11.5.6. *Remedial measures under the ELD and BHD in comparison*.
[62] For further reference, see findings in Chapter 10.1.1., *Scope of biodiversity protected under the ELD*.
[63] ELD, Article 7(4) provides for involvement of the public in the remediation process.
[64] European Parliament, *2017 ELD Resolution* (26 October 2017), para.33; Milieu & IUCN, *ELD Biodiversity Damage Report*, 33 and 35.

NCAs to effectively and proactively implement the ELD, thus avoiding subsidiary liability.[65] Since the incentives and obligations for the operator in principle remain intact, subsidiary state liability also does not counter the objective of the ELD to promote the polluter pays principle.

That said, the costs of such measures would be borne by the taxpayer**.** On this matter, it may be worthwhile to reconsider the proposal to finance these measures through what has been referred to as "polluter pays taxes" on Annex III activities, thereby enabling the NCAs to carry out the necessary actions while preventing the transfer of costs from the responsible operator to the taxpayer.[66]

Finally, the findings of this study underscore the **importance of improving financial security mechanisms** to ensure that funds are available for remediation, even in cases where operators are insolvent or unidentified.[67] To address situations where poorly capitalised operators, with a high risk of insolvency, deliberately engage in environmentally harmful behaviour - and where, therefore, financial liability is ineffective as a deterrent - criminal (non-monetary) sanctions may serve as a more effective deterrent and ensure accountability through criminal liability.

36.2.4.3 Improving data on implementation of remedial measures under the ELD

Another notable shortcoming identified in this study is the lack of data on the implementation of remedial measures across MS, highlighting the need for greater transparency, improved follow-up, and far more comprehensive data collection on the practical application of remedial measures under the ELD. [68] To address this issue, the ELD should be amended to introduce a requirement for regular reporting on the implementation of its measures, with a particular focus on remediation. Such reports should include data aligned with the criteria listed in Annex I for assessing the significance of environmental damage. Furthermore, in line with Annex II, the reports should specify the extent to which restoration has been achieved through primary, complementary, and compensatory measures. This approach would provide a clearer picture of the effectiveness of remediation efforts and ensure that the ELD regime is applied consistently and effectively across MS.

[65] European Parliament, *2017 ELD Resolution* (26 October 2017), para.33.
[66] Milieu & IUCN, *ELD Biodiversity Damage Report*, 35.
[67] See Chapter 34.10, *Lack of mandatory financial security and the problem of orphan damage*.
[68] See Chapter 34.8, *Improving transparency on the remediation of damage under the ELD with better monitoring and collection of data*.

36.2.4.4 Strengthening preventive measures under the ELD regime: Key areas for further development

Next to remediation, prevention of environmental damage is a central objective under the ELD. Where environmental damage has not yet occurred but there is an imminent threat of such damage, the ELD obliges the operator to take the necessary preventive measures.[69] From the examination of the provisions relating to preventive action under the ELD, it appears that the interpretation of the concept "preventive measures" needs further clarification.[70] This need could be addressed through guidelines or amendments:[71] **Firstly**, to ensure consistent application of the ELD to cases of environmental damage, the distinction between preventive and emergency remedial measures should be clarified. **Secondly**, it needs to be clear that measures must be taken to prevent damage from becoming significant when there is a reasonable belief—not certainty—that such damage may occur. **Thirdly**, legal uncertainties surrounding the application of preventive measures to authorised activities need to be resolved. This is particularly pertinent to the broader discussion on the role of permits and authorisations within the ELD framework.[72]

More generally, inconsistencies between the ELD and BHD often lead to a fragmented application of preventive measures and highlight the need to clarify and harmonise the interpretation of certain key terms in both regimes. As has been demonstrated, these inconsistencies are particularly evident in the interpretation of the threshold requirements under Article 6(2) HD, on the one hand, and the ELD, on the other.[73]

36.2.4.5 Observations on key amendments in the nECD strengthening environmental crime prevention

Amendments introduced under the nECD (2024) promise to further strengthen the prevention of environmental crime. These concern, on the one hand, the new types and levels of penalties prescribed under the nECD and, on the other, a newly introduced obligation on MS to adopt preventive measures. While the nECD retains the general provisions on penalties, stipulating

[69] ELD, Article 5(1).
[70] See Chapter 11.4, *Prevention of damage to protected species and habitats under the ELD*, and Chapter 11.4.6, *Summary of findings on preventive measures*.
[71] See Chapter 34.7, *Improving the prevention of damage to protected species and habitats under the ELD.*
[72] See also discussion in Chapter 36.2.2, *Permits and authorisations as self-authorisation tools: a loophole in ELD and ECD enforcement*.
[73] For further reference, see discussion in Chapter 11.1., especially 11.1.2, *The significance threshold under the ELD*, and Chapter 33.4.1.2, *Interpretation of the significance threshold*.

that they must be "effective, proportionate and dissuasive," it additionally specifies penalties for both natural and legal persons.[74] This is achieved through a combination of prescribed minimum and maximum sanctions, along with provisions for aggravating circumstances and accessory sanctions, which should contribute to the imposition of more appropriate sanctions for environmental crime.[75] Furthermore, the newly introduced Article 16 of the nECD obliges MS to implement measures such as information and awareness-raising campaigns, as well as research and educational programmes, with the aim of reducing both environmental criminal offences and the risks of environmental crime.[76]

36.2.5 Overcoming crucial challenges with the enforcement of the ELD and ECD

A central prerequisite for the effectiveness of any EU environmental legislation is its proper enforcement. Especially in the case of the ECD, problems with the enforcement of the Directive are well documented: Several studies and reports have revealed significant shortcomings in all MS and at all levels of the enforcement chain.[77] In response to these findings, the nECD has introduced extensive amendments.[78] They address the **critical importance of data**, the need for sufficient **resources**, **technical knowledge**, **specialisation and training** as well as measures to improve **cooperation and coordination** of activities along the enforcement chain. Particularly noteworthy are the amendments concerning **the role of citizens and NGOs**, especially the protection of individuals such as whistleblowers and environmental defenders. Also, worth highlighting is assessment the introduction of **preventive measures**, such as awareness-raising, education and research as well as the **mandatory strengthening of investigative tools** in the MS. Finally, the nECD makes the **adoption of a national strategy** on combatting environmental crime mandatory, obliging MS to set out their objectives and priorities in the area of environmental criminal offences and the corresponding measures and resources need.

There are instances where the wording of the nECD is declarative rather than binding, such as in the context of special units or procedural rights. Altogether, though, these newly introduced

[74] See Chapter 35.5, *Penalties for legal and natural persons.*
[75] For a discussion of the requirement of "dissuasiveness" and the deterrent character of penalties, refer to Chapter 18.2, *The requirement for "effective, proportionate and dissuasive penalties under the final version of the* ECD and Chapter 20.2, *Criminal or administrativ e law for enforcement of environmental law?*
[76] See Chapter 35.6.4, *Preventive measures: Awareness-raising, research and education.*
[77] For further reference, see Chapter 14.4, *Evaluations of the ECD from 2019-2020*, and Chapter 19, *Enforcement and practical relevance of environmental criminal law*.
[78] For further reference, see Chapter 35.6.2, *Enforcement measures under the nECD*.

measures promise to greatly improve the operational effectiveness of national enforcement chains, addressing some of the crucial challenges identified in the assessment of the ECD.

An enforcement issue not effectively addressed under the nECD is the discussion on the **use of administrative versus criminal penalties** for environmental offences.[79] This study found that the amendments concerning penalties under the nECD fail to address the increasing tendency of MS to rely on administrative sanctions for environmental offences.[80] As demonstrated, evidence suggests that the application of administrative sanctions results in overall higher penalties for environmental offences. To **promote the effective use of administrative penalties**, the nECD should have replaced the exclusive reliance on criminal sanctions for individual offenders with a framework encouraging a "**smart mix**" of both types of penalties, supported by clear criteria for their respective use.

In the case of the ELD, problems with its enforcement are less well documented. The general lack of information on ELD cases at national level is well evidenced and has been highlighted as one of the "major challenges" for the evaluation of the ELD.[81] Principally, enforcement requires that breaches of duties under the ELD are punished. However, not all MS have enacted penalties and where they are in place, sanctions widely differ.[82] As demonstrated, the Commission's 2021 proposal for a nECD still included a provision that linked failure to comply with the remedial obligations set out under the ELD with criminal punishment, listing it as an aggravating circumstance.[83] This proposal, however, was not included in the final version of the nECD. Altogether, incentives to comply with the ELD regime may thus vary between MS. This dissertation therefore concluded that the ELD should be amended to oblige MS to ensure enforcement via effective, dissuasive and proportionate sanctions.[84]

[79] See Chapter 20, *Administrative versus criminal penalties for environmental offences.*
[80] See Chapter 35.7, *Combined use of administrative and criminal penalties for the enforcement of environmental law*, and Chapter 35.7.3, *Summary of findings and conclusions on the combined use of administrative and criminal penalties under the nECD*.
[81] For further reference, see Chapter 10, *National transposition and implementation of the ELD.*
[82] For further reference, see *Chapter 11.8, Enforcement & Sanctions*.
[83] pECD, Art. 8 (h)
[84] For further reference, see Chapter 34.11, *Enforcement & Sanctions*.

36.2.6 Access to Justice and the role of citizens and NGOs under the ELD and ECD/nECD

Citizens and NGOs ("private parties") play an important role in enforcing EU environmental law and, as shown in Part I of this study, have been instrumental in implementing and enforcing the BHD. [85]

Both, the ELD as well as the newly adopted nECD contain rights for private parties. In the case of the **ELD**, the inclusion of explicit requirements for participation and access to justice in Articles 12 and 13 ELD has been identified as one of its most progressive and strongest features.[86] The fact that in most cases ELD procedures were initiated by a request from private parties is further evidence that the provisions of Articles 12 and 13 ELD are indeed necessary for the ELD procedure to work.[87]

In the case of the **ECD**, the adoption of the **nECD** has introduced rights and measures designed to strengthen the role of private parties.[88] These include, firstly, the protection of individuals such as whistleblowers and environmental defenders, and, secondly, the publication of information and access to justice for
the "public concerned".

However, while the inclusion of rights for citizens and NGOs is a crucial element for the effective functioning of both Liability Directives—the ELD and ECD/nECD—their assessment revealed several limitations and areas for improvement. Regarding the ELD, two key shortcomings were identified.

First, MS, in their transposition of the ELD, have the discretion to exclude cases involving imminent threats of environmental damage from the scope of Articles 12 and 13. Given that citizens and NGOs are often the first to identify such threats, limiting these rights to instances of actual damage undermines the Directive's preventive objectives. This differentiation lacks clear justification, and removing MS' discretion in this regard would enhance the ELDs effectiveness for prevention.

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[85] See Chapter 5.1.3, *The Role of Private Parties (Citizens and NGOs).*
[86] See Chapter 11.8, *Rights of affected persons and environmental organisations*, and Chapter 12.5, *Participation and access to justice requirements*.
[87] *Ibid.*
[88] For further reference, see Chapter 35.6.4, *Measures concerning the role of citizens and NGOs under the nECD.*

Second, the ELD lacks provisions ensuring **access to information**, which potentially weakens the ability of citizens and NGOs to exercise their rights under Articles 12 and 13. The scarcity of reported ELD cases across the EU, coupled with the lack of transparency, highlights the need for improved access to information.[89] Introducing a requirement for MS to collect and publish data on national ELD cases in a publicly accessible register could address this issue.[90] Such a database should also include cases of environmental damage addressed under pre-existing sectoral legislation, providing a more comprehensive understanding of how these cases intersect with the ELDs application.

For the ECD, the shortcomings primarily concern the newly introduced provisions under Article 15 nECD, which relate to the publication of information and access to justice rights for the "public concerned". However, the application of Article 15 is confined to MS where similar rights already exist for other criminal proceedings, reinforcing a fragmented system where access to justice remains a challenge. Consequently, the analysis concluded that the impact of Article 15 nECD is likely to be limited.[91]

36.2.7 The importance of data, monitoring and reporting

A significant part of this dissertation involved gathering empirical evidence on the implementation and enforcement of the BHD, ELD, and ECD. This evidence included ECJ case law, reports from the Commission and EU MS, evaluations commissioned by the Commission, studies by environmental NGOs, and research from professional networks.

The findings underscore the critical importance of data for the proper implementation and enforcement of these Directives.

Insufficient data emerged as a key challenge, particularly for the ELD, which relies on the availability of data on the "baseline condition" for its application. As demonstrated, the baseline condition acts as both the benchmark against which the "significance" of damage is assessed and the basis for determining remedial measures.[92] Studies have confirmed the challenges

[89] For further reference, see Chapter 10, *National transposition and implementation of the ELD.*
[90] See Chapter 34.9, *Participation and access to justice requirements*.
[91] See Chapter 35.6.4.2, *Publication of information and access to justice for the public concerned.*
[92] For further reference, see Chapter 11.1.2.2, *The interpretation of the term "significant"*, and Chapter 11.5. *Remediation of damage to protected species and habitats*.

associated with the availability of baseline data and recommend more extensive and regular monitoring to establish a suitable database. [93]

A lack of data also complicates the evaluation of implementation, enforcement, and overall effectiveness of the Directives. For the BHD and ELD, this specifically pertains to data on the implementation and effectiveness of compensatory measures (BHD) or remediation measures (ELD). Evidence suggests weak oversight of whether announced compensatory measures under the BHD are implemented or effective,[94] with one main point of criticism concerning the lack of transparency in the process.[95] While the overall implementation record of compensatory measures under the BHD appears poor, the limited data available further complicates an accurate assessment of its effectiveness.[96]

For the ELD, the limited data available similarly suggests that MS are not fully meeting the remediation requirements set out in the Directive. Once again, the overall data situation is problematic. The European Commission describes the available data as "haphazard and scarce" and highlights complications arising from the Directive's reporting obligations, which do not mandate detailed information on the three remediation options.[97] Altogether, the findings suggest that the effectiveness of both the ELD and BHD would substantially benefit from strengthened monitoring and reporting requirements, particularly regarding baseline information and the implementation of compensatory or remediation measures.

For the ECD, the lack of data primarily concerns the level of enforcement within MS and across various enforcement levels. As discussed earlier, the nECD has introduced important amendments that promise to improve the availability and quality of data. Another significant issue, extending beyond the ECD and relevant to environmental crime more broadly, is the high number of undetected crimes, which do not appear in statistical data.[98] Estimates suggest that

[93] See Chapter 11.1.2.1.1, *Assessing the baseline condition and availability of data*, and references included therein.
[94] For further reference, see discussion in Chapter 5.2.3.4.4, *Implementation and enforcement of Article 6(4) requirements*.
[95] See Chapter 11.5.6.2, *Comparing and contrasting BHD compensatory measures with ELD remedial measures*, with further reference to Krämer, *Article 6(4) Opinions*, 76-77.
[96] See Chapter 11.5.6.2.
[97] See Chapter 11.5.6.2, with reference to European Commission, *REFIT Evaluation of the ELD (SWD (2016) 121 final)*, 59: According to the Commission, the data received from MS was "haphazard and scarce".
[98] For an assessment of the features that complicate the detection of envIronmental crime, refer to Chapter 19.2.2, *Dark figure of unrecorded environmental crime*.

between 20% and 40% of environmental crimes go undetected, with some figures indicating this could reach as high as 90%.[99] Inspections have been identified as a crucial tool in detecting and preventing environmental violations in this dissertation. The findings on their significance in relation to the effectiveness of the ELD and ECD are discussed in the following.

36.3 Role of inspections in the enforcement of the BHD: Interaction and complementarity with the ELD and ECD frameworks

Part IV of this study investigated the role of inspections in the implementation and enforcement of the BHD, and how they interact with, and potentially complement, the frameworks established by the ELD and the ECD.

The findings of this study show that a system of regular and well-planned inspections could significantly strengthen the implementation and enforcement of EU environmental law, addressing key shortcomings in the enforcement of the BHD, ELD, and ECD.[100] Such a system of inspections would not only ensure compliance, but also serve as a proactive measure to prevent environmental damage and violations of environmental law.

However, the examination of the current EU regulatory framework, as established under the non-binding Recommendation on Minimum Criteria for Environmental Inspections (RMCEI), has revealed several shortcomings. **First**, the limited scope of the RMCEI excludes key activities under EU environmental legislation, such as the BHD and Natura 2000 site inspections. As a result, MS' inspection systems for Natura 2000 sites vary considerably and exhibit significant shortcomings, as discussed further below. **Second**, flaws in the design and wording of the RMCEI, such as vague definitions and reporting deficiencies, further weaken its impact. **Finally**, the non-binding nature of the RMCEI leaves the adoption of its minimum criteria to the discretion of MS. This discretion, coupled with disparities in resources and political priorities among MS, has resulted in inconsistent application, with some MS implementing the RMCEI only partially or not at all.

[99] See Chapter 19.2.2, with further reference to European Commission, ECD Evaluation/Part I, SWD(2020) 260 final, 24; Gerstetter et al, *Status quo Umweltstrafrecht*, 43.
[100] See Part IV, *The role of inspections*, in particular Chapter 26, *Discussion of findings and conclusion on the role of inspections in the implementation and enforcement of the BHD*.

Concerning **inspections of Natura 2000** sites specifically, a number of findings appear particularly noteworthy.[101] **First**, inspections to prevent unauthorised activities are often absent or insufficient. **Second**, they frequently fail to ensure that mitigation and compensation measures under Article 6(3) and (4) HD are properly implemented. **Third**, inspections are often conducted by the same NCAs that issue permits, creating potential conflicts of interest.

Another important finding in the context of this dissertation concerns the **role of permits** as a loophole in inspections. Inspections focus on compliance with permits but not their lawfulness, rendering them ineffective if activities are backed by unlawful permits. To ensure compliance with EU environmental law, inspections should also address the issuance of permits that breach the BHD or other EU environmental legislation.

In conclusion, there is strong evidence to suggest that inspections can significantly improve the implementation and enforcement of EU environmental legislation, playing a crucial role in supporting and complementing the ELD and ECD frameworks. However, their effectiveness depends on proper design and implementation. As this study has highlighted, concrete proposals for improving the current inspection regime exist, but political will to implement them remains insufficient.

36.4 Improving coherence between the ELD and ECD for better protection of biodiversity in the European Union

Part V of the study investigated to what extent the design and wording of the ELD and ECD are sufficiently integrated to use any **complementary aspects of the two liability regimes** in relation to damage to protected species and habitats ("biodiversity damage"). As already mentioned above in the discussion of preventive and remedial measures, the analysis of the ELD and ECD and by extension BHD, clearly shows that these instruments, as a collective governance framework, have the potential to operate as an integrated system that ensures the **prevention and remediation** of biodiversity damage. However, for this potential to be realised, key terms or concepts of these Directives must be aligned and harmonised. Throughout this dissertation, research into the integration of these Directives has demonstrated, that in various regards integration is still insufficient to guarantee an efficient interplay.

[101] Mandated under Article 11 HD, which requires MS to undertake surveillance of the conservations status of protected species and habitats.

In various publications, the term "sister directives" is used to describe the ELD and ECD.[102] This metaphor implies that the two Directives operate in tandem, complementing one another to achieve their objectives. However, as the research for this dissertation demonstrates, this synergy is not currently realised.

Effective interaction does not necessarily require the complete elimination of all differences but rather the assurance of seamless integration. The overarching principle that should underpin all measures in this area is "coherence". The strict nature of criminal law, in particular, means that uniform standards cannot always be applied. For instance, the establishment of different thresholds for the applicability of the Directives may be justified, as may varying evidentiary requirements for establishing causation. Nevertheless, in all such instances, it must be ensured that the Directives continue to function cohesively.

As this research highlights, this objective is impeded by several factors, including ambiguities in the interpretation of key terms, particularly concerning the thresholds set out in the Directives. Another critical area requiring harmonisation arises from amendments introduced by the nECD. These amendments have resulted in authorisations no longer providing an automatic exemption from criminal liability in all circumstances. In light of this development, it would be highly desirable—not only for the sake of harmonising the two Directives—for similar adjustments concerning authorisations to be introduced under the ELD, as has already been advocated in the literature. Otherwise, future cases may arise where a perpetrator is imprisoned regardless of holding an authorisation, yet cannot be obliged to remediate the environmental damage caused, owing to the protection conferred by that authorisation under the ELD.

Enhanced collaboration between the two Directives would also be highly beneficial in the area of data collection, monitoring and reporting. As shown, both Directives currently lack sufficient data on their implementation in MS, which is essential for assessing their effectiveness and making necessary adjustments. Notably, there is a significant gap in both quantitative and qualitative data regarding damage to protected habitats and species. For instance, it is crucial

[102] Fogleman et al, *Facilitating Enforcement of the ELD*, 170; Gerstetter et al, *EFFACE Environmental Crime and the EU – Synthesis*, 39.

to examine the role of authorisations in this regard. Existing data suggests that authorised destruction plays a significant role in the damage to protected habitats, often linked to the economic and social interests of MS. This area warrants urgent and systematic investigation to establish a more reliable data foundation and to gain a deeper qualitative understanding.

Finally, it is necessary to address the limitations of the ELD, particularly its restriction to "occupational activities" and its focus on the "operator". These limitations preclude the reliable remediation of environmental damage resulting from crimes that are not committed by an operator in the course of an occupational activity.

37 Significance and contribution of the study

This dissertation presents the first comprehensive assessment of liability for biodiversity damage within the EU, offering a deeper understanding of the intricate interplay between four key Directives: the two Nature Directives—the Birds and Habitats Directives (BHD)—and the two Liability Directives—the Environmental Administrative Liability Directive (ELD) and the Environmental Criminal Liability Directive (ECD). These Directives, though distinct in scope and function, are closely interconnected. Understanding their interplay is essential for evaluating the current framework governing liability for biodiversity damage in the EU.

To address these issues comprehensively, this study has situated its research within the broader context of EU environmental governance, exploring the role of liability within this system and its potential contributions. It first explored the challenges associated with the implementation and enforcement of the BHD, focusing on the key actors and instruments involved, before analysing the ELD and ECD to evaluate whether their design and wording sufficiently support the BHD's implementation and enforcement. This cross-assessment, conducted within the broader governance framework, has yielded important insights, enabling a clearer distinction between systemic issues and those stemming from the Directives' poor design or ambiguous wording.

The findings of this study underscore the importance of approaching any future development of the liability regime for biodiversity damage as a holistic endeavour. These four Directives must be assessed collectively, as they function interdependently and should indeed be designed to operate as "Sister Directives". The analysis demonstrates that the interplay among these

instruments is decisive in shaping their effectiveness in protecting biodiversity. Moreover, these four Directives, along with their interplay, do not operate in isolation; they also interact with the broader, multi-level environmental governance framework. This framework covers a diverse array of instruments, rules, and practices designed to implement and enforce EU environmental laws and policies, forming part of a broader effort to enhance the governance of EU environmental law as a whole. As demonstrated, amendments to this broader system - including strengthening the rules on inspections or further empowering the role of citizens and NGOs - will have significant ramifications for the effectiveness of the liability regime established by these four Directives.

Finally, the findings of this study reveal numerous gaps and inconsistencies, as well as instances of vague wording or the need for clearer interpretation of such wording, which present significant opportunities for improvement.

38 Limitations of the current study

The scope of this study was limited to the existing legal framework, specifically evaluating its current effectiveness and identifying areas for improvement. While it is conceivable to define liability for biodiversity damage in entirely different ways, this study focused on the framework as currently established under EU law. One could critique this framework for its focus on species and habitats protected under the BHD, as biodiversity, in its broader sense, extends well beyond these boundaries. This broader definition of biodiversity, as outlined in the introduction and provided by the IPBES, was not considered within the scope of this study but remains a point of relevance for any future development of liability frameworks.

Notwithstanding these limitations, the findings of this dissertation underscore the significant challenges involved in reconciling liability rules with the broader goals of biodiversity protection. On one hand, there is a clear need for legal certainty within liability frameworks. On the other, biodiversity and ecosystems are inherently complex, and any assessment of damage must contend with this complexity, which complicates efforts to establish a standardised approach. As such, any future development of this framework must carefully balance these competing considerations.

A second limitation of this study concerns its focus on one of the three types of environmental damage addressed by the ELD: damage to protected species and habitats. While this focus aligns with the study's primary objectives, it is important to acknowledge that the ELD also addresses damage to water and land, both of which also have an impact on biodiversity. Similarly, while the ECD/nECD encompasses a wide array of environmental offences that will, in one way or another, impact biodiversity, this study limited its focus to provisions directly related to the BHD, thereby addressing biodiversity protection in a narrower sense.

Finally, it is important to note that this study did not address private law compensation for environmental damage. Issues such as personal injury, damage to private property, or economic loss were expressly excluded from the scope of this research, as they do not feature in the ELD or ECD/nECD and are not currently addressed under other EU legislation.

39 Pathways forward: Recommendations and areas for further research

This dissertation provided a comprehensive assessment of the role of environmental administrative and environmental criminal liability in the protection of biodiversity within the EU, with a focus on the effectiveness of the ELD and ECD. In conclusion, the central aim of this research - to evaluate these Directives and explore potential amendments to enhance their effectiveness in protecting biodiversity - has revealed both significant challenges and substantial opportunities for strengthening the existing framework.

In moving towards a stronger and more unified framework for the protection of biodiversity in the EU, this dissertation suggests several key approaches.

Firstly, there is a clear need for greater interdisciplinary collaboration between legal scholars, ecologists, economists - particularly those specialising in the intersection of law and economics - and policymakers. Such collaboration could help develop more holistic approaches to liability for biodiversity damage. Bridging the gap between these disciplines would not only strengthen the legal framework but also ensure it is more informed by ecological principles and economic insights, particularly regarding the cost-effectiveness and incentive structures that could drive stronger liability outcomes. **Additionally**, while case studies offer valuable insights, there is currently a lack of data that would allow for a comprehensive evaluation of the effectiveness of the two liability regimes. Addressing these gaps will be crucial to better understanding how

liability frameworks can more effectively prevent harm and contribute to the remediation of biodiversity damage. **Finally**, throughout this dissertation, areas of potential research have been identified, offering valuable avenues for further exploration.

One key area in need of further exploration pertains to the clear lack of information regarding the **nature of wildlife and habitat crime**. A dedicated study on the implementation of the two offences relating to wildlife and habitat crime as well as on the broader nature of these crimes could provide insights into how liability frameworks might be improved. Such research could help clarify typical case constellations, the challenges involved in assessing damage or establishing causal links, and the role that unlawful authorisations play in facilitating such damage. The findings could then serve as the basis for refining these offences, including better defining threshold criteria and determining appropriate models of criminalisation.

Another area where the findings of this dissertation suggest significant potential for further development is the definition and refinement of **threshold criteria for liability**. Clearer indicators are essential for the success of any liability regime for biodiversity damage. This dissertation has highlighted the potential of emerging biodiversity measurements, metrics, and indicators to help refine these criteria. The rapid advancement of biodiversity indicators presents a unique opportunity to improve how biodiversity damage is measured and assessed, thus facilitating the application of liability frameworks. Further research should focus on the development of biodiversity indicators and standards within the context of liability regimes. A particularly useful next step would be to link this research on threshold criteria for biodiversity damage under the ELD with similar research focused on the ECD. This alignment would help create a more standardised framework for determining thresholds across both Directives.

Finally, a study on the actual **implementation of remediation measures under the ELD** is recommended, comparing and contrasting these with findings on the implementation of **offsetting measures under the BHD**. The findings of such a study could help establish the effectiveness of these measures and inform the further development of monitoring and reporting requirements under the ELD and BHD.

40 Final reflections & outlook

This study has shown that there is considerable scope to strengthen the legal framework for biodiversity protection within the EU. If further developed and integrated into a more cohesive governance structure, the ELD, ECD, and, by extension, the BHD could—by strengthening liability—play a pivotal role in the prevention and remediation of biodiversity damage, thereby contributing to its protection for present and future generations.

Encouragingly, the recent amendments to the Environmental Criminal Liability Directive (nECD) have brought notable improvements to the Directive's design and wording. As this study has demonstrated, these changes mark an important step forward - reflecting both political will and legal momentum - and offer a solid foundation for future reform. At the same time, the analysis has highlighted significant remaining shortcomings, underscoring the need for further amendments to improve the coherence, scope, and enforceability of the nECD regime as part of a more integrated liability framework.

In parallel, the recent adoption of the Nature Restoration Regulation (NRR) [103] may indirectly complement the liability instruments analysed in this dissertation. By introducing new mechanisms and financial incentives for restoration, it could enhance MS' engagement with their obligations under the ELD and ECD. In particular, the need to finance the restoration measures required under the NRR is likely to heighten MS' interest in preventing biodiversity damage and ensuring that polluters and perpetrators are held financially accountable for the harm they cause.

At the judicial level, the recent ruling of the ECJ of 14 November 2024 in *Commission v Germany* (C-47/23), which found a systemic breach of Article 6(2) of the Habitats Directive, marks a significant development.[104] By clarifying the thresholds for proving systemic non-compliance and reinforcing the need for legally binding measures, the case sends a clear signal that the Court will not hesitate to address systemic environmental governance issues. This may prompt both the Commission and MS to take more decisive action in implementing and enforcing biodiversity protection measures.

[103] Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869, OJ L 1991, 29.7.2024.
[104] *Commission v Germany* (C-47/23). For a discussion of this ruling, refer to Chapter 5.2.4, *Rulings on general and structural breaches of the Habitats Directives*.

In conclusion, while considerable challenges persist, this thesis has underscored the opportunities inherent within the existing EU liability framework. If amended and strengthened appropriately, this framework holds considerable potential not only to prevent further biodiversity loss but also to support the EU's broader restoration objectives.

Table of International Treaties and Agreements

Short forms used for repeated citations in footnotes are indicated in square brackets at the end of each entry.

Convention Relative to the Preservation of Fauna and Flora in their Natural State (London, opened for signature 8 November 1933), in force 14 January 1936, 172 LNTS 241.

Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (Washington, opened for signature 12 October 1940), in force 1 May 1942, 161 UNTS 193.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, opened for signature 3 March 1973), in force 1 July 1975, 993 UNTS 243.

UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, opened for signature 16 November 1972), in force 17 December 1975.

Convention on Wetlands of International Importance (Ramsar, opened for signature 2 February 1971), as amended, in force 21 December 1975, 996 UNTS 245.

Declaration of the United Nations Conference on the Human Environment (Stockholm, 1972), UN Doc. A/CONF.48/14/REV.1 (1972).

Convention on the Conservation of Migratory Species of Wild Animals (Bonn, opened for signature 23 June 1979), in force 1 November 1983, 1651 UNTS 333.

Convention on the Conservation of European Wildlife and Natural Habitats (Bern, opened for signature 19 September 1979), in force 1 June 1982, Council of Europe Treaty Series No. 104.

Council of Europe Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (Lugano, 1993).

Convention on Biological Diversity (Rio de Janeiro, opened for signature 5 June 1992), in force 29 December 1993, 1760 UNTS 79.

Council of Europe Convention on the Protection of the Environment through Criminal Law (ETS No 172, adopted 4 November 1998, not yet in force) [COE Convention].

Agreement on the Conservation of African-Eurasian Migratory Waterbirds (The Hague, opened for signature 16 June 1995), in force 1 November 1999, 2401 UNTS 45.

UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus), 25 June 1998, in force 30 October 2001, 2161 UNTS 447.

Rome Statute of the International Criminal Court, 2187 UNTS 3, adopted 17 July 1998, entered into force 1 July 2002, last amended 26 November 2010.

Table of EU Primary and Secondary Legislation

Treaties and amending protocols (TEU, TFEU, Charter, etc.)

Primary EU Law (Treaties, Charter)

Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed 13 December 2007, [2007] OJ C 306, 17 December 2007.

Treaty on European Union (TEU), consolidated version, [2012] OJ C 326, 26 October 2012, p. 13–45.

Treaty on the Functioning of the European Union (TFEU), consolidated version, [2012] OJ C 326, 26 October 2012, p. 47–390.

Charter of Fundamental Rights of the European Union [2016] OJ C 202, 7 June 2016, p. 389–405.

Secondary EU Legislation (Regulations, Directives, Decisions)

Regulations – Directives – Decisions / Framework Decisions

Regulations

Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, OJ L 61, 3.3.1997, p. 1.

Regulation (EC) No 2152/2003 of the European Parliament and of the Council of 17 November 2003 concerning monitoring of forests and environmental interactions in the Community (Forest Focus), OJ L 324, 11.12.2003, p. 1.

Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste, OJ L 190, 12.7.2006, p. 1.

Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market, OJ L 295, 12.11.2010, p. 23□34.

Regulation (EU) 2019/1010 of the European Parliament and of the Council of 5 June 2019 on the alignment of reporting obligations in the field of legislation related to the environment, OJ L 170, 25.6.2019, p. 115.

Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869, OJ L 1991, 29.7.2024, p. 1.

Directives

Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, OJ L 175, 5.7.1985, p. 40.

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OJ L 206, 22.7.1992, p. 7.

Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control, OJ L 257, 10.10.1996, p. 26.

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, OJ L 327, 22.12.2000, p. 1.

Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143, 30.4.2004, p. 56.

Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law, OJ L 328, 6.12.2008, p. 28.

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, OJ L 20, 26.1.2010, p. 7.

Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA, OJ L 101, 15.4.2011, p. 1.

Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, as amended by Directive 2014/52/EU, OJ L 26, 28.1.2012, p. 1; OJ L 124, 25.4.2014, p. 1.

Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons who report breaches of Union law, OJ L 305, 26.11.2019, p. 17.

Directive (EU) 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law and replacing Directives 2008/99/EC and 2009/123/EC, OJ L 1203, 30.4.2024, p. 1.

Decisions

Council Decision 2005/370/EC of 17 February 2005 on the conclusion, on behalf of the European Community, of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, OJ L 124, 17.5.2005, p. 1.

Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet", OJ L 354, 28.12.2013, p. 171.

Framework Decisions

Council Framework Decision 2003/80/JHA of 27 January 2003 on the protection of the environment through criminal law, OJ L 29, 5.2.2003, p. 55 (annulled).

Council Framework Decision 2005/667/JHA of 12 July 2005 to strengthen the criminal law framework for the enforcement of the law against ship source pollution, OJ L 255, 30.9.2005, p. 164.

Preparatory and Soft-Law Documents

Commission proposals, Council common positions, Member-State initiatives, Green/White Papers, Communications, Council conclusions

Recommendations and Other Non-Binding Acts

European Commission, *Recommendation 2001/331/EC providing for minimum criteria for environmental inspections in the Member States*, [2001] OJ L 118/41 (RMCEI).

Council of the European Union Resolutions and Reports

Council of the European Union and the Representatives of the Governments of the Member States, Resolution on the Continuation and Implementation of a European Community Policy and Action Programme on the Environment [1977] OJ C 139, 13 June 1977.

Council Resolution of 7 October 1997 on the drafting, implementation and enforcement of Community environmental law [1997] OJ C 321, 22 October 1997.

Council of the EU, EU Environmental Criminal Law – Presidency Report 12801/19, Brussels, 4 October 2019.

Council of the EU, Final Report of the Eighth Round of Mutual Evaluations on Environmental Crime 14852/19, Brussels, 5 December 2019.

Council of the EU, Proposal for a Directive on the Protection of the Environment through Criminal Law – General Approach 2021/0422(COD), Brussels, 16 December 2022.

European Council Conclusions

European Council, Presidency Conclusions, Göteborg European Council, 15–16 June 2001, https://www.consilium.europa.eu/en/european-council/conclusions accessed 1 May 2025.

European Commission Proposals, Green/White Papers, Communications

Commission Proposals (Legislative Proposals & Accompanying Documents)

European Commission, *Proposal for a Council Directive on the protection of natural and semi-natural habitats and of wild fauna and flora*, COM(88) 381 final [1988] OJ C 247, Brussels, 21 September 1988.

European Commission, *Proposal for a Council Directive on Civil Liability for Damage Caused by Waste*, COM(89) 282, amended by COM(91) 219, Brussels, 15 September 1989.

European Commission, *Proposal for a Directive on the Protection of the Environment through Criminal Law*, COM(2001) 139 final, Brussels, 15 March 2001.

European Commission, *Proposal for a Directive on Environmental Liability with regard to the prevention and remedying of environmental damage*, COM(2002) 17 final, Brussels, 21 February 2002.

European Commission, *Explanatory Memorandum to the Proposal for a Directive on Environmental Liability*, COM(2002) 17 final, Brussels, 21 February 2002.

European Commission, *Proposal for a Directive on Access to Justice in Environmental Matters*, COM(2003) 624 final, 2003/0246 (COD), Brussels, 24 October 2003.

European Commission, *Proposal for a Directive on the Protection of the Environment through Criminal Law*, COM(2007) 51 final, Brussels, 9 February 2007.

European Commission, *Proposal for a Directive on the Protection of the Environment through Criminal Law and Replacing Directive 2008/99/EC*, COM(2021) 851 final, 2021/0422 (COD), Brussels, 15 December 2021.

European Commission, *Green Paper on Remedying Environmental Damage*, COM(93) 47 final, Brussels, 14 May 1993.

Brans, E.H.P. and Uilhoorn, M., *Liability for Damage to Natural Resources: Background Paper for EU White Paper on Environmental Liability* (1997) [Brans & Uilhoorn, *Liability for Damage to Natural Resources*].

European Commission, *White Paper on Environmental Liability*, COM(2000) 66 final, Brussels, 9 February 2000.

Commission Communications and Strategic Documents

European Commission, *European Biodiversity Strategy*, COM(1998) 42 final, Brussels, 4 February 1998.

European Commission, *EU Biodiversity Strategy to 2020*, COM(2011) 244 final, Brussels, 3 May 2011.

European Commission, *Improving the Delivery of Benefits from EU Environment Measures*, COM(2012) 95 final, Brussels, 7 March 2012.

European Commission, *EU Law: Better Results through Better Application*, C/2016/8600, [2017] OJ C 18/10.

European Commission, *EU Action Plan for Nature, People and the Economy*, COM(2017) 198 final, Brussels, 27 April 2017.

European Commission, *EU Biodiversity Strategy for 2030: Bringing Nature Back into Our Lives*, COM(2020) 380 final, Brussels, 20 May 2020.

European Commission, *Commission Work Programme 2021: A Union of Vitality in a World of Fragility*, COM(2020) 690 final, Brussels, 19 October 2020.

European Commission, *Stepping Up the Fight Against Environmental Crime*, COM(2021) 814 final, Brussels, 15 December 2021.

Commission Reports

European Commission, *Report under Article 14(2) of Directive 2004/35/EC on Environmental Liability*, COM(2010) 581 final, Brussels, 12 October 2010.

European Commission, *Monitoring the Application of Union Law: 2014 Annual Report*, COM(2015) 329, Brussels, 9 July 2015.

European Commission, *Report under Article 18(2) of Directive 2004/35/EC*, COM(2016) 204 final, Brussels, 14 April 2016.

European Commission, *Monitoring the Application of EU Law – 2023 Annual Report*, COM(2024) 358 final, Brussels, 25 July 2024.

Member State Initiatives

Initiative of the Kingdom of Denmark with a view to adopting a Framework Decision on combating serious environmental crime (2000/C 39/05) [2000] OJ C 39/5 (adopted 11 February 2000).

European Parliament: Briefings, Reports and Resolutions

European Parliament, *Report on the Proposal for a Directive on the Protection of the Environment through Criminal Law*, COM(2007) 51, 15 April 2008,

https://www.europarl.europa.eu/doceo/document/A-6-2008-0154_EN.html accessed 1 May 2025.

European Parliament, *Resolution on the Application of Directive 2004/35/EC*, 2016/2251(INI), [2018] OJ C 346/184 (26 October 2017).

European Parliament, Directorate-General for Internal Policies, *Challenges in the Implementation of EU Law at National Level*, Briefing PE 608.841 (2018), available at: https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/608841/IPOL_BRI(2018)608841_EN.pdf, accessed 1 May 2025.

European Parliament, *Report on the Liability of Companies for Environmental Damage*, 2020/2027(INI), 6 April 2021, https://www.europarl.europa.eu/doceo/document/A-9-2021-0112_EN.html accessed 1 May 2025.

European Parliament, *Report on the Proposal for a Directive on the Protection of the Environment through Criminal Law*, COM(2021) 851, 28 March 2023.

European Economic and Social Committee (EESC): Opinions and Reports

European Economic and Social Committee, *Opinion on the Proposal for a Directive on the Protection of the Environment through Criminal Law*, COM(2007) 51 final, Brussels, 26 September 2007.

European Economic and Social Committee, *Evaluation of the Environmental Crime Directive (Information Report)*, NAT/767-EESC-2019-01597, 11 December 2019, https://www.eesc.europa.eu/en/documents/evaluation-environmental-crime-directive accessed 1 May 2025.

European Economic and Social Committee, *Opinion on the Proposal for a Directive on the Protection of the Environment through Criminal Law*, [2022] OJ C 290/143, 29 July 2022, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022AE2110 accessed 1 May 2025.

Related European Commission Commissioned Studies and Reports

BIO Intelligence Service, *Implementation Challenges and Obstacles of the Environmental Liability Directive. Final Report Prepared for European Commission, DG Environment, May 2013* in collaboration with Stevens & Bolton LLP (2013) [BIO Intelligence Service, *ELD Implementation Report*].

BIO Intelligence Service, Stevens & Bolton LLP, Fogleman, V, Salès, K et al, *Study on ELD Effectiveness, Scope and Exceptions – Final Report*, prepared for European Commission, DG Environment, Publications Office (2014), https://data.europa.eu/doi/10.2779/70236 accessed 1 May 2025 [BIO Intelligence et al, *Study on ELD Effectiveness, Scope and Exceptions*].

COWI and Eunomia, *Study on the Costs of Not Implementing EU Environmental Law* (2019, Brussels, commissioned by the European Commission), https://ec.europa.eu/environment/eir/pdf/study_costs_not_implementing_env_law.pdf accessed 1 May 2025 [COWI & Eunomia, *Costs of Not Implementing EU Environmental Law*].

COWI, Prospect and Justice and Environment, *Improving ELD Implementation and the Evidence Base for the ELD* (2021, Brussels, study commissioned by the European Commission), https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/ec101025-1121-4809-a1ac-e72a146fd20d/details accessed 1 May 2025 [COWI et al., *Improving ELD Implementation*].

Fogleman, V., *Study on Analysis of Integrating the ELD into 11 National Legal Frameworks – Final Report*, study commissioned by the European Commission (2013) https://op.europa.eu/s/n93R, accessed 1 May 2025, [Fogleman, *Study on Integrating the ELD*].

Fogleman, V., Stevens & Bolton LLP and Cardiff University School of Law and Politics, *Improving Financial Security in the Context of the Environmental Liability Directive*, Study for the European Commission, (May 2020), https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/01708073-da51-4db7-8049-6e7141c901f4/details?download=true accessed 1 May 2025 [Fogleman et al., *Improving Financial Security under the ELD]*.

Fogleman, V., Stevens & Bolton LLP and Cardiff University School of Law and Politics, *Facilitating Enforcement of the ELD by Competent Authorities, Final Report for the European Commission* (2021), https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/9b423999-cc41-41ea-9629-5682e3bb6b2b/details?download=true accessed 1 May 2025 [Fogleman et al, *Facilitating Enforcement of the ELD*].

IEEP, Bio Intelligence Service and Ecologic Institute, *Study on Possible Options for Strengthening the EU Level Role in Environmental Inspections and Strengthening the Commission's Capacity to Undertake Effective Investigations of Alleged Breaches in EU Environment Law.* Final Report for the European Commission, DG Environment (January 2013, IEEP, Brussels and London), https://ec.europa.eu/environment/legal/law/pdf/Environmental%20Inspections.pdf accessed 1 May 2025 [IEEP et al., Environmental Inspections Study].

IEEP, Bio Intelligence Service and Ecologic Institute, *Information Collection and Impact Assessment of Possible Requirements for Environmental Inspections in the Area of EU Legislation on Water, Nature Protection and Trade in Certain Environmentally Sensitive Goods.* Final Report for the European Commission, DG Environment (July 2013, Institute for European Environmental Policy, Brussels and London), https://ieep.eu/wp-content/uploads/2022/12/Enhancing_enforcement_obligations_for_EU_environmental_law.pdf accessed 1 May 2025 [IEEP et al., Impact Assessment Environmental Inspections].

Milieu, *Evaluation Study on the Implementation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law by Member States*, study commissioned by the European Commission (2014), https://ec.europa.eu/info/sites/info/files/milieu_implementation_report_2013.pdf accessed 1 May 2025 [Milieu, *Evaluation Study on Directive 2008/99/EC*].

Milieu & IUCN, *Experience Gained in the Application of ELD Biodiversity Damage. Final Report for the European Commission, DG Environment* (2014), https://op.europa.eu/s/n9et accessed 1 May 2025 [Milieu & IUCN, *ELD Biodiversity Damage Report*].

Milieu, IEEP & ICF, *Evaluation Study to Support the Fitness Check of the Birds and Habitats Directives*, study commissioned by the European Commission (2016),

https://ec.europa.eu/environment/nature/legislation/fitness_check/docs/study_evaluation_support_fitness_check_nature_directives.pdf accessed 1 May 2025 [Milieu et al., *Fitness Check Birds and Habitats Directives*].

Milieu, Bilbomatica & Deloitte, *Support in the Implementation of REFIT Actions for the ELD – Phase 1: Annex II-Task 2 Common Understanding Document – ELD Key Terms and Concepts*, study commissioned by the European Commission (2017), https://circabc.europa.eu/ui/group/cafdbfbb-a3b9-42d8-b3c9-05e8f2c6a6fe/library/3112f0b5-0021-49ce-9dfc-9127a1e12a8b/details accessed 1 May 2025 [Milieu et al., REFIT ELD Key Terms and Concepts].

Table of EU Official Documents

EU Guidelines, Notices, Reports and Staff Working Documents

Staff Working Documents and Impact Assessments

European Commission, *Commission Staff Working Document Accompanying the Proposal for a Directive on the Protection of the Environment through Criminal Law: Impact Assessment*, SEC(2007) 161, COM(2007) 51 final, Brussels, 9 February 2007.

European Commission, *REFIT Evaluation of the Environmental Liability Directive: Staff Working Document*, SWD(2016) 121 final, Brussels, 14 April 2016.

European Commission, *Fitness Check of the EU Nature Legislation: Staff Working Document*, SWD(2016) 472 final, Brussels, 16 December 2016.

European Commission, *Environmental Compliance Assurance – Scope, Concept and Need for EU Actions: Staff Working Document*, SWD(2018) 10 final, Brussels, 18 January 2018.

European Commission, *Evaluation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law – Executive Summary*, SWD(2020) 259 final, SEC(2020) 373 final, Brussels, 28 October 2020.

European Commission, *Evaluation of Directive 2008/99/EC – Part I*, SWD(2020) 260 final, SEC(2020) 373 final, Brussels, 28 October 2020.

European Commission, *Evaluation of Directive 2008/99/EC – Part II*, SWD(2020) 260 final, SEC(2020) 373 final, Brussels, 28 October 2020.

European Commission, *Assessment Report Accompanying the Proposal for a Directive on the Protection of the Environment through Criminal Law*, SWD(2021) 465 final, Brussels, 15 December 2021.

European Commission, *Impact Assessment Accompanying the Proposal for a Regulation on Nature Restoration*, SWD(2022) 167 final, Brussels, 22 June 2022.

Commission Notices

European Commission, *Commission Notice on Access to Justice in Environmental Matters*, C/2017/2616, [2017] OJ C 275/1.

European Commission, *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive*, C(2018) 7621 final, Brussels, 21 November 2018.

European Commission, *Commission Notice: Guidelines Providing a Common Understanding of the Term 'Environmental Damage'*, [2021] OJ C 118/1.

European Commission, *Commission Notice: Methodological Guidance on Article 6(3) and (4) of the Habitats Directive*, C/2021/6913, [2021] OJ C 437, 28 October 2021, 1–107.

Implementation and Evaluation Reports

European Commission, *Implementation of Recommendation 2001/331/EC: Staff Working Paper*, SEC(2007) 1493 final, Brussels, 14 November 2007.

European Commission, *Implementation of Article 6(4) of Directive 92/43/EEC: Summary Report 2004–2006*, Brussels, 30 June 2008.

European Commission, *Implementation of Article 6(4) of Directive 92/43/EEC: Summary Report 2007–2011*, Brussels, March 2012.

Guidance Documents

European Commission, *Wind Energy Developments and Natura 2000 – Guidance Document*, Directorate-General for Environment (Publications Office 2010) https://data.europa.eu/doi/10.2779/98894 accessed 1 May 2025.

European Commission, *Establishing Conservation Measures for Natura 2000 Sites: Review of Article 6(1)*, 9 April 2013 https://circabc.europa.eu accessed 1 May 2025.

European Commission, *Handbook on the Environmental Liability Directive: Two-Day Training Handbook and Slides*, February 2013 https://environment.ec.europa.eu/law-and-governance/environmental-compliance-assurance/environmental-liability_en#publications accessed 1 May 2025.

European Commission, *Environmental Liability Directive – Protecting Europe's Natural Resources*, Directorate-General for Environment (Publications Office 2013) https://data.europa.eu/doi/10.2779/28060 accessed 1 May 2025.

European Commission, *Multi-Annual ELD Work Programme 2017–2020*, https://environment.ec.europa.eu/law-and-governance/environmental-compliance-assurance/environmental-liability/implementation-commission_en#multiannual-work-programme accessed 1 May 2025.

European Commission, *Multi-Annual ELD Work Programme 2021–2024 (Version: 18 November 2020)*, https://environment.ec.europa.eu/law-and-governance/environmental-compliance-assurance/environmental-liability/implementation-commission_en#multiannual-work-programme accessed 1 May 2025.

European Environment Agency Reports

European Environment Agency, *The European Environment — State and Outlook 2020: Knowledge for Transition to a Sustainable Europe* (2019) https://www.eea.europa.eu/publications/soer-2020 accessed 1 May 2025.

European Environment Agency, *State of Nature in the EU: Results from Reporting under the Nature Directives 2013–2018* (2020) https://www.eea.europa.eu/publications/state-of-nature-in-the-eu-2020 accessed 1 May 2025.

Table of EU Case Law

Judgments of the Court of Justice of the EU

Judgment of the Court of Justice of the EU of 21 September 1989, *Commission v Greece*, C-68/88, EU:C:1989:339.

Judgment of the Court of Justice of the EU of 28 February 1991, *Leybucht Dykes, Commission v Germany*, C-57/89, EU:C:1991:89.

Judgment of the Court of Justice of the EU of 19 November 1991, *Andrea Francovich and Danila Bonifaci and others v Italian Republic* (*Francovich and Others), Joined cases C-6/90 and C-9/90*, EU:C:1991:428

Judgment of the Court of Justice of the EU of 2 August 1993, *Santoña marshes, Commission v Spain*, C-355/90, EU:C:1993:331.

Judgment of the Court of Justice of the EU of 11 July 1996, *Lappel Bank*, C-44/95, EU:C:1996:297.

Judgment of the Court of Justice of the EU of 24 October 1996, *Kraaijeveld*, Case C-72/95, EU:C:1996:404

Judgment of the Court of Justice of the EU of 19 May 1998, *Commission v Netherlands*, C-3/96, EU:C:1998:238.

Judgment of the Court Justice of the EU of 8 July 1999, *Nunes and De Matos*, Case C-186/98,EU:C:1999:376

Judgment of the Court of Justice of the EU of 25 November 1999, *Commission v France*, C-96/98, EU:C:1999:580.

Judgment of the Court of Justice of the EU of 6 April 2000, *Commission v France*, C-256/98, EU:C:2000:192

Judgment of the Court of Justice of the EU of 7 December 2000, *Basses Corbières, Commission v France*, C-374/98, EU:C:2000:670.

Judgment of the Court of Justice of the EU of 7 November 2000, *First Corporate Shipping*, C-371/98, EU:C:2000:600.

Judgment of the Court of Justice of 18 October 2001, *Commission v Ireland*, C-354/99, EU:C:2001:550.

Judgment of the Court of Justice of the EU of 13 June 2002, *Commission v Ireland*, C-117/00, EU:C:2002:366

Judgment of the Court of Justice of the EU of 10 April 2003, *Commission v Germany*, C-20/01 and C-28/01, EU:C:2003:220

Judgment of the Court of Justice of the EU of 7 January 2004, *Wells*, C-201/02, EU:C:2004:12.

Judgment of the Court of Justice of the EU of 7 September 2004, *Waddenzee*, C-127/02, EU:C:2004:482.

Judgment of the Court of Justice of the EU of 13 January 2005, *Dragaggi*, C-117/03, EU:C:2005:16.

Judgment of the Court of Justice of the EU of 14 April 2005, *Commission v Netherlands*, C-441/03, EU:C:2005:233

Judgment of the Court of Justice of the EU of 12 July 2005, *Commission v France*, C-304/02, EU:C:2005:444

Judgment of the Court of Justice of the EU of 13 September 2005, *Commission of the European Communities v Council of the European Union*, C-176/03, EU:C:2005:542

Judgment of the Court of Justice of the EU of 20 October 2005, *Commission v United Kingdom*, C-6/04, EU:C:2005:626.

Judgment of the Court of Justice of the EU of 10 January 2006, *Commission v Germany*, C-98/03, ECLI:EU:C:2006:3.

Judgment of the Court of Justice of the EU of 13 July 2006, *Commission v Portugal*, C-191/05, EU:C:2006:472.

Judgment of the Court of Justice of the EU of 14 September 2006, *Bund Naturschutz*, C-244/05, EU:C:2006:579.

Judgment of the Court of Justice of the EU of 26 October 2006, *Commission v Portugal*, C-239/04, EU:C:2006:665.

Opinion of Advocate General Kokott of 23 February 2006, Commission v Portugal, C-191/05, EU:C:2006:150.

Judgment of the Court of Justice of the EU of 14 June 2007, *Commission v Finland (Finnish Wolfe)*, C-342/05, EU:C:2007:341

Judgment of the Court of Justice of the EU of 20 September 2007, *Commission v Italy*, C-304/05, EU:C:2007:532

Judgment of the Court of Justice of the EU of of 10 May 2007, *Commission v Austria, C-508/04, EU:C:2007:274*

Judgment of the Court of Justice of the EU of 13 December 2007, *Commission v Ireland*, C-418/04, EU:C:2007:780.

Judgment of the Court of Justice of the EU of 23 October 2007, *Commission of the European Communities v Council of the European Union*, C-440/05, EU:C:2007:625 [Ship-Source Pollution]

Judgment of the Court of Justice of the EU of 15 October 2009, *Djurgården-Lilla Värtans Miljöskyddsförening v Stockholms kommun genom dess marknämnd*, C-263/08, EU:C:2009:631

Judgment of the Court of Justice of the EU of 14 January 2010, *Stadt Papenburg*, C-226/08, EU:C:2010:10.

Judgment of the Court of Justice of the EU of 4 March 2010, *Commission v France*, C-241/08, EU:C:2010:114.

Judgment of the Court of Justice of the EU of 9 March 2010, *Raffinerie Mediterranee (ERG) SpA, Polimeri Europa SpA and Syndial SpA v Ministero dello Sviluppo economico and Others*, C-378/08, EU:C:2010:126 [*ERG and others*]

Judgment of the Court of Justice of the EU of 9 March 2010, *Raffinerie Mediterranee (ERG) SpA, Polimeri Europa SpA and Syndial SpA v Ministero dello Sviluppo economico and Others* (C-379/08) and ENI SpA v Ministero Ambiente e Tutela del Territorio e del Mare and Others, Joined cases C-379/08 and C-380/08, EU:C:2010:127 [*ERG and others and ENI*]

Judgment of the Court of Justice of the EU of 20 May 2010, *Commission v Spain*, C-308/08, EU:C:2010:281.

Judgment of the Court of Justice of the EU of 14 October 2010, *Commission v Austria*, C-535/07, EU:C:2010:602.

Judgment of the Court of Justice of the EU of 8 March 2011, *LZ I (Brown Bears I)*, C-240/09, EU:C:2011:125.

Judgment of the Court of Justice of the EU of 9 June 2011, *Commission v France (Alsace Hamster)* , C-383/09, EU:C:2011:125.EU:C:2011:369

Judgment of the Court of Justice of the EU of 22 September 2011, *Commission v Spain*, C-90/10, EU:C:2011:606.

Judgment of the Court of Justice of the EU of 24 November 2011, *Commission v Spain*, C-404/09, EU:C:2011:768.

Judgment of the Court of Justice of the EU of 11 September 2012, *Nomarchiaki*, C-43/10, EU:C:2012:560.

Judgment of the Court of Justice of the EU of 9 February 2012, *Urbán*, C-210/10, EU:C:2012:64 [*Urbán*]

Judgment of the Court of Justice of the EU of 15 March 2012, *Commission v Cyprus*, C-340/10, EU:C:2012:143.

Judgment of the Court of Justice of the EU of 16 February 2012, *Solvay*, C-182/10, EU:C:2012:82.[*Solvay*]

Judgment of the Court of Justice of the EU of 11 April 2013, *Sweetman*, C-258/11, EU:C:2013:220.

Judgment of the Court of Justice of the EU of 25 April 2013, *Asociaţia Accept*, C-81/12, EU:C:2013:275

Judgment of the Court of Justice of the EU of 20 June 2013, *Rodopi*, C-259/12, EU:C:2013:414 [*Rodopi*]

Judgment of the Court of Justice of the EU of 27 March 2014, *LCL Le Crédit Lyonnais*, Case C-565/12, EU:C:2014:190 [*LCL Le Crédit Lyonnais* 9

Judgment of the Court of Justice of the EU of 3 April 2014, *Cascina Tre Pini*, C-301/12, EU:C:2014:214.

Judgment of the Court of Justice of the EU of 15 May 2014, *Briels*, C-521/12, EU:C:2014:330.

Judgment of the Court of Justice of the EU of 4 March 2015, *Ministero dell'Ambiente e della Tutela del Territorio e del Mare and Others v Fipa Group srl and Others*, C-534/13, EU:C:2015:140. [FIPA group and others]

Judgment of the Court of Justice of the EU of 8 November 2016, *LZ II or Brown Bears II*, C-243/15, EU:C:2016:838.

Judgment of the Court of Justice of the EU of 10 November 2016, *Commission v Greece*, C-504/14, EU:C:2016:847.

Judgment of the Court of Justice of the EU of 14 January 2016, *Commission v Bulgaria*, C-141/14, EU:C:2016:8.

Judgment of the Court of Justice of the EU of 14 January 2016, *Grüne Liga Sachsen*, C-399/14, EU:C:2016:10.

Judgment of the Court of the Court of Justice of the EU of 9 June 2016, *Nutrivet*, C-69/15, EU:C:2016:425 [Nutrivet]

Judgment of the Court of Justice of the EU of 21 July 2016, *Hilde Orleans and Others v Vlaams Gewest* [Orleans], C-387/15, EU:C:2016:583.

Judgment of the Court of Justice of the EU of 24 November 2016, *Commission v Spain*, C-461/14, EU:C:2016:895.

Judgment of the Court of Justice of the EU of 26 April 2017, *Commission v Germany*, C-142/16, EU:C:2017:301.

Judgment of the Court of Justice of the EU of 19 October 2017, *Vereniging Hoekschewaards Landschap v Staatssecretaris van Economische Zaken*, C-281/16, EU:C:2017:774.

Judgment of the Court of Justice of the EU of 1 June 2017, *Gert Folk*, C-529/15, EU:C:2017:419

Judgment of the Court of Justice of the EU of 13 July 2017, *Túrkevei Tejtermelő Kf*, C-129/16, EU:C:2017:547

Judgment of the Court of Justice of the EU of 20 December 2017, *Protect Natur-, Arten- und Landschaftsschutz Umweltorganisation v Bezirkshauptmannschaft Gmünd*, C-664/15, EU:C:2017:987

Judgment of the Court of Justice of the EU of 17 April 2018, *Commission vPoland (Białowieska Forest)*, C-441/17, EU:C:2018:255 [*Białowieska Forest*]

Judgment of the Court of Justice of the EU of 13 June 2018, *Deutscher Naturschutzring – Dachverband der deutschen Natur- und Umweltschutzverbände e.V v Bundesrepublik Deutschland*, Case C-683/16, EU:C:2018:433.

Judgment of the Court of Justice of the EU of 5 September 2019, *Commission v Italy* (*Bacterium Xylella fastidiosa*),C-443/18, EU:C:2019:676

Judgment of the Court of Justice of the EU of 5 March 2020, *OPR-Finance*, C-679/18, EU:C:2020:167

Judgment of the Court of Justice of the EU of 9 July 2020, *Naturschutzbund Deutschland - Landesverband Schleswig-Holstein e.V v Kreis Nordfriesland*, C-297/19, EU:C:2020:533

Judgment of the Court of Justice of the EU of 24 June 2021, *Commission v Spain*, C-559/19, EU:C:2021:512

Judgment of the Court of Justice of the EU of 29 June 2023, *Commission v Ireland*, C-444/21, EU:C:2023:524

Judgment of the Court of Justice of the EU of 21 September 2023, *Commission v Germany*, C-116/22, EU:C:2023:687

Judgment of the Court of Justice of the EU of 12 September 2024, *Elliniki Ornithologiki Etaireia and Others*, C-66/23, EU:C:2024:733

Judgment of the Court of Justice of the EU of 14 November 2024, *Commission v Germany*, C-47/23, EU:C:2024:954

Table of National Case Law

Germany

BVerfG, Judgment of the Second Senate of 30 June 2009 - 2 BvE 2/08 -, paras. 1-421[online via: http://www.bverfg.de/e/es20090630_2bve000208en.html, accessed on 18 May 2025]

LG Hanau, Unerlaubtes Betreiben von Anlagen - *Alkem-Urteil*, Urteil vom 12.11.1987 - 6 Js 13470/84 KLs Hanau, NJW 1988, 571.

Austria

Decision of 22 December 2016 of the Court of Appeal (Revisionsgericht), GZ 6Ob229/16v, on the appeal of the plaintiff against the decision of the Regional Court of Steyr as Court of Appeal of 30 August 2016, GZ 1 R 173/16h-15 [online via: https://ris.bka.gv.at/Dokument.wxe?Abfrage=Justiz&Dokumentnummer=JJT_20161222_OGH0002_0060OB00229_16V0000_000&Suchworte=RS0023122, accessed on 18 May 2025].

Table of National Parliamentary Documents and Official Communications

Noll, A. et al., *Schriftliche Anfrage der Abgeordneten Dr. Alfred J. Noll, Kolleginnen und Kollegen an den Bundesminister für Verfassung, Reformen, Deregulierung und Justiz betreffend Umweltschutz durch Strafrecht vom 03. Juli 2018* (2018) https://www.parlament.gv.at/PAKT/VHG/XXVI/J/J_01467/index.shtml accessed 30 April 2025, [Austrian Parliament].

Bundesminister für Verfassung, Reformen, Deregulierung und Justiz Dr Josef Moser, *Anfragebeantwortung zu der schriftlichen Anfrage (1467/J) der Abgeordneten Dr Alfred J Noll, Kolleginnen und Kollegen an den Bundesminister für Verfassung, Reformen, Deregulierung und Justiz betreffend Umweltschutz durch Strafrecht vom 21.9.2018* (2018) https://www.parlament.gv.at/PAKT/VHG/XXVI/AB/AB_01455/index.shtml accessed 30 April 2025.

Bibliography

Short forms used for repeated citations in footnotes are indicated in square brackets at the end of each entry.

Books and Edited Volumes

Bergkamp, L., *Liability and Environment: Private and Public Law Aspects of Civil Liability for Environmental Harm in an International Context* (Kluwer Law International 2001) [Bergkamp, *Liability and Environment*].

Bergkamp, L. and van Bergeijk, A., *Scope of the ELD Regime,* in: B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (Oxford University Press 2013) [Bergkamp & van Bergeijk, *Scope of the ELD*].

Bergkamp, L. and van Bergeijk, A., *Exceptions and Defences*, in: B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (Oxford University Press 2013) [Bergkamp & van Bergeijk, *Exceptions and Defences*].

Bigham, G.N., Gard, N.W., Monti, C. and Pozzi, C., *The Remediation Regimes*, in: B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (Oxford University Press 2013) 80 [Bigham et al., *The Remediation Regimes*].

Birnie, P., Boyle, A. and Redgwell, C., *International Law and the Environment* (3rd edn, Oxford University Press 2009) [Birnie et al., *International Law and the Environment*].

Born, C-H., Cliquet, A., Schoukens, H., Misonne, D. & Van Hoorick, G. (Eds) (2015) *The Habitats Directive in its EU Environmental Law Context: European Nature's Best Hope?* Routledge. Routledge Research in EU Law.

Brans, E., *Liability for Damage to Public Natural Resources* (Kluwer Law International 2001) [Brans].

Brans, E., *Fundamentals of Liability for Environmental Harm under the ELD*, in B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (Oxford University Press 2013) 31–50 [Brans, *Fundamentals of Liability*].

Clément, M., *Global Objectives and Scope of the Habitats Directive*, in: C-H Born, A Cliquet, H Schoukens, D Misonne and G Van Hoorick (eds), *The Habitats Directive in its EU Environmental Law Context: European Nature's Best Hope?* (Routledge 2015) [Clément, *Global Objectives and Scope*].

Cichowski, R. A., *The European Court and Civil Society: Litigation, Mobilization, and Governance* (2007, Cambridge: Cambridge University Press) [Cichowski, *The European Court and Civil Society*].

Cliquet, A., *About Blanket Bogs, Brown Bears, and Oak Forests: Case Law of the European Court of Justice on Article 6, §2 of the Habitats Directive* (2015) in: Born, C.H. & Jongen, F. (eds.), *D'Urbanisme et d'Environnement: Liber Amicorum Francis Haumont*, pp. 541-542 [Cliquet, *About Blanket Bogs and Brown Bears*].

Colantoni, L. & Bianchi, M., *Fighting Environmental Crime in Europe Preliminary Report* (2020) https://www.iai.it/sites/default/files/ambitus_pr.pdf accessed 1 May 2025. [Colantoni & Bianchi, *Fighting Environmental Crime in Europe Preliminary Report*]

Collantes, J.L., *The Convention on the Protection of the Environment through Criminal Law: Legislative Obligations for the States* (2001) *Revista electronica de derecho ambiental* 2001:6, http://huespedes.cica.es/gimadus/collantes.html accessed 1 May 2025. [Collantes, *Protection of the Environment through Criminal Law*]

De Sadeleer, N., *Environmental Principles: From Political Slogans to Legal Rules* (2002, Oxford University Press, Oxford) [De Sadeleer, *Environmental Principles*].

De Sadeleer, N., 'The Polluter-Pays Principle in EU Law – Bold Case Law and Poor Harmonisation' in IL Backer, OK Fauchald and C Voigt (eds), *Pro Natura: Festskrift til Hans Christian Bugge på 70-årsdagen 2. mars 2012* (2012, Universitetsforlaget) 405–419 [De Sadeleer, *Polluter-Pays Principle*].

De Smedt, K., *Environmental Liability in a Federal System: A Law and Economics Analysis* (2007, Intersentia) [De Smedt, *Environmental Liability in a Federal System*].

Farmer, A., Faure, M.G. and Vagliasindi, G.M. (eds), *Environmental Crime in Europe* (2017, Hart Publishing) Oxford; Portland, Oregon [online] [Farmer, Faure & Vagliasindi (eds), *Environmental Crime in Europe*].

Farmer, A., *Environmental Crime in Europe: State of Affairs and Future Perspectives*, in: A Farmer, MG Faure and GM Vagliasindi (eds), *Environmental Crime in Europe* (2017, Hart Publishing) Oxford; Portland, Oregon [online] [[Farmer, 'Environmental Crime: State of Affairs'].

Faure, M., *Criminal Liability for Exploitation of Natural Resources*, in: S Alam, J H Bhuiyan and J Razzaque (eds), *International Natural Resources Law, Investment and Sustainability*, vol 1 (1st edn, Routledge 2018) 435–52 [Faure, *Criminal Liability for Exploitation of Natural Resources*].

Faure, M. and Partain, R., *Environmental Law and Economics: Theory and Practice* (Cambridge University Press 2019) [Faure & Partain, *Environmental Law and Economics*].

Fogleman, V, *The Threshold for Liability for Ecological Damage in the EU: Mixing Environmental and Conservation Law*, in: Born, C-H, Cliquet, A, Schoukens, H, Misonne, D & Van Hoorick, G (eds), *The Habitats Directive in Its EU Environmental Law Context: European Nature's Best Hope?* (Routledge 2015) [Fogleman, *Threshold for Liability in the EU*].

Fuentes Osorio, J.L. (2017) *Environemntal Criminal Law in Spain*, in: A Farmer, MG Faure and GM Vagliasindi (eds), Environmental Crime in Europe (2017, Hart Publishing) Oxford; Portland, Oregon [online] [[Fuentes Osorio, *Environemntal Criminal Law in Spain*].

Goldsmith, B. and Bergkamp, L., *The EU Environmental Liability Directive: A Commentary* (2013, Oxford University Press) [Goldsmith & Bergkamp, ELD Commentary].

Gard, N. and Desvousges, W.H., "Technical and Economic Issues and Practices in ELD Application" in B. Goldsmith and L. Bergkamp (eds), The EU Environmental Liability Directive: A Commentary (2013, Oxford University Press) [Gard & Desvousges, *Technical and Economic Issues and Practices*].

Hecker, B., *Europäisches Strafrecht* (5th ed, 2015, Springer Berlin Heidelberg) [Hecker, Europäisches Strafrecht].

Hedemann-Robinson, M., *Enforcement of European Union Environmental Law: Legal Issues and Challenges* (2nd ed, 2015, Routledge) [Hedemann-Robinson, *EU Environmental Law Enforcement: Legal Issues*].

Heger, M., *Die Europäisierung des deutschen Umweltstrafrechts* (2009, Mohr Siebeck) [Heger, *Europäisierung des Umweltstrafrechts*].

Higgins, P., *Eradicating Ecocide: Laws and Governance to Stop the Destruction of the Planet*, Shepheard-Walwyn Ltd, London (2010) [Higgins, *Eradicating Ecocide*].

Jackson, A. L. R., *Conserving Europe's Wildlife: Law and Policy of the Natura 2000 Network of Protected Areas* (1st ed, 2018, Routledge) [Jackson, *Conserving Europe's Wildlife*].

Jordan, A. and Tosun, J., *Policy Implementation*, in: Jordan, A. and Adelle, C. (eds), *Environmental Policy in the EU: Actors, Institutions and Processes* (3rd ed, 2013, Routledge, London) [Jordan & Tosun, Policy Implementation in Environmental Policy in the EU].

Kieß, C., *Die Sanierung von Biodiversitätsschäden nach der europäischen Umwelthaftungsrichtlinie* (2008, Springer-Verlag Berlin Heidelberg) [Kieß, Biodiversitätsschäden und Umwelthaftung].

Kingston, S. (ed), *European Perspectives on Environmental Law and Governance* (2013, Routledge, London) [Kingston, *European Environmental Law and Governance*].

Kingston, S., *Mind the Gap: Difficulties in Enforcement and the Continuing Unfulfilled Promise of EU Environmental Law*, in: Kingston, S. (ed), *European Perspectives on*

Environmental Law and Governance (1st ed, 2013, Routledge, London) [Kingston, Mind the Gap].

Krämer, L., *EU Environmental Law* (2011, Sweet & Maxwell, London) [Krämer, *EU Environmental Law*].

Krämer, L., *Implementation and Enforcement of the Habitats Directive*, in: C-H Born, A Cliquet, H Schoukens, D Misonne and G Van Hoorick (eds), *The Habitats Directive in its EU Environmental Law Context: European Nature's Best Hope?* (Routledge 2015) [Krämer, *Implementation of the Habitats Directive*].

Leblois-Happe, J. and Frinchaboy, J., *Länderbericht Frankreich*, in: Satzger, H. (ed), *Harmonisierung strafrechtlicher Sanktionen in der Europäischen Union* (1st ed, 2020, Nomos, Schriften zum Internationalen und Europäischen Strafrecht, vol. 41), https://doi.org/10.5771/9783748902102-743 accessed 1 May 2025 [Leblois-Happe & Frinchaboy, Länderbericht Frankreich].

Linder, B., Neumann, L. and Pohlmann, S., *Comparative Conclusion*, in: Satzger, H. (ed), *Harmonisierung strafrechtlicher Sanktionen in der Europäischen Union* (1st ed, 2020, Nomos, Schriften zum Internationalen und Europäischen Strafrecht, vol. 41), https://doi.org/10.5771/9783748902102-743 accessed 1 May 2025 [Linder et al, Comparative Conclusion].

Lipton, J, Özdemiroğlu, E, Le Jeune, K and Peers, J, *Resource Equivalency Methods in the European Union: A 'Toolkit' for Calculating Environmental Liability*, in: Lipton, J., Özdemiroğlu, E., Le Jeune, K. and Peers, J., *Equivalency Methods for Environmental Liability Assessing Damage and Compensation Under the European Environmental Liability Directive* (1st ed, 2018, Springer, Netherlands) [Lipton et al, *Resource Equivalency Toolkit*].

McGillivray, D., *Compensatory Measures under Article 6(4) of the Habitats Directive: No Net Loss for Natura 2000?*, in: Born, C.-H., Cliquet, A., Schoukens, H., Misonne, D. and Van Hoorick, G. (eds), *The Habitats Directive in Its EU Environmental Law Context* (2015, Routledge) [McGillivray, *No Net Loss for Natura 2000*].

Micchiché, R., *Environmental Liability – First Step Towards "Making the Polluters Pay"*, in: Scheuer, S. (ed.), *EU Environmental Policy Handbook: A Critical Analysis of EU Environmental Legislation – Making It Accessible to Environmentalists and Decision Makers* (2005, European Environmental Bureau), 197–204, https://www.nile-center.com/uploads/KCYWKKGF5763QNE.pdf accessed 1 May 2025 [Micchiché, Environmental Liability in EU Policy Handbook].

Pereira, R., *Environmental Criminal Liability and Enforcement in European and International Law*, Queen Mary Studies in International Law, Brill (2015) [Pereira, *Environmental Criminal Liability*].

Ramao, C., *The Added Value of the Habitats Directive*, in: Born, C-H., Cliquet, A., Schoukens, H., Misonne, D., & Van Hoorick, G. (Eds.), *The Habitats Directive in its EU Environmental Law Context: European Nature's Best Hope?* Routledge, Routledge Research in EU Law (2015) [Ramao, *Added Value Habitats Directive*].

Reindl-Krauskopf, S. & Salimi, F., *Umweltstrafrecht: Eine systematische Darstellung des gerichtlichen Umweltstrafrechts*, Verlag Österreich (2013) [Reindl-Krauskopf & Salimi, Umweltstrafrecht].

Rose, J., *Europe's Pollution Liability Debate Heats Up*, Environmental Science & Technology 28:5 (1994), 215A [Rose, *Pollution Liability Debate*].

Sands, P. & Peel, J., *Principles of International Environmental Law*, Cambridge University Press (3rd ed.) (2012) [Sands & Peel, *Principles of International Environmental Law*].

Satzger, H. (Ed.), *Harmonisierung strafrechtlicher Sanktionen in der Europäischen Union* (1st ed.), Series: Schriften zum Internationalen und Europäischen Strafrecht, 41 (2020) [Satzger, *Harmonisierung strafrechtlicher Sanktionen*].

Schoukens, H., *Non-Regression Clauses in Times of Ecological Restoration Law: Article 6(2) of the EU Habitats Directive as an Unusual Ally to Restore Natura 2000?*, *Utrecht Law Review* 13:1 (2017), 124–154 [Schoukens, *Non-Regression and Article 6(2)*].

Sina, S., *Environmental Criminal Law in Germany*, in: A Farmer, MG Faure and GM Vagliasindi (eds), Environmental Crime in Europe (2017, Hart Publishing) Oxford; Portland, Oregon [online] [Sina, *Environmental Criminal Law in Germany*].

Smith, M., Centralised Enforcement, Legitimacy and Good Governance in the EU (Routledge, London 2009).[Smith, *Centralised Enforcement*.]

Stuffmann, C., *The European Community and EECONET*, in: Bennett, G. (Ed.), *Conserving Europe's Natural Heritage: Towards a European Ecological Network*, London, Graham and Trotman (1994) [Stuffmann, *European Community and EECONET*].

Telesetsky, A., Cliquet, A. & Akhtar-Khavari, A., *Ecological Restoration in International Environmental Law*, London, Routledge (2017) [Telesetsky et al., *Ecological Restoration in International Environmental Law*].

Van Calster, G. and Reins, L., *The ELD's background*, in: B Goldsmith and L Bergkamp (eds), *The EU Environmental Liability Directive: A Commentary* (2013, Oxford University Press) Oxford, 9–30 [Van Calster & Reins, *The ELD's Background*].

Vagliasindi, G. M., *Environmental Criminal Law in Italy*, in: A Farmer, MG Faure and GM Vagliasindi (eds), Environmental Crime in Europe (2017, Hart Publishing) Oxford; Portland, Oregon [online] [Vagliasindi, *Environmental Criminal Law in Italy*]

Journal Articles

Baldock D., *The Status of Special Protection Areas for the Protection of Wild Birds* (1992) 4(1) *Journal of Environmental Law* 139, https://heinonline.org accessed 30 April 2025 [Baldock, *Status of Special Protection Areas*].

Baldwin, C. and Lodge, M., *Understanding Regulation: Theory, Strategy, and Practice* (2nd edn, Oxford University Press 2012) [Baldwin & Lodge, *Understanding Regulation*].

Becker, G., *Crime and Punishment: An Economic Approach* (1968) 76(2) *Journal of Political Economy* 69, http://www.jstor.org/stable/1830482 accessed 30 April 2025 [Becker, *Crime and Punishment*].

Betlem, G., *Scope and Defences of the 2004 Environmental Liability Directive: Who is Liable for What?* (2005) 6 *ERA Forum* 376, https://doi.org/10.1007/s12027-005-0024-2 accessed 30 April 2025 [Betlem, *ELD Scope and Defences*].

Ceballos G. et al., *Accelerated Modern Human-Induced Species Losses: Entering the Sixth Mass Extinction* (2015) 1(5) *Science Advances* https://www.science.org/doi/10.1126/sciadv.1400253 accessed 30 April 2025, [Ceballos et al., *Species Losses*].

Clarke, C., *The Proposed EC Liability Directive: Half-Way through Co-Decision* (2003) 12(3) *Review of European Community and International Environmental Law (RECIEL)* 261 [Clarke, *The Proposed EC Liability Directive*].

De Sadeleer, N., *The Birds, Habitats, and Environmental Liability Directives to the Rescue of Wildlife Under Threat* (2007) 7 *Yearbook of European Environmental Law* 36–75 https://ssrn.com/abstract=2361867 accessed 1 May 2025, [De Sadeleer, *Wildlife under Threat*].

De Sadeleer, N., *Preliminary Reference on Environmental Liability and the Polluter Pays Principle: Case C-534/13, Fipa* (2015) 24(2) *Review of European, Comparative & International Environmental Law* 232–237 [De Sadeleer, *Fipa Judgment*].

De Vos J et al, Estimating the Normal Background Rate of Species Extinction (2014) 29(2) *Conservation Biology: The Journal of the Society for Conservation Biology*, https://conbio.onlinelibrary.wiley.com/doi/ftr/10.1111/cobi.12380 accessed 26 April 2025 [De Vos et al.].

Epstein, Y., *Population Based Species Management across Legal Boundaries: The Bern Convention, Habitats Directive, and the Gray Wolf in Scandinavia* (2013) 25(4) *Georgetown International Environmental Law Review* 221–244, [Epstein, *Population-Based Species Management*].

Epstein, Y., López-Bao, J.V. and Chapron, G., *A Legal-Ecological Understanding of Favorable Conservation Status for Species in Europe* (2015) *Conservation Letters,* [Epstein, López-Bao & Chapron, *Favorable Conservation Status*].

Epstein,Y., *Favourable Conservation Status for Species: Examining the Habitats Directive's Key Concept Through a Case Study of the Swedish Wolf* (2016) 28(2) *Journal of Environmental Law (Oxford)* [Epstein, *Favourable Conservation Status, (Swedish Wolf)*].

Eskenazi, B., Warner, M., Brambilla, P., Signorini, S., Ames, J. and Mocarelli, P., *The Seveso Accident: A Look at 40 Years of Health Research and Beyond* (2018) 121(Part 1) *Environment International*, 71–84, https://doi.org/10.1016/j.envint.2018.08.051 accessed 1 May 2025. [Eskenazi et al., *Seveso Accident*]

Faure, M.G., *Instruments for Environmental Governance: What Works?* (Paper presented at the Annual Colloquium of the Academy for Environmental Law of the IUCN, Wuhan, 1–5 November 2009).

Faure, M.G., *Environmental Liability* in *Tort Law and Economics* (Edward Elgar 2009) 247–286, https://doi.org/10.2139/ssrn.1503405 accessed 1 May 2025.

Faure, M.G., *Vague Notions in Environmental Criminal Law* (Part 1) (2010) 18(4) *Environmental Liability* 119–133 [Faure, Vague Notions (Part 1)].

Faure, M.G., *Vague Notions in Environmental Criminal Law* (Part 2) (2010) 18(5) *Environmental Liability* 163–170 [Faure, *Vague Notions (Part 2)*].

Faure, M. G., *Effective, Proportional and Dissuasive Penalties in the Implementation of the Environmental Crime and Shipsource Pollution Directives: Questions and Challenges* (2010) *European Energy and Environmental Law Review* 256–278 [Faure, *Effective Penalties*].

Faure, M.G., *The Implementation of the Environmental Crime Directives in Europe* (2011) Ninth International Conference on Environmental Compliance and Enforcement Brussels [Faure, *Implementation of Environmental Crime Directives*].

Faure, M.G. & Svatikova, K., *Criminal or Administrative Law to Protect the Environment? Evidence from Western Europe* (2012) 24(2) *Journal of Environmental Law* 253–286 [Faure & Svatikova, *Criminal or Administrative Law*]

Faure, M.G., *The Development of Environmental Criminal Law in the EU and its Member States* (2017) 26(2) Review of European, Comparative & International Environmental Law 139–146 [Faure, *Development of Environmental Criminal Law*].

Faure, M., *The Evolution of Environmental Criminal Law in Europe: A Comparative Analysis* in Farmer, A, Faure, M G and Vagliasindi, G M (eds), *Environmental Crime in Europe* (2017, Hart Publishing) Oxford; Portland, Oregon [Faure, *Evolution of Environmental Criminal Law*].

Faure, M., *The Revolution in Environmental Criminal Law in Europe* (2017) 35(2) *Virginia Environmental Law Journal* 321–356 [Faure, *Revolution in Environmental Criminal Law*].

Fogleman, V., *Enforcing the Environmental Liability Directive: Duties, Powers and Self-Executing Provisions* (2006) 4 *Environmental Liability* 127–146 [Fogleman, *Enforcing the ELD*].

Fogleman, V., *The Duty to Prevent Environmental Damage in the Environmental Liability Directive; a Catalyst for Halting the Deterioration of Water and Wildlife* (2019) 20 ERA Forum 707–721 [Fogleman, Duty to Prevent Environmental Damage].

Fogleman, V., *Biodiversity Damage from Authorised Activities: The Polluter Pays and Precautionary Principles and the Significance Threshold in the Environmental Liability Directive* (2020) 26(2) Environmental Liability 35–54, http://orca.cardiff.ac.uk/id/eprint/136318 accessed 13 August 2021 [Fogleman, Biodiversity Damage from Authorised Activities].

Fuchs, H., Zerbes, I. and Stricker, M., *Länderbericht Österreich* in H Satzger (ed), *Harmonisierung strafrechtlicher Sanktionen in der Europäischen Union* (1st edn, 2020) 41 Schriften zum Internationalen und Europäischen Strafrecht, https://doi.org/10.5771/9783748902102-743 accessed 1 May 2025 [Fuchs, Zerbes & Stricker, Länderbericht Österreich].

Hall, M. E., *Environmental Law in the European Union: New Approach for Enforcement* (2007) 20 Tulane Environmental Law Journal 277–304 [Hall, *Environmental Law EU Enforcement*].

Hardin, G., *The Tragedy of the Commons* (1968) 162 Science 1243–1248 [Hardin, Tragedy of the Commons].

Harman, J., *Environmental Regulation in the 21st Century* (2004) 6 Environmental Law Review 141–160 [Harman, Environmental Regulation 21st Century].

Hedemann-Robinson, M., *Enforcement of EU Environmental Law: Taking Stock of the Evolving Union Legal Framework* (2015) 5 European Energy and Environmental Law 115–129 [Hedemann-Robinson, *Enforcement of EU Environmental Law: Taking Stock*].

Hedemann-Robinson, M., *Environmental Inspections and the EU: Securing an Effective Role for a Supranational Union Legal Framework* (2017) 6(1) Transnational Environmental Law 31–58 [Hedemann-Robinson, *Environmental Inspections and the EU*].

Kingston, S., Wang, Z., Alblas, E. *et al*., *The democratisation of European nature governance 1992–2015: introducing the comparative nature governance index* (2022) 22 Int Environ Agreements, 27–48 [Kingston et al., *The democratisation of European nature governance 1992–2015*]

Kingston, S., Wang, Z., Alblas, E. et al., *Europe's nature governance revolution: harnessing the shadow of heterarchy* (2022) 22 Int Environ Agreements, 793–824. [Kingston et al., *Europe's nature governance revolution*]

Krämer, L., *Discussions on Directive 2004/35 Concerning Environmental Liability*, *Journal for European Environmental Law & Planning* 5 (2005), 250–256 [Krämer, *Directive 2004/35 and Environmental Liability*].

Krämer, L., *The European Commission's Opinions under Article 6(4) of the Habitats Directive*, *Journal of Environmental Law* 21(1) (2009), 59–85 [Krämer, *Article 6(4) Opinions*].

Lafuite, A.-S., Denise, G. and Loreau, M., *Sustainable Land-use Management Under Biodiversity Lag Effects*, *Ecological Economics* 154 (2018), 272–281 [Lafuite et al, *Sustainable Land-use Management and Biodiversity Lag Effects*].

Lee, M., *The Changing Aims of Environmental Liability*, *Environmental Law and Management* 14 (2002), 189–196 [Lee, Changing Aims of Environmental Liability].

Mandiberg, S. F. and Faure, M. G., *A Graduated Punishment Approach to Environmental Crimes: Beyond Vindication of Administrative Authority in the United States and Europe*, *Columbia Journal of Environmental Law* 34:2 (2009), 447–511 [Mandiberg & Faure, Graduated Punishment Approach].

McGillivray, D., *Compensating Biodiversity Loss: The EU Commission's Approach to Compensation under Article 6 of the Habitats Directive*, *Journal of Environmental Law* 24:3 (2012), 417–450 [McGillivray, *Compensating Biodiversity Loss*].

Nollkaemper, A., *Habitat protection in European Community law: evolving conceptions of balance of interests*, Journal of Environmental Law 9:2 (1997), 271–286, [Nollkaemper, *Habitat Protection in EC Law*].

Ogus, A. & Abbot, C., *Sanctions for pollution: do we have the right regime?* Journal of Environmental Law 14:3 (2002), 283–298, [Ogus & Abbot, *Sanctions for Pollution*].

Orlando, E., *From Domestic to Global? Recent Trends in Environmental Liability from a Multi-level and Comparative Law Perspective*, *Review of European, Comparative & International Environmental Law* 2015:24:3, pp. 289–303, [Orlando, Environmental Liability Trends].

Pimm, S. et al., *The Biodiversity of Species and Their Rates of Extinction, Distribution, and Protection*, Science (New York, N.Y.) 344:6187 (2014) [online via: https://www.science.org/doi/10.1126/science.1246752, accessed 27 April 2025] [Pimm et al., *Biodiversity of Species and Extinction Rates*].

Quétier, F. & Lavorel, S., *Assessing Ecological Equivalence in Biodiversity Offset Schemes: Key Issues and Solutions*, Biological Conservation 144:12 (2011), 2991–2999 [online via:

https://doi.org/10.1016/j.biocon.2011.09.002, accessed 1 May 2025] [Quétier & Lavorel, *Ecological Equivalence in Biodiversity Offsets*].

Rasmusen, E., *Stigma and Self-Fulfilling Expectations of Criminality*, The Journal of Law & Economics 39:2 (1996) [Rasmusen, *Stigma and Criminality*].

Regnery, B., Denis, C. & Kerbiriou, C., Offsets and Conservation of the Species of the EU Habitats and Birds Directives, *Conservation Biology: The Journal of the Society for Conservation Biology* 27:6 (2013), 1335-1343 [Regnery et al., *Offsets and Conservation of Species*].

Reid, C., Between Priceless and Worthless: Challenges in Using Market Mechanisms for Conserving Biodiversity, *Transnational Environmental Law* 2:2 (2012), 217-233 [Reid, *Market Mechanisms for Conserving Biodiversity*].

Rehbinder, E., *Implementation of the Environmental Liability Directive in Germany*, *Environmental Liability* 15:5 (2007), 199-203 [Rehbinder, Environmental Liability Directive in Germany].

Ruga, Riva., C, *Il decreto legislativo di recepimento delle direttive comunitarie sulla tutela penale dell'ambiente: nuovi reati, nuova responsabilità degli enti da reato ambientale* (2011), https://archiviodpc.dirittopenaleuomo.org/d/836-il-decreto-legislativo-di-recepimento-delle-direttive-comunitarie-sulla-tutela-penale-dell-ambiente accessed 1 May 2025 [Ruga Riva, *Decreto legislativo di recepimento*].

Satzger, H., *Der Mangel an Europäischer Kriminalpolitik – Anlass für das Manifest der internationalen Wissenschaftlergruppe „European Criminal Policy Initiative"*, Zeitschrift für Internationale Strafrechtsdogmatik ZIS 12 (2009), 691-694 [Satzger, *Mangel an Europäischer Kriminalpolitik*].

Satzger, H. et al. (European Criminal Policy Initiative), *Manifest zu Europäischen Kriminalpolitik*, Zeitschrift für Internationale Strafrechtsdogmatik ZIS 12 (2009), 691-706 [Satzger et al., Manifest zu Europäischen Kriminalpolitik].

Satzger, H. et al. (European Criminal Policy Initiative), A Manifesto on European Criminal Policy, *Zeitschrift für Internationale Strafrechtsdogmatik (ZIS)* 12 (2009), 707–716 [Satzger et al., *Manifesto on European Criminal Policy*].

Satzger, H., The Harmonisation of Criminal Sanctions in the European Union – A New Approach, *eucrim – The European Criminal Law Associations' Forum* 2 (2019), 115-119 [Satzger, *Harmonisation of Criminal Sanctions*].

Saurer, J., Das Verschuldenserfordernis im Umweltschadensgesetz, *Natur + Recht* 39:5 (2017), 289–292 [Saurer, *Verschuldenserfordernis im Umweltschadensgesetz*].

Saurer, J., Die Verwaltungsakzessorietät des Umweltstrafrechts – Eine Koordinationsstrategie im Wandel, *Die Verwaltung* 3 (2017), 339–365 [Saurer, *Verwaltungsakzessorietät des Umweltstrafrechts*].

Schoukens, H., The Ruling of the Court of Justice in *Sweetman*: How to Avoid a Death by a Thousand Cuts?, *ELNI* 2014:1, 2–12 [Schoukens, *Sweetman Ruling and Habitat Assessment*].

Schwabach, A., The Sandoz Spill: The Failure of International Law to Protect the Rhine from Pollution, *Ecology Law Quarterly* 16:2 (1989), 443–480 [Schwabach, *Sandoz Spill and International Law*].

Shavell, S., *Liability for Harm versus Regulation of Safety*, Journal of Legal Studies 13:2 (1984), 357-374 [Shavell, *Liability for Harm versus Regulation of Safety*].

Stavins, R., *The Problem of the Commons: Still Unsettled after 100 Years*, American Economic Review 101:1 (2011), 81–108 [Stavins, *Problem of the Commons*].

Steffen, W. et al., *The Anthropocene: Conceptual and Historical Perspectives*, Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences 369 (2011), 842–867 [Steffen et al., *The Anthropocene*].

Steffen, W. et al., *The Trajectory of the Anthropocene: The Great Acceleration*, The Anthropocene Review 2:1 (2015), 81–98 [Steffen et al., *Great Acceleration*].

Van Den Broek, G. M., *Environmental Liability and Nature Protection Areas: Will the EU Environmental Liability Directive Actually Lead to the Restoration of Damaged Natural Resources?* (2009) 5(1) *Utrecht Law Review* 117–131 [Van Den Broek, *Environmental Liability and Nature Protection Areas*].

Van Hoorick, G., *Compensatory Measures in European Nature Conservation Law* (2014) 10(2) *Utrecht Law Review* 161–171 [Van Hoorick, *Compensatory Measures*].

Van Zeben, J A W, The Untapped Potential of Horizontal Private Enforcement within EC Environmental Law (2008) The Georgetown Int'l Environmental Law Review 22 241, Amsterdam Center for Law & Economics Working Paper No 2008-09 https://ssrn.com/abstract=1320080 accessed 1 May 2025 [Van Zeben, *Untapped Potential*].

Vercher, A., *The Use of Criminal Law for the Protection of the Environment in Europe: Council of Europe Resolution (77) 28*, (1990) 10(3) *Northwestern Journal of International Law & Business* 442–459 [Vercher, *Criminal Law and Environment in Europe*].

Verschuuren, J., *Shellfish for Fishermen or for Birds? Article 6 Habitats Directive and the Precautionary Principle* (2005) 17(2) *Journal of Environmental Law* 265–283 [Verschuuren, *Article 6 Habitats Directive and the Precautionary Principle*].

Winter, G., Jans, J H, Macrory, R. and Krämer, L., *Weighing Up the EG Environmental Liability Directive* (2008) 20(2) *Journal of Environmental Law* 163–191 [Winter et al, *Weighing Up the ELD*].

Studies & Reports

Global Assessments and Strategic Reports on Biodiversity and Ecosystem Services

Dasgupta, P., *The Economics of Biodiversity: The Dasgupta Review* (2021, HM Treasury, London), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957291/Dasgupta_Review_-_Full_Report.pdf accessed 1 May 2025 [Dasgupta, *Economics of Biodiversity*].

IPBES, *Regional Assessment Report on Biodiversity and Ecosystem Services for Europe and Central Asia*, Rounsevell, M., Fischer, M., Torre-Marin Rando, A. and Mader, A. (eds) (2018, Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn), https://files.ipbes.net/ipbes-web-prod-public-files/2018_eca_full_report_book_v5_pages_0.pdf accessed 1 May 2025 [IPBES, Europe and Central Asia Assessment].

IPBES, *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, Brondizio, E. S., Settele, J., Díaz, S. and Ngo, H. T. (eds) (2019, IPBES Secretariat, Bonn), https://ipbes.net/global-assessment accessed 1 May 2025 [IPBES, Global Assessment Report].

International Resource Panel, *Global Resources Outlook 2019: Natural Resources for the Future We Want. A Report of the International Resource Panel* (2019, United Nations Environment Programme, Nairobi), https://www.resourcepanel.org/sites/default/files/documents/document/media/unep_252_global_resource_outlook_2019_web.pdf accessed 1 May 2025 [IRP, Global Resources Outlook 2019].

Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: Synthesis*, Island Press, Washington, DC (2005), https://www.millenniumassessment.org/en/Synthesis.html accessed 1 May 2025 [Millennium Ecosystem Assessment, *Ecosystems and Human Well-being*].

WWF, *Living Planet Report 2020 - Bending the Curve of Biodiversity Loss*, Almond, R E A, Grooten M and Petersen T (eds), WWF, Gland, Switzerland (2020) https://www.wwf.org.uk/sites/default/files/2020-09/LPR20_Full_report.pdf accessed 15 March 2025 [WWF, *Living Planet Report 2020*].

Institutional and Strategic Studies on Environmental Crime

EnviCrimeNet, *Intelligence Project on Environmental Crime* (2015, The Hague), https://www.europol.europa.eu/cms/sites/default/files/documents/ipec_report_on_environmental_crime_in_europe_0.pdf accessed 1 May 2025 [EnviCrimeNet, Intelligence Project].

Eurojust, *Strategic Project on Environmental Crime* (2014), https://www.eurojust.europa.eu/sites/default/files/Publications/Reports/environmental-crime-report_2014-11-21-EN.pdf, accessed on 1 May 2025 [Eurojust, Strategic Project on Environmental Crime].

Europol, *Environmental Crime in the Age of Climate Change: Strategic Threat Assessment* (Europol 2022), https://www.europol.europa.eu/cms/sites/default/files/documents/Environmental_Crime_in_the_Age_of_Climate_Change_threat_assessment_2022.pdf?utm_source=chatgpt.com, accessed 1 May 2025 [Europol, *Environmental Crime*].

Faure, M., *Steckbrief Belgien*, in: Sina, S (ed), *Steckbriefe zur Anwendung des Umwelt(straf)rechts und der Zusammenarbeit der dafür zuständigen Behörden in ausgewählten EU-Staaten* (2020) [online] https://www.umweltbundesamt.de/publikationen/steckbriefe-zur-anwendung-des-umweltstrafrechts-der accessed 1 May 2025 [Faure, Steckbrief Belgien].

Gerstetter, C. et al., *Status quo und Weiterentwicklung des Umweltstrafrechts und anderer Sanktionen: Instrumente zur Verbesserung der Befolgung von Umweltrecht (Compliance), Abschlussbericht für das Umweltbundesamt* (2019), https://www.umweltbundesamt.de/publikationen/status-quo-weiterentwicklung-des-umweltstrafrechts, accessed 1 May 2025 [Gerstetter et al, Status quo Umweltstrafrecht].

Gerstetter, C., *Steckbrief Spanien*, in: Sina, S (ed), *Steckbriefe zur Anwendung des Umwelt(straf)rechts und der Zusammenarbeit der dafür zuständigen Behörden in ausgewählten EU-Staaten* (2020) [online] https://www.umweltbundesamt.de/publikationen/steckbriefe-zur-anwendung-des-umweltstrafrechts-der accessed 1 May 2025 [Gerstetter, *Steckbrief Spanien*].

Mederake, L., *Steckbrief Polen*, in: Sina, S (ed), *Steckbriefe zur Anwendung des Umwelt(straf)rechts und der Zusammenarbeit der dafür zuständigen Behörden in ausgewählten EU-Staaten* (2020) [online] https://www.umweltbundesamt.de/publikationen/steckbriefe-zur-anwendung-des-umweltstrafrechts-der accessed 1 May 2025 [Mederake, *Steckbrief Polen*].

IMPEL, *Nature Protection in Permitting and Inspection of Industrial Installations – Implementation of Art. 6(3) of the Habitats Directive (Phase 4): Roadmap for Planning Tool for Inspection of Natura 2000 Sites* (2017), https://www.impel.eu/contents/libraryfile/FR-2017-19-Habitats-Directive-Project-part-2-Roadmap-for-a-planning-tool.pdf accessed 1 May 2025 [IMPEL, *Habitats Directive Planning Tool*].

Seager, J. & Shears, T., *A Survey on Practitioners' Views about the Implementation Challenges with EU Environmental Legislation, Their Underlying Reasons and Ways to Improvement*, IMPEL (2017) https://www.impel.eu/contents/libraryfile/FR-2017-27-Implementation-Challenge-follow-up.pdf accessed 1 May 2025 [Seager & Shears, *Implementation Challenges with EU Environmental Law*].

Sina, S. et al., *Steckbriefe zur Anwendung des Umwelt(straf)rechts und der Zusammenarbeit der dafür zuständigen Behörden in ausgewählten EU-Staaten* (2020), https://www.umweltbundesamt.de/publikationen/steckbriefe-zur-anwendung-des-umweltstrafrechts-der accessed 1 May 2025 [Sina et al., *Umweltstrafrecht in EU-Staaten*].

Skinnider, E., Nwapi, C. & Cloutier de Repentigny, P., *Victims of Environmental Crime – Mapping the Issues* (2011), https://www.researchgate.net/publication/339252284_Victims_of_Environmental_Crime_-_Mapping_the_Issues accessed 1 May 2025] [Skinnider et al., *Victims of Environmental Crime*].

Stefes, C.H., *Steckbrief Dänemark*, in: Sina, S (ed), *Steckbriefe zur Anwendung des Umwelt(straf)rechts und der Zusammenarbeit der dafür zuständigen Behörden in ausgewählten EU-Staaten* (2020) [online] https://www.umweltbundesamt.de/publikationen/steckbriefe-zur-anwendung-des-umweltstrafrechts-der accessed 1 May 2025 [Stefes, *Steckbrief Dänemark*].

Torres Rosell, N. & Marquès Banqué, M., *Study on the Implementation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law* (2016), https://www.eufje.org/images/docPDF/Study-on-the-implementation-of-Directive-2008_99_ENEC_SEO_BirdLife_May2016.pdf accessed 7 July 2020 [Torres Rosell & Marquès Banqué, *Implementation of Directive 2008/99/EC*].

EFFACE Reports

Bianco, F., Lucifora, A. and Vagliasindi G.M., *Fighting Environmental Crime in France: A Country Report* (2015, University of Catania), https://efface.eu/publications accessed 1 May 2025 [Bianco, Lucifora & Vagliasindi, *EFFACE Country Report (France)*].

Bianco, F., Lucifora, A. and Vagliasindi G.M., *Fighting Environmental Crime in Italy: A Country Report* (2015, University of Catania), https://efface.eu/publications accessed 1 May 2025 [Bianco, Lucifora & Vagliasindi, *EFFACE Country Report (Italy)*].

Fajardo T, Fuentes J, Ramos I and Verdú J, *Fighting Environmental Crime in Spain: A Country Report* (2015, University of Granada), https://efface.eu/publications accessed 1 May 2025 [Fajardo et al, *EFFACE Country Report (Spain)*].

Fajardo, T., *Organised Crime and Environmental Crime: Analysis of EU Legal Instruments* (2015, University of Granada), https://efface.eu/publications accessed 1 May 2025 [Fajardo, *EFFACE Study on Organised Crime*].

Fajardo, T. and Fuentes, J., *The Aznalcóllar and the Kolontár Mining Accidents: A Case Study on Mining Accidents and the Criminal Responsibility of Operators and Administrations (EFFACE)* (2014, University of Granada and University of Jaén), https://efface.eu/publications accessed 1 May 2025 [Fajardo & Fuentes, *EFFACE Mining Accidents Study*].

Faure, M.G., Gerstetter, C., Sina, S. & Vagliasindi, G.M., *Instruments, Actors and Institutions in the Fight Against Environmental Crime* (2015) Study in the framework of the EFFACE research project, Berlin: Ecologic Institute, https://efface.eu/publications accessed 1 May 2025 [Faure, Gerstetter, Sina & Vagliasindi, *Instruments, Actors and Institutions*].

Faure, M.G. et al, *Conclusions and Recommendations of the Research Project "European Union Action to Fight Environmental Crime" (EFFACE)* (2016), https://efface.eu/publications accessed 1 May 2025 [Faure et al, *Conclusions and Recommendations of the EFFACE Research Project*].

Gerstetter, C. et al., *Environmental Crime and the EU: Synthesis of the Research Project "European Union Action to Fight Environmental Crime" (EFFACE)* (2016), https://efface.eu/publications accessed 1 May 2025 [Gerstetter et al, *EFFACE Environmental Crime and the EU - Synthesis*].

Salanitro, U., *Directive 2004/35/EC on Environmental Liability*, Study in the framework of the EFFACE research project, Catania: University of Catania (2015), https://www.efface.eu/publications accessed 1 May 2025 [Salanitro, *Environmental Liability Directive*].

Sina, S., *Fighting Environmental Crime in Germany: A Country Report*, Study in the framework of the EFFACE research project, Berlin: Ecologic Institute (2015), https://efface.eu/publications accessed 1 May 2025 [Sina, *Fighting Environmental Crime in Germany*].

Smith, L. & Klaas, K., *Networks and NGOs Relevant to Fighting Environmental Crime: Study in the Framework of the EFFACE Research Project*, Berlin: Ecologic Institute (2015), https://www.efface.eu/publications accessed 1 May 2025] [Smith & Klaas, *NGOs and Environmental Crime*].

Vagliasindi, G. M., *Directive 2008/99/EC on Environmental Crime and Directive 2009/123/EC on Ship-source Pollution. Study in the Framework of the EFFACE Research Project*, Catania: University of Catania (2015) https://efface.eu/publications accessed 1 May 2025 [Vagliasindi, *EFFACE Study on Environmental and Ship-source Crime*].

Vagliasindi, G. M., Lucifora, A. and Bianco, F., *Contribution to Conclusions and Recommendations on Environmental Crime: Environmental Liability. Study in the Framework of the EFFACE Research Project*, Catania: University of Catania (2016) https://efface.eu/publications accessed 1 May 2025 [Vagliasindi, Lucifora & Bianco, *Contribution on Environmental Liability*].

Working Papers

Allio, L. and Fandel, M.-H., *Making Europe Work: Improving Transposition, Implementation and Enforcement of EU Legislation*, EPC Working Paper No 25 (June 2006, European Policy Centre), https://www.epc.eu/en/Publications/Making-Europe-work-improving~232800, accessed 30 April 2025 [Allio & Fandel].

Bolt J., et al, *Maddison Project Database, Version 2018* (Maddison Project Working Paper No 10, University of Groningen 2018), https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2018?lang=en accessed 30 April 2025 [Bolt et al.]

UNDESA, *World Population Prospects: The 2017 Revision - Key Findings and Advance Tables*, Working Paper No ESA/P/WP/248, United Nations Department of Economic and Social Affairs, New York, NY (2017), https://desapublications.un.org/file/624/download accessed on 30 April 2025] [UNDESA, *World Population Prospects 2017*].

Doctoral Dissertations

Hedemann-Robinson, M., *Enforcement of European Union Environmental Law: An Investigation into Developments and Challenges Concerning the Union's Legal Framework for Addressing Non-Compliance* (2017, Doctor of Laws (LLD) thesis, University of Kent) [Hedemann-Robinson, *Addressing Non-Compliance*].

Liu, J., *Compensating Ecological Damage: Comparative and Economic Observations* [Doctoral Thesis, Maastricht University] (2013, Intersentia, Cambridge – Antwerp – Portland), https://cris.maastrichtuniversity.nl/en/publications/compensating-ecological-damage-comparative-and-economic-observati accessed 1 May 2025 [Liu, *Compensating Ecological Damage*].

Advocacy and Policy Position Papers on EU Environmental Law and Governance

BirdLife International, *BirdLife Position on Improvements Needed to Environmental Inspections Regimes in the European Union* (2013),

https://ornithologiki.gr/images/ekdoseis/pdf/2014_Improving_the_complaints_and_infringement_process.pdf, accessed 30 April 2025 [BirdLife International, *Inspections Regimes*].

BirdLife International, European Environmental Bureau, Friends of the Earth Europe and WWF, *The State of Implementation of the Birds and Habitats Directives in the EU – An Analysis by National Environmental NGOs in 18 Member States* (2018), https://eeb.org/library/the-state-of-implementation-of-the-birds-and-habitats-directives-in-the-eu-an-analysis-by-national-environmental-ngos-in-18-member-states/ accessed 30 April 2025 [BirdLife International et al., *State of BHD Implementation*]

ClientEarth, *Reviewing the Environmental Liability Directive: ClientEarth Recommendations* (2015) [ClientEarth, *Reviewing the ELD*].

ClientEarth, *National EUTR Penalties: Are They Sufficiently Effective, Proportionate, and Dissuasion?* (2018) [ClientEarth, *National EUTR Penalties*].
European Environmental Bureau, *Crime and Punishment* (2020), https://eeb.org/library/crime-and-punishment/ accessed 1 May 2025 [EEB, Crime and Punishment].

Eberlein, A. and Roller, G., *Application of the Environmental Liability Directive (ELD) in Practice: The German Experience* (Study commissioned by the European Environmental Bureau 2012) [Eberlein & Roller, German Experience of the ELD].

European Network Against Environmental Crime (ENEC), *Recommendations to Tackle Habitat Destruction in the European Union* (III European Workshop on Environmental Crime: Habitat Destruction, 26 February 2016), http://www.lawyersfornature.eu/wp-content/uploads/2016/05/Recommendations-on-habitat-destruction-ENEC_RSPB.pdf accessed 1 May 2025 [ENEC, Habitat Destruction 2016].

Glowka, L., Burhenne-Guilmin, F., Synge, H., McNeely, J. A. and Gündling, L., *A Guide to the Convention on Biological Diversity*, IUCN, Environmental Policy and Law Paper No 30 (1994) [online] https://portals.iucn.org/library/efiles/documents/EPLP-no.030.pdf accessed 1 May 2025 [Glowka et al, *Guide to the CBD*].

Stop Ecocide Foundation, *Independent Expert Panel for the Legal Definition of Ecocide: Commentary and Core Text*, June 2021, https://static1.squarespace.com/static/5ca2608ab914493c64ef1f6d/t/60d7479cf8e7e5461534dd07/1624721314430/SE+Foundation+Commentary+and+core+text+revised+%281%29.pdf accessed 1 May 2025 [Stop Ecocide Foundation, *Legal Definition of Ecocide*].

Stop Ecocide Foundation, *Position Paper with Regard to the Revised EU Directive on Protection of the Environment through Criminal Law* (2021), https://static1.squarespace.com/static/5ca2608ab914493c64ef1f6d/t/62fa53b6e02e867e515f216a/1660572600393/ENGLISH+Position+Paper.pdf accessed 1 May 2025 [Stop Ecocide Foundation, *Position Paper on EU Environmental Crime Directive*].

Other Sources (websites, blogs, datasets, news media, etc.)

BBC Future, *Ecocide: Should killing nature be a crime?*, 5 November 2020, https://www.bbc.com/future/article/20201105-what-is-ecocide.

Bryce, J., "Controversial Spanish mine to reopen", *The Guardian*, 25 February 2015, https://www.theguardian.com/environment/2015/feb/25/controversial-spanish-mine-to-repoen accessed 26 May 2025 [Bryce, *Controversial Spanish Mine*].

Đorđević, N., *Emerging Europe's Primeval Forests Are in Danger*, Emerging Europe (21 September 2020) ‹https://emerging-europe.com/analysis/emerging-europes-primeval-forests-are-in-danger/ accessed 19 May 2025.

ClientEarth, *Complaint to the European Commission Concerning an Alleged Breach of Union Law over Logging in the Białowieża Forest* (19 April 2016) ‹https://www.clientearth.org/media/ozlamvzx/2016-04-19-complaint-to-the-european-commission-concerning-alleged-breach-of-union-law-over-logging-bialowieza-coll-en.pdf› accessed 19 May 2025.

ClientEarth, *Saving Białowieża* (story update, 18 April 2018) ‹https://www.clientearth.org/latest/latest-updates/stories/saving-bialowieza/› accessed 19 May 2025.

ClientEarth, *Romania Facing Legal Action over Destruction of Europe's Last Natural Forests* (5 February 2020) ‹https://www.clientearth.org/latest/news/romania-facing-legal-action-over-destruction-of-europes-last-natural-forests/› accessed 19 May 2025.

ClientEarth, *Media Briefing Paper: Complaint to the European Commission Regarding Illegal Logging in Romanian Forests* (22 April 2020) ‹https://www.clientearth.org/media/gkdhecrk/briefing-paper-complaint-to-the-european-commission-re-illegal-logging-in-romanian-forests-coll-en1.pdf› accessed 19 May 2025.

European Commission, *February Infringements Package: Key Decisions* (5 March 2020) ‹https://ec.europa.eu/commission/presscorner/detail/en/inf_20_202› accessed 19 May 2025.

European Commission, *July Infringements Package: Key Decisions* (4 September 2020) ‹https://ec.europa.eu/commission/presscorner/detail/en/INF_20_1212› accessed 19 May 2025.

Hildt, L., *Prohibiting Drivers of Biodiversity Loss: How the Court of Justice of the European Union Provides Further Teeth to the Habitats Directive*, VerfBlog, 19 December 2024, https://verfassungsblog.de/prohibiting-drivers-of-biodiversity-loss/ accessed 31 March 2025 [Hildt, *Prohibiting Drivers of Biodiversity Loss*].

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). *About IPBES*. https://ipbes.net/about accessed 16 May 2025 [IPBES, *About IPBES*].

International Union for Conservation of Nature (IUCN), *Białowieża Forest Case: Judgement of the Court of Justice of the EU* (World Commission on Environmental Law, 8 May 2018) ‹https://www.iucn.org/news/world-commission-environmental-law/201805/bialowieza-forest-case-judgement-court-justice-eu› accessed 19 May 2025.

Ławicki, L., *The Białowieża Forest – a new threat*, British Birds, 9 May 2017, https://www.researchgate.net/publication/303863279_The_Bialowieza_Forest_-_a_new_threat/citation/download accessed 16 May 2025.

Maletto, F., *Renewed Hopes for the European Commission in Enforcing General and Structural Violations of the Habitats Directive? (Case C-47/23, European Commission v Federal Republic of Germany)* (5 December 2024), https://eulawlive.com/analysis-renewed-hopes-for-the-european-commission-in-enforcing-general-and-structural-violations-of-the-habitats-directive-case-c-47-23-european-commission-v-federal-republic-of-germany/ accessed 1 May 2025 [Maletto, *Renewed Hopes for Habitats Directive Enforcement*].

Romania Insider, *Environmental NGOs File Complaint against Romania over Forest Protection* (5 July 2017) ‹https://www.romania-insider.com/ngos-forests-romania-complaint› accessed 19 May 2025.

Stokstad, E., *Logging in Europe's Primeval Forest Ruled Illegal*, *Science* (18 April 2018) ‹https://www.science.org/content/article/logging-europe-s-primeval-forest-ruled-illegal› accessed 19 May 2025.

University College Dublin, *Effective Nature Laws Project***,** available at: https://www.ucd.ie/effectivenaturelaws/ accessed 19 My 2025.

Walker, S., *Violence Escalates as Romania Cracks Down on Illegal Timber Trade*, The Guardian (8 January 2020), https://www.theguardian.com/world/2020/jan/08/violence-escalates-as-romania-cracks-down-on-illegal-timber-trade accessed 19 May 2025.