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COVER NOTE

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To:	Ms Thérèse BLANCHET, Secretary-General of the Council of the European Union
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Subject:	COMMISSION STAFF WORKING DOCUMENT EVALUATION of Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage

Delegations will find attached document SWD(2026) 400 final.

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COMMISSION STAFF WORKING DOCUMENT

EVALUATION

of Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage

{SWD(2026) 401 final}

Contents

GLOSSARY

Term or abbreviation	Meaning or definition
AAQD / Ambient Air Quality Directives	Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe; and Directive 2004/107/EC of the European Parliament and of the Council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air
2024 AAQD	Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast)
ANIA	Association of Italian Insurers (Associazione Nazionale fra le Imprese Assicuratrici)
Biodiversity Strategy	EU Biodiversity strategy for 2030, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 20 May 2020, *'EU Biodiversity Strategy for 2030 Bringing nature back into our lives'*, COM(2020) 380 final
Birds Directive	Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds
CAED	Criteria for the assessment of environmental damage
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (United States of America)
CJEU	Court of Justice of the European Union
CLP Regulation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
2023 CLP revision	Commission Delegated Regulation (EU) No 2023/707 amending Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures
Corporate Sustainability Due Diligence Directive, CSDDD	Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence, OJ L, 2024/1760, 5.7.2024
EC	European Community

2021 ECA Special Report	European Court of Auditors special report 12/2021 of 5 July 2021, *The Polluter Pays Principle: inconsistent application across EU environmental policies and actions*
2024 ECD / Environmental Crime Directive	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
EEZ	Exclusive economic zone
EIA Directive / Environmental Impact Assessment Directive	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;
ELD, Environmental Liability Directive	Directive 2004/35/CE 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; (consolidated version)
2016 ELD evaluation	Commission Staff Working Document of 14 April 2016, *REFIT Evaluation of the Environmental Liability Directive*, SWD(2016) 121 final.
2016 ELD Report	Report from the Commission to the Council and the European Parliament of 14 April 2016 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
2021 EP ELD Resolution	Resolution of the European Parliament of 20 May 2021 on the liability of companies for environmental damage
EU	European Union
EUR	Euro
FAQ	Frequently asked questions
GDV	German Insurance Association (Gesamtverband der Deutschen Versicherungswirtschaft)
GMO	Genetically modified organism
ELD Guidelines / Guidelines on environmental damage	Commission Notice of 7 April 2021, *Guidelines providing a common understanding of the term 'environmental damage' as defined in Article 2 of Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage*, OJ C 118, 7.4.2021, p. 1.
Green Deal	Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions of 11 December 2019, *The European Green Deal*, COM(2019) 640 final.

Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
IED / Industrial Emissions Directive	Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
2024 IED Revision	Directive (EU) 2024/1785 of the European Parliament and of the Council of 24 April 2024 amending Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control) and Council Directive 1999/31/EC on the landfill of waste
Revised IED	Directive 2010/75/EU as amended by Directive (EU) 2024/1785 of the European Parliament and of the Council of 24 April 2024 amending Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control) and Council Directive 1999/31/EC on the landfill of waste
IMPEL	European Union Network for the Implementation and Enforcement of Environmental Law
ISPRA	Italian Institute for Environmental Protection and Research (Istituto Superiore per la Protezione e la Ricerca Ambientale)
MARWP	Multiannual rolling work programme
MAWP	Multiannual work programme
MORA	Environmental Liability Supply Model (Modelo de Oferta de Responsabilidad Ambiental) (Spain)
MS	Member State(s)
MSFD / Marine Strategy Framework Directive	Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy
NGO	Non-governmental organisation
NRL / Nature Restoration Law	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
Plastic Pellets Regulation/ PPR	Regulation (EU) 2025/2365 of the European Parliament and of the Council of 12 November 2025 on preventing plastic pellet losses to reduce microplastic pollution
PFAS	Per- and polyfluoroalkyl substances
PPP	Polluter pays principle
PPP Fitness Check	SWD(2026)402 and SWD(2026)403 – Commission Staff Working Document: Fitness Check of the Polluter Pays Principle (PPP).

The Renewable Energy Directive III (RED III)	Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652
REPowerEU Plan	Communication from the Commission to the European Parliament , the European Council, the Council, the European Economic and Social Committee and the Committee of Regions of 18 May 2022, *REPowerEU Plan,* COM(2022) 230 final
SSPD/ Ship-Source Pollution Directive	Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on ship-source pollution and on the introduction of penalties for infringements, last revised by Directive (EU) 2024/3101 of 27 November 2024
SME	Small and medium-sized enterprise
Soil Monitoring Law/ SML	Directive (EU) 2025/2360 of the European Parliament and of the Council of 12 November 2025 on soil monitoring and resilience (Soil Monitoring Law)
Soil Strategy	Communication from the Commission to the European Parliament , the European Council, the Council, the European Economic and Social Committee and the Committee of Regions of 17 November 2021- *EU Soil Strategy for 2030 - Reaping the benefits of healthy soils for people, food, nature and climate,* COM(2021)699
Support Study	Valerie Fogleman, Stevens & Bolton LLP, Cardiff University School of Law and Politics, supported by RPA Europe and RPA Europe consortium, Study in support of the evaluation of the Environmental Liability Directive and its implementation, https://data.europa.eu/doi/10.2779/034934
SWD	Staff working document
The Treaty / TFEU	Treaty on the Functioning of the European Union
URV	Environmental risks insurance (Umweltrisikoversicherung) (Germany)
Waste Framework Directive	Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives
WFD / Water Framework Directive	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 (consolidated version)
Water Resilience Strategy	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 4 June 2025 - *European Water Resilience Strategy,* COM(2025) 280 final
ZPAP	Zero pollution action plan, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 12 May 2012, *Pathway to a Healthy Planet for All, EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil'*, COM(2021) 400 final

1. INTRODUCTION

1.1. Purpose and scope of the evaluation

The Environmental Liability Directive (ELD)[1] was adopted in 2004 and became applicable in 2007. It establishes a framework based on the polluter pays principle (PPP), enshrined in the TFEU, to prevent and remediate environmental damage. The ELD is a cross-cutting instrument that supports the objectives of sectoral legislation protecting specific environmental resources, notably the Birds Directive, the Habitats Directive and the Water Framework Directive (WFD)[2]. It addresses cases of significant environmental damage to protected species and natural habitats (biodiversity damage) and also damage to water and to soil caused by operators carrying out certain potentially hazardous activities (Annex III activities).

Scope of the evaluation

The evaluation analyses whether the ELD is fit for purpose and any shortcomings it may have. It is carried out in accordance with the Article 18 obligation to do so every 5 years. The time period covered by the evaluation dates from 30 April 2007 (the deadline for the Member States to transpose the ELD into their national laws); and in particular the period from 14 April 2016, when the Commission presented its last ELD evaluation.

The evaluation assesses the ELD against five evaluation criteria: effectiveness, efficiency, coherence, EU added value and relevance. The evaluation also considers calls from the European Parliament[3] and the European Court of Auditors[4] to strengthen application of the ELD.

Legal and political context

The evaluation started in 2022 and was carried out in the context of both the Commission policy priorities under 2019-24 mandate and under 2024-29 mandate.

Since the ELD's adoption in 2004, there has been rapid progress (and increasing awareness) of the triple planetary crisis, which consists of (i) climate change through global warming; (ii) biodiversity and ecosystem integrity losses affecting nature; and (iii) pollution and waste generation. These intersecting global crises, which are all caused by the human activity, are recognised as the core focus of the United Nations Environment Programme[5]. The European Union's efforts to address the challenges resulting from the environmental crisis have since 2020 taken the form of the European Green Deal[6] and the ensuing package of policy initiatives to transform the EU into a modern, resource-efficient and competitive economy and the first climate neutral continent by 2050. For the ELD, the most important initiatives are those carried out under the umbrella of the EU's

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1 Directive 2004/35/CE 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; (consolidated version).

2 Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora., 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.

3 Resolution of the European Parliament of 20 May 2021 on the liability of companies for environmental damage.

4 European Court of Auditors special report 12/2021 of 5 July 2021, *The Polluter Pays Principle: inconsistent application across EU environmental policies and actions*.

5 Forging a new relationship between people and the earth (unep.org)

6 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions of 11 December 2019, *The European Green Deal*, COM(2019) 640 final.

Biodiversity strategy for 2030 [7] and the Zero pollution action plan (ZPAP) [8]. The Biodiversity strategy aims to set the EU's biodiversity on the path to recovery by 2030 for the benefit of people, climate and the planet. The ZPAP outlines a number of initiatives to reduce pollution to levels that are no longer harmful to human health and natural ecosystems by 2050. A number of sectoral environmental legislative acts have been adopted or revised. These include the revised Industrial Emissions Directive (the Revised IED) [9]; the 2024 Environmental Crime Directive (ECD) [10]; the 2024 Ambient Air Quality Directive (the 2024 AAQD) [11]; the Nature Restoration Law (NRL) [12] and the Soil Monitoring and Resilience Directive (SML) [13]. This extensive legislative activity necessarily influences the way the ELD, as a cross-cutting instrument, is or will be implemented and sometimes directly affects the scope of its application.

The ELD remains very important in the context of the 2024 Commission policy priorities of reinforced implementation and compliance assurance, as well as simplification.

Among actions to ensure better implementation and enforcement of the EU's pollution prevention laws, the ELD evaluation is carried out in parallel with the fitness check on the polluter pays principle (PPP fitness check) [14]. Like the ELD evaluation, the PPP fitness check is anchored in both the ZPAP and the 2021 European Court of Auditors special report on the polluter pays principle. The PPP fitness check analyses how the EU applies the principle through policies which ensure that polluters bear the cost of measures to prevent, control and remedy pollution. The PPP fitness check covers not only *ex post* liability for environmental damage (including environmental, civil and criminal liability) but also policies to *ex ante* address the pollution.

1.2. Methodology of the evaluation

General methodology

The methodology for carrying out the evaluation is based on the Commission's Better Regulation Guidelines and toolbox. The assessment was assisted by an external study contracted by the Commission in support of the evaluation of the ELD [15] (the Support Study).

In addition to 14 questions set out in a call for evidence [16], the evaluation also answers an additional question ('How has interaction of the ELD with national environmental legislation affected implementation of the ELD?'), which was identified as relevant during the evaluation process.

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[7] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 20 May 2020, *'EU Biodiversity Strategy for 2030'*, COM(2020) 380 final.

[8] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 12 May 2021, *'Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil''*, COM(2021) 400 final.

[9] Directive (EU) 2024/1785 of the European Parliament and of the Council of 24 April 2024 amending Directive 2010/75/EU the European Parliament and of the Council on industrial emissions.

[10] 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.

[11] Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast).

[12] 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.

[13] Directive (EU) 2025/2360 of the European Parliament and of the Council of 12 November 2025 on soil monitoring and resilience (Soil Monitoring Law).

[14] SWD(2026)402 and SWD(2026)403 – Commission Staff Working Document: Fitness Check of the Polluter Pays Principle (PPP).

[15] Valerie Fogleman, Stevens & Bolton LLP, Cardiff University School of Law and Politics, supported by RPA Europe and RPA Europe consortium, Study in support of the evaluation of the Environmental Liability Directive and its implementation, https://data.europa.eu/doi/10.2779/034934

Various consultation activities have been carried out as part of the evaluation: call for evidence; public consultation; targeted consultation (questionnaire and interviews); and three dedicated surveys (for Member States on the ELD's costs and benefits and on ELD training, and for operators on the ELD's costs and benefits). A dedicated ELD stakeholder workshop was held to discuss the Support Study's preliminary findings. The synopsis report (Annex V) summarises the outcome of the consultation activities.

The following further sources of information and evidence were used to prepare the Support Study and the evaluation itself:

- legal research, including EU and national legislative acts, rulings of the Court of Justice of the European Union and national court cases;
- a review of existing literature (including academic research) as well as relevant studies, reports, guidance documents and methodologies developed by EU and national institutions and organisations;
- empirical research carried out in the form of case studies;
- Member States' reports on the ELD's implementation that were submitted to the Commission under ELD Article 18(1), and enhanced summaries of these reports that were prepared as part of the Support Study.

When addressing the individual evaluation questions, the underlining data and information were triangulated as far as possible to ensure that the evaluation has an objective result.

Robustness and limitations of the methodology

The key challenge in the evaluation of the ELD and of its implementation was the lack of complete statistical data on those environmental damage occurrences which have not been reported under the ELD for one of two reasons: (i) they fall within the ELD's scope, but Member States have chosen to handle them under non-ELD liability rules; or (ii) they do not fall within the ELD's current scope. This challenge was strengthened by the limited scope of information on environmental damage occurrences handled under the ELD that Member States are required to include in their Article 18 implementation reports and by the differences in interpretation of the ELD by the different Member States, resulting in difficulties in comparability of data.

An associated problem is the lack of comprehensive data needed to compare the effectiveness of the remediation processes carried out under the ELD and under non-ELD liability legislation. In addition (as discussed in Section 4.1.1, second objective), limited data are available regarding the ELD's preventive function. Finally, the limited number of responses gathered from the targeted consultation and dedicated surveys makes it harder to assess the ELD's costs and benefits.

In order to address these challenges, the Support Study complemented the information from the Member States' reports with an analysis of some ELD and non-ELD occurrences (case studies) and with information obtained through exchanges with the national competent authorities (enhanced summaries of Article 18 reports). More details on how the evaluation was conducted are available in this report's Annex II (on the methodology) and Annex V (the synopsis report, which summarises the results of all the consultation activities undertaken for this evaluation).

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[16] European Commission, Call for evidence of 29 November 2021, *Environmental Liability Directive (evaluation)*.

2. WHAT WAS THE EXPECTED OUTCOME OF THE INTERVENTION?

2.1. Description of the intervention and its objectives

2.1.1. Needs and objectives

As stated in the explanatory memorandum accompanying the Commission's proposal for the ELD, the intervention was intended 'to address effectively and efficiently site contamination and the loss of biodiversity in the Community'. These needs are further stated in the ELD's recital 1, which refers in particular to the large number of contaminated sites in the EU that pose significant risks to human health and to 'the loss of biodiversity [that] has dramatically accelerated over the last decades'. The explanatory memorandum also explained the need to ensure that, in the event of environmental damage, the responsibility for restoring the impaired environmental assets lies with the operator who caused the damage; and stresses the need to ensure damage prevention.

To respond to these identified needs, the ELD's main objective is, as stated in Article 1, 'to establish a framework of environmental liability based on the polluter pays principle, to prevent and remedy environmental damage'. In the intervention logic developed for this analysis (see also Section 4.1.1), this main objective has been articulated in the following specific objectives:

1. to establish an environmental liability framework with minimum standards consistent with a high level of environmental protection across the EU;
2. to ensure that an imminent threat of, or actual, environmental damage to biodiversity, water and land (soil) within its scope is prevented or remediated, thus helping to halt the loss of biodiversity and site contamination;
3. to ensure that the costs are borne by liable operators;
4. to induce operators to adopt measures and develop practices to minimise the risk of environmental damage;
5. to encourage the development of insurance and other financial security instruments and markets;
6. to allow interested persons to initiate and participate in the ELD proceedings.

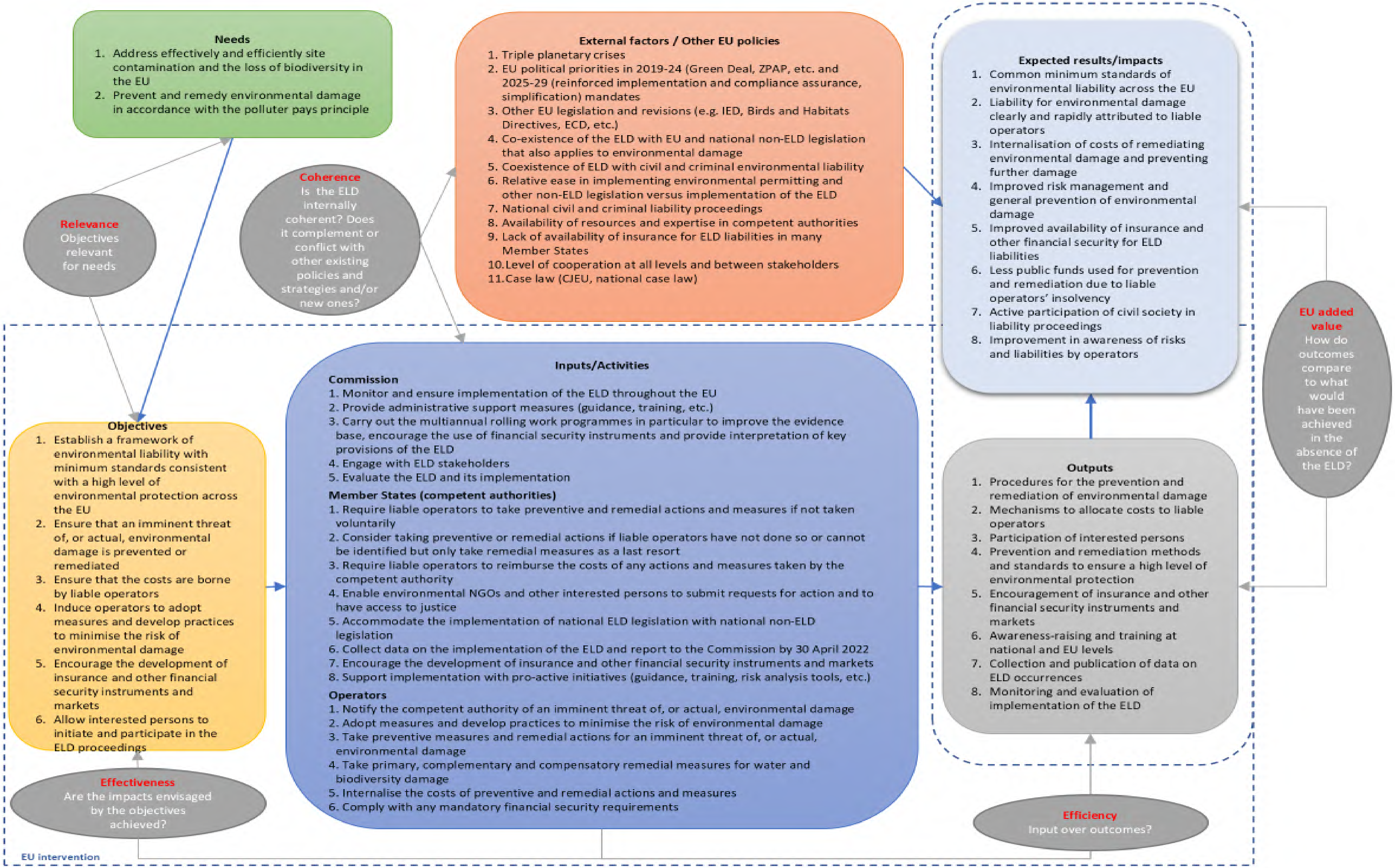
The ELD implements several environmental principles that are enshrined in Article 191(2) TFEU: (i) the polluter pays principle (this is invoked expressly in Article 1, third objective); (ii) the precautionary principle (incentivising prevention – fourth and fifth objectives); (iii) the preventive principle (requirement of preventive action in the case of imminent threat of environmental damage – second objective); and (iv) the principle that environmental damage should as a priority be rectified at source (requirement of remediation in kind – second objective).

The ELD was adopted before the Sustainable Development Goals [17], but it is highly relevant to them and particularly to: (i) goal 15 ('life on land'); (ii) some specific aspects of goal 14 ('life below water') and goal 6 ('clean water and sanitation'); and (iii) indirectly to goal 13 ('climate action').

2.1.2. ELD intervention logic and architecture

[17] The United Nations defined the 17 World Sustainable Development Goals in 2015 in its 2030 Agenda for Sustainable Development.

Figure 1. ELD intervention logic



Annex VI to this report provides further description of the ELD's architecture.

2.2. Point(s) of comparison

The ELD was adopted in 2004 and the Member States were required to bring into force the laws, regulations and administrative provisions needed in order to comply with the ELD by 30 April 2007. The ELD was last evaluated in 2016.

Two points of comparison are therefore used in the present evaluation: the baseline situation before the ELD entered into application and the state of play described in the 2016 ELD evaluation.

2.2.1. Baseline situation

When preparing the ELD proposal, the Commission estimated that some 300 000 sites in the EU (European Community at that time) had already been identified as definitely or potentially contaminated [18]. The European Environment Agency had estimated the costs associated with the clean-up at between EUR 55 billion and EUR 106 billion (partial estimates just for some Member States or regions and some sites).

Before the ELD was transposed into the Member States' national law, liability for preventing and remediating environmental damage differed substantially between them [19]. Almost all the liability systems allowed broad discretion to competent authorities to decide whether the persons that caused the damage should be required to prevent and/or remediate it.

The vast majority of Member States had environmental liability systems for specific categories of environmental damage. A few (e.g. Hungary, Poland) had broad but vague liability systems for remediating damage to environmental media, fauna and flora, but these broad systems were rarely enforced.

Nearly all Member States had regimes for the remediation of contaminated land that had been polluted by historic incidents. They were usually retrospective and subject to strict liability but tended not to include liability for measures to prevent further land damage.

Liability for remediating damage to surface waters, groundwater and coastal waters was generally set out in environmental-permit-granting legislation (including legislation that transposed the IED). Nearly all the systems were limited to the prevention and remediation of damage caused by pollution as defined by the IED [20] and did not cover other types of environmental damage. Germany was the only Member State that imposed a limited scope of liability for complementary remediation. No Member State imposed liability for compensatory remediation.

[18] See the Commission's explanatory memorandum accompanying the ELD proposal, COM(2002) 17 final, which referred to the European Environment Agency's June 2000 report *'Management of contaminated sites in Western Europe'*.

[19] See Fogleman V., *Facilitating enforcement of the ELD by competent authorities (2021) – Final Report*, 31 December 2021, https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/9b423999-cc41-41ea-9629-5682e3bb6b2b/details?download=true; and the annex containing Member State reports, https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/4583a0be-3e7a-49a0-9a87-59e59dabe38d/details?download=true. The main report describes legal liabilities and responsibilities for preventing and remediating environmental damage in all Member States, with the Member State reports describing the situation in more detail for each Member State.

[20] Article 3(2) of the IED defines pollution as 'the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment'.

No Member State had a liability system that required persons that had caused biodiversity damage to remediate the damage[21]. A few Member States (e.g. Ireland) had legislative provisions that required a person that caused such damage to remediate the damage. The requirements in some Member States were limited to persons convicted of an offence (e.g. Cyprus, Luxembourg).

A few Member States (e.g. Portugal, Sweden) had general provisions according to which any person could submit comments on any actions that they considered as having caused environmental damage or the risk of such damage. However, no Member State specifically authorised persons affected by environmental damage (including NGOs) to request an administrative authority to take actions concerning potential environmental damage occurrences.

2.3. State of play described in the 2016 ELD evaluation

In 2016, the Commission adopted an implementation report[22] based on Article 18(2) of the ELD (the 2016 ELD Report) which was accompanied by the 2016 ELD evaluation.

The 2016 ELD evaluation concluded that, although the ELD's implementation had improved the prevention and remediation of environmental damage in the EU, it had done so only to a limited extent[23].

According to the 2016 ELD evaluation, the ELD has improved:

- the standards of prevention and restoration of environmental damage;
- the application of the polluter pays principle;
- strict liability across the EU for environmental damage;
- EU-wide liability for biodiversity damage;
- public participation and access to justice for people affected and NGOs.

However, the large discrepancies between the different Member States in terms of the number of reported ELD cases mean that the implementation of the ELD by most Member States was not deemed satisfactory. A major reason identified for the discrepancies was the lack of a common understanding of what is meant by 'significant environmental damage' and therefore of the scope of damage to which the ELD should apply.

The 2016 ELD evaluation also highlighted a number of other shortcomings and obstacles to the ELD's correct and consistent implementation. These included the many exceptions and defences limiting its scope; the lack of subsidiary liability for other responsible persons and the competent authority if the operator cannot be found or be held liable; and the issue of mandatory financial security at EU level. It also identified several outdated and/or ambiguous provisions (e.g. outdated legal references in Annex III). The Commission found that there was still 'a patchwork of environmental remediation'[24] across the EU and that any 'future evaluation should assess the ELD together with the pre-existing national legislation to determine the extent to which a level playing field has been created'[25].

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21 European Commission, *Frequently asked questions on the Commission's proposal on Environmental Liability* (MEMO/02/10), 24 January 2002, https://ec.europa.eu/commission/presscorner/api/files/document/print/en/memo_07_157/MEMO_07_157_EN.pdf.

22 Report from the Commission to the Council and the European 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, 14 April 2016), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:204:FIN.

23 2016 ELD Evaluation, 8.

24 2016 ELD Evaluation, 39.

25 2016 ELD Report, 9.

The level playing field to which the 2016 ELD evaluation referred is the framework established by the ELD for the prevention and remediation of environmental damage consistent with minimum standards for a high level of environmental protection. These minimum standards are not the same as a harmonised system of liability, which the ELD was never intended to establish. This is evidenced in its legal base being what is now Article 192 of the Treaty of the Functioning of the European Union (TFEU) to establish minimum standards consistent with a high level of environmental protection across the EU; the ability of Member States to enact more stringent provisions; and the large number of options in the ELD.

The main challenges identified by the Commission also included the lack of data on (i) environmental damage occurrences that were handled under national ELD legislation; and (ii) comparable occurrences that were handled under national non-ELD legislation. A further challenge was the cost of implementation. These challenges made it difficult to draw clear conclusions [26].

3. HOW HAS THE SITUATION EVOLVED OVER THE EVALUATION PERIOD?

During the evaluation period, the ELD was amended by Regulation (EU) 2019/1010[27] so that the obligation of reporting by Member States and the evaluation of the Directive both became cyclical (to be performed every 5 years). The scope of the reporting was also substantially limited.

Also, during the evaluation period, the scope of Annex III to the ELD, which lists occupational activities that are subject to strict liability (referred to in this report as 'hazardous activities') was indirectly revised through the 2023 CLP Regulation revision[28] and the 2024 IED revision[29] (see Section 4.3.2 for further analysis).

Following the 2016 ELD evaluation, the Commission in cooperation with Member States designed and carried out two multiannual work programmes to improve the ELD's implementation, 2017-2020 and 2021-2024 [30]. These included training courses; supporting the capacity-building; guidance on common understanding of terms and concepts; making the financial security instruments more available; and improving the evidence base.

In March 2021, the Commission adopted guidelines that clarify the scope of the term 'environmental damage' in the ELD (ELD Guidelines) [31].

Also in 2021, the European Parliament adopted a resolution on the liability of companies for environmental damage; and the European Court of Auditors issued a special report on the polluter

[26] 2016 ELD Report, 9.

[27] 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

[28] Commission Delegated Regulation (EU) No 2023/707 amending Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.

[29] Directive (EU) 2024/1785 of the European Parliament and of the Council of 24 April 2024 amending Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control) and Council Directive 1999/31/EC on the landfill of waste.

[30] See: ELD multi-annual work programmes.

[31] Commission Notice of 7 April 2021, *Guidelines providing a common understanding of the term 'environmental damage' as defined in Article 2 of Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage*, OJ C 118, 7.4.2021, p. 1.

pays principle. Both documents provided analysis in view of the upcoming ELD evaluation and called for the ELD regime to be strengthened.

Annex VII to this report provides further details regarding the main developments during the evaluation period.

4. EVALUATION FINDINGS (ANALYTICAL PART)

4.1. To what extent was the intervention successful and why?

EFFECTIVENESS

4.1.1. To what extent have the objectives of the ELD been achieved?

The main objective of the ELD is, as stated in Article 1 of the Directive, 'to establish a framework of environmental liability based on the polluter pays principle, to prevent and remedy environmental damage'. However, for the purpose of this analysis and as presented in the intervention logic [32], this main objective has been articulated into six more specific objectives that are discussed below.

First objective – to establish an environmental liability framework with minimum standards consistent with a high level of environmental protection across the EU

This objective needs to be assessed not only as regards the provisions of the ELD itself but also as regards the implementation of the ELD by Member States.

The framework established by the ELD is in many aspects consistent with the high standard of environmental protection and which is superior to pre-existing national liability instruments. The framework embodies major principles of EU environmental law (that the polluter pays, that damage should be repaired at source, and the precautionary and prevention principles). The ELD mechanisms ensures a high level of environmental protection (i) through the recognition of the need to address the occurrences of significant environmental damage; and (ii) through the required response to the damage which needs to take the form of an in-kind action and which materialises (for confirmed damage) in an advanced system of remedial measures, including primary, complementary and compensatory remediation[33]. **The complementary and compensatory remediation for environmental damage is the ELD's major innovation** allowing to ensure a high level of environmental protection across the EU. We refer below to this ELD mechanism as the '**ELD liability standard**'.

Before the ELD's adoption, some Member States either did not have liability rules on environmental damage or had rules which did not cover some environmental resources (notably biodiversity) (see Section 2.2.1 above). Remediation in kind was not required in many cases and the

[32] See intervention logic under Section 2.1.2 above.

[33] Primary remediation refers to any remedial measure that takes place at the affected site and returns the damaged natural resources and/or impaired services to the original condition. Complementary remediation refers to measures to be taken at another site, possibly geographically linked to the damaged one and applies if primary remediation does not fully return the damaged site to its original condition. If full remediation is delayed, compensatory remediation measures should be taken for the interim loss of natural resources and services. See also Annex VI to this report.

damage was instead subject to financial compensation. Furthermore, no Member State had previously adopted national non-ELD legislation that would require a person that causes environmental damage to carry out compensatory remediation or – if primary remediation does not remediate the damaged water or biodiversity to its baseline condition (i.e. its condition at the time of the damage if the damage had not occurred) – complementary remediation. Germany had imposed liability for complementary remediation but to a much lesser extent than the ELD.

Moreover, unlike many national liability systems that provide competent authorities with discretion as to whether or not to require a person which caused environmental damage to remediate it, the ELD actually obliges administrative/competent authorities to require this [34]. This duty is further reinforced through the ELD participatory mechanism. These aspects also constitute the ELD's main EU added value and are therefore discussed further under Section 4.2.1.

However, this legal framework also features limitations that weaken the standard of environmental protection:

- liability for damage caused by economic activity considered as non-hazardous (i.e. not listed in Annex III to the ELD) is limited to damage to biodiversity and is conditioned by fault or negligence of the perpetrator;
- the scope of the damage itself is limited on several levels, notably through significance criteria[35], by limiting biodiversity damage to damage to sites and species protected under the EU law, and by limiting land damage to cases risking the human health;
- in the case of land damage, the required response is limited to primary remediation;
- a clause allowing Member States to maintain other, more stringent, liability rules has proven to be a source of misinterpretation resulting in the ELD's underuse;
- substantial exclusions and exceptions from the ELD liability, such as permit and state-of-the-art defences[36].

These different limitations of the ELD framework are further described in Annex VI and assessed in Sections 4.1.2, 4.1.9 and 4.3.2 below.

The standard of environmental protection established by the ELD is further differentiated through its varying implementation by the different Member States.

The 2016 ELD evaluation recognised that the ELD's implementation was still resulting in 'a patchwork of environmental remediation' instead of a level playing field for the operators. The evaluation found that differences in the ELD's implementation meant that what was considered as ELD damage occurrence in one Member State might not be considered as ELD occurrence in another Member State. The evaluation report stated that this could be explained by the continuing application of pre-existing national law that was applied if the damage was not considered as 'significant' under the ELD [37].

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[34] European Commission, *Questions and Answers on the Environmental Liability Directive* (MEMO/07/157), 27 April 2007, Section 2, page 3; https://ec.europa.eu/commission/presscorner/api/files/document/print/en/memo_07_157/MEMO_07_157_EN.pdf.

[35] For the ELD to apply, the damage (with regard to all three types of environmental resources) needs to be significant. The significance criteria are based on a 'measurable adverse change' from the baseline condition of the natural resource.

[36] The permit defence applies if the emission or event that caused environmental damage is expressly covered by a specified permit. The state-of-the-art defence applies if an emission or activity which caused the damage was not considered hazardous according to the state of scientific and technical knowledge (ELD Article 8(4)(a) and (b)).

[37] 2016 ELD evaluation, 39.

Some liability standards vary between Member States due to the above-mentioned optional provisions in the ELD. These include the permit and state-of-the-art defences; the option of identifying additional responsible parties (under joint and several liability); and inclusion of damage to biodiversity protected under national nature conservation legislation. Some Member States[38] adopted these provisions but others did not, with the result that national ELD legislation varies.

Another reason for the variance is that some Member States adopted or implemented more stringent measures than those specified by the ELD. Examples include the application of strict liability to non-Annex III activities (in at least one Member State, Hungary) and – in one concrete case – not applying the exception for marine conventions[39] (Greece).

Further variance in the applied environmental protection standard results from diverging interpretations of the ELD provisions, especially as regards the **definitions of water and biodiversity damage**. This often resulted in the ELD being interpreted restrictively.

Some Member States (cases confirmed in Belgium (Flemish Region), Estonia, Ireland, Spain and the Netherlands, of either national authorities or courts decisions) interpreted the term 'water damage' as meaning that liability for its prevention and remediation applies only if an operator's activities significantly and adversely affect an entire water body, as defined by the WFD. Some Member States (cases confirmed in Ireland, Spain and Portugal) also considered that 'water damage' does not occur unless the status of a water body is changed to a lower classification. By contrast, other Member States (cases confirmed in Latvia (since 2018), Luxembourg, Hungary, Poland and Slovakia) interpreted 'water damage' as applying more broadly to 'waters' under the WFD.

The interpretation of water damage as referring to water bodies instead of waters has resulted in a wide variance in liability for preventing and remediating water damage across the EU. This reflects the variance in the size of the water bodies in the different Member States (for instance, the average length of a river water body varies from 1 kilometre in Denmark to close to the EU average of 11 kilometres in Greece and Slovakia, and 37 kilometres in Bulgaria). Denmark has added a further restriction to the interpretation of water damage by considering that water damage does not occur unless it lasts for at least a year – a restriction that is not in the ELD.

Competent authorities and national courts in some Member States (confirmed cases in Poland) have interpreted biodiversity damage as meaning that it does not occur unless the damage significantly and adversely affects the favourable conservation status of a protected species or natural habitat in an entire Member State, the territory of the EU or its natural range – instead of only a local area.

These divergences in the minimum ELD-derived requirements in the different Member States prompted the European Parliament to call in its 2021 EP ELD Resolution [40] for the ELD to be transformed from a directive into a regulation in order to ensure a more uniform approach to liability. More specifically, both the European Parliament and the European Court of Auditors have called on the Commission to clarify the ELD's key definitions and concepts and to improve criteria for defining the environmental damage to which the ELD should apply [41].

The Commission sought to change the restrictive interpretations of water and biodiversity damage – and to clarify other provisions of the ELD – by issuing guidelines on environmental damage in

[38] See Annex VII, Section 3.1.

[39] The ELD does not apply to environmental damage or to any imminent threat of such damage in respect of which liability or compensation falls is covered by one of the international conventions in the domain of marine, listed in the ELD Annex IV (see also Annex VI to this report),

[40] 2021 EP ELD Resolution, paragraph 10.

[41] 2021 EP ELD Resolution, paragraphs 24 and 27; 2021 ECA Special Report.

March 2021. These Commission Guidelines (which are binding only on the Commission, but which are based in part on CJEU judgements) state, *inter alia*, that water damage can occur if only a small area of a water body is affected and that a reduction in the classification of the water body is not required. They further state that biodiversity damage can occur if damage only affects a localised area. Application of the Commission Guidelines should allow more cases of environmental damage to be addressed under the ELD than in a situation where Member State apply restrictive interpretations of the ELD definitions.

The Finnish Supreme Administrative Court has applied the Commission Guidelines to a case involving pollution of a river. It reasoned that classification of the ecological status of a water body under the WFD and factors to assess the ecological status do not necessarily provide a comprehensive picture of the status of a water body or the effects of a discharge of pollutants into it. This is because the sampling for ecological status under the WFD does not, for example, include all aquatic species and their abundance (although it should include all relevant quality elements – i.e. all elements that can be impacted by pressures on a specific water body, with the quality elements being chosen to reflect all aquatic life) [42].

Inclusion in the ELD of damage to the ecological status of a water body also means that liability for preventing and remediating damage to aquatic biodiversity is extended beyond the criteria for biodiversity damage itself. The liability therefore includes liability for damage to species that are not protected by the Birds and Habitats Directives.

A Swedish national court has also applied the Commission Guidelines to justify the view that an environmental damage case should be handled under the ELD [43]. However, some Member States (cases confirmed in Spain and Poland) have continued to apply their restrictive interpretations of water and biodiversity damage despite the guidelines. Different minimum standards of environmental protection persist across the EU.

On the other hand, in some, limited, cases the ELD liability standard is being applied by Member States beyond the scope of application defined in the ELD. For example, Lithuania extends liability under the ELD to damage to air. Based on its water protection legislation, Spain applies the ELD liability standard to water damage in cases where water damage is not significant enough to qualify as an ELD case. Italy applies the ELD remediation requirements retroactively to cases of environmental damage caused by economic activity that ceased before the ELD's entry into force. These cases are instances of recognition that the ELD liability standard adds value.

Second objective – to ensure that an imminent threat of, or actual, environmental damage is prevented or remediated, thus contributing to halting the loss of biodiversity and site contamination

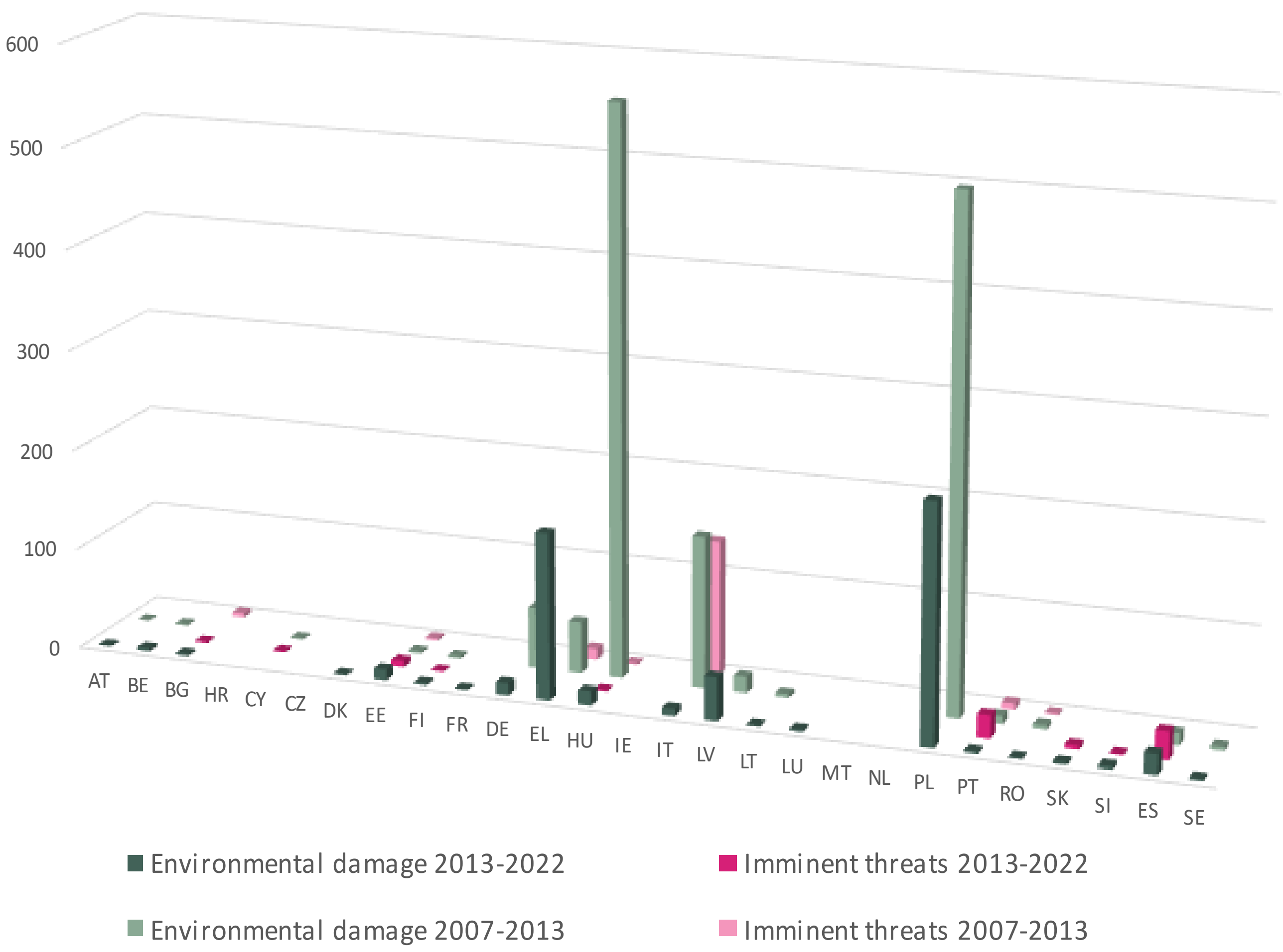
This objective is clearly the most important one for the ELD, but it is also very difficult to assess on the basis of the currently available evidence. Complete assessment of this objective would require systematic information on the state of play throughout the EU for the following elements: (i) the baseline condition of environmental resources protected under the ELD before the damage; (ii) all damage cases together with the elements allowing independent assessment of the proportion of these cases that would qualify under the ELD; (iii) the legal framework and type of remediation measures which have been applied in order to bring these resources back to their baseline condition (primary and complementary compensatory remediation); and (iv) the condition of the affected resources after the remedial measures have been applied. Such an assessment is even more complicated for cases of imminent threat of the damage, because the scope of the damage is necessarily hypothetical for such occurrences.

[42] See the case study from Finland in Annex I, Section 8 of the Support Study.
[43] See the case study from Sweden in Annex I, Section 14 of the Support Study.

The Commission does not have systematic information on all these aspects. Instead, on the basis of the available evidence (i.e. Member States' reports and case studies), the Support Study analysis focused on the following three questions: (i) whether the Member States had implemented the ELD effectively by requiring the prevention and remediation of environmental damage for the environmental damage occurrences qualifying under this framework; (ii) whether they had ensured that remediation achieves a high standard of environmental protection by requiring complementary and compensatory remediation where relevant; and (iii) whether, if competent authorities have implemented national non-ELD legislation instead of national ELD legislation for environmental damage occurrences, the applied remediation equated to remediation under the ELD [44].

There are clearly substantial divergencies between Member States as regards these questions. The Article 18(1) reports reveal a large disparity between Member States in the number of ELD occurrences (as set out in Figure 2).

Figure 2. Number of ELD occurrences (actual instances and imminent threats of environmental damage) reported by Member States in the 2007-2013 and 2013-2022 reporting periods



[44] For the last question see Section 4.1.3.

The complete statistics of reported ELD occurrences can be found in Annex VIII. To note that the numbers of reported ELD occurrences (as shown both in Annex VIII and in the graph above (Figure 2)) are imprecise[45] and they can only be further used and analysed subject to the following caveats:

- divergencies in the timeframes applied by the different Member States for the second reporting period; in some Member States the statistics have been only collected and reported as of 26 June 2019 [46] – i.e. after the new reporting obligation became applicable;
- some Member States not recording or reporting imminent threats of environmental damage;
- multiple reporting by some Member States of cases that had affected more than one natural resource;
- some Member States reporting potential ELD cases that other Member States would not have reported;
- some Member States non-reporting environmental damage cases that would qualify under the ELD but that had been processed under the non-ELD legislation;
- delays in detection by the competent authorities of environmental damage cases that could in some cases accumulate [47].

Despite these major imperfections, the number of ELD occurrences in each Member State remains the most relevant available indicator for assessing and evaluating whether competent authorities have implemented and enforced the ELD effectively, especially when that number is compared with the number of non-ELD environmental damage occurrences. It also allows comparison between the two reporting periods: the first covering the period between 30 April 2007 and 30 April 2013 (6 years of ELD application) and the second covering the period between 1 May 2013 and 31 December 2021 (8 years and 8 months of ELD application).

The Member States with the highest number of ELD occurrences between 30 April 2007 and 31 December 2021 are Poland (742 occurrences), Hungary (578 occurrences), Greece (216 occurrences), Italy (up to 157 occurrences [48]), Germany (72 occurrences), Spain (61 occurrences) and Latvia (56 occurrences).

5 Member States (Czechia, Ireland, Croatia, Malta and the Netherlands) did not report any ELD occurrences between 30 April 2007 and 31 December 2021.

10 Member States (Belgium, Denmark, France, Cyprus, Lithuania, Luxembourg, Austria, Romania, Slovenia and Finland) reported between 1 and 5 ELD occurrences. 3 Member States (Bulgaria,

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45 Information in Figure 2 for the first reporting period is adapted from Table 1 of the 2016 ELD evaluation. Information for the second reporting period is based on the cases reported by Member States under the current Article 18(1). In both cases, further adjustments to the numbers result from information obtained from Member States in the context of the Support Study. There is no entry for Croatia for the first reporting period because it only joined the EU on 1 July 2013. Germany reported 147 ELD occurrences for the period from 26 June 2019 to 31 December 2021, including 12 occurrences that were handled under national ELD legislation (Germany had previously reported 60 ELD cases for the period up to 30 April 2013). For the first reporting period, Italy reported 'up to 133' occurrences of imminent threat of the damage (presented as actual occurrences in Figure 2). Some Member States did not record imminent threats of environmental damage. A zero in the columns for imminent threats indicates either that no imminent threat cases were recorded or that no imminent threat cases were reported. Furthermore, Germany and Hungary did not report ELD occurrences for the period from 1 May 2013 to 25 June 2019 because there was no obligation to report them for this period. See further details in Annex J to the Supporting Study;

46 Germany, Italy, Hungary and Sweden.

47 The competent authority in Greece is continuing to discover significant amounts of hazardous waste, raw materials, fuel and other materials in factories that ceased operating or were abandoned after 2011 as a result of the economic crisis (see Support Study, Annex J, Section 12).

48 This figure includes up to 133 possible cases of imminent threat of the damage in the first reporting period.

Slovakia and Sweden) reported between 6 and 10 ELD occurrences. 2 Member States (Estonia and Portugal) reported between 11 and 50 occurrences.

Overall, 599 ELD occurrences have been reported for the second reporting period (after 1 May 2013) compared with 1 388 occurrences reported for the first reporting period.

The largest decreases between the first and second reporting periods occurred in Hungary (563 down to 15 occurrences), Poland (506 down to 236 occurrences), Italy (from 'up to 150' down to 7 occurrences) and Germany (60 down to 12 occurrences). By contrast, Greece reported an increase between the first and second reporting periods from 51 occurrences up to 165. A proportionately similar increase (but lower in absolute figures) was reported for Spain (from 12 up to 49 occurrences), Latvia (from 16 up to 56 occurrences) and Portugal (from 8 up to 33 occurrences).

These changes are probably due to the following reasons.

- Greece has a relatively high number of ELD occurrences because it does not have specific national legislation for preventing and remediating environmental damage other than national ELD legislation. There are therefore no overlaps and gaps between national ELD legislation and national non-ELD liability legislation.
- Greece, Spain and Portugal are known to have invested substantially in developing trainings and methodologies to help implement the ELD.
- The increased number of cases in Latvia is partly explained by a series of criminal acts of just one individual who intentionally polluted roadsides with a substance containing cyanide ions [49] in 26 different locations. This series was reported as 26 separate ELD occurrences.
- In Hungary and Poland, national ELD legislation was initially broader in scope than the ELD and included several enhanced, more stringent or larger scope provisions. Poland also repealed the previous national legislation, which could potentially have overlapped with the ELD [50].
- The reduced number of cases in Poland in the second reporting period can be attributed to the amendment of the national ELD legislation in 2014, which removed some provisions that had been more stringent than the ELD.
- The substantially reduced number of cases in Germany, Italy and Hungary may be at least partly attributed to changes in the way that cases were reported. For the second reporting period, the central ELD competent authority in Hungary screened data from competent authorities for 189 environmental damage cases and concluded that only 14 of them were ELD cases. The cases reported by Hungary for the first reporting period were not similarly screened.
- Germany reported a total of 147 ELD occurrences in the second reporting period. However, only 12 of these occurrences were handled under national ELD legislation and the remaining 135 were resolved under national non-ELD legislation (relevant sectoral legislation).
- Italy reported 133 'potential' cases of imminent threat of damage in the first reporting period, but no such cases in the second reporting period. This seems justified by the reporting methodology used.
- Germany and Hungary only provided figures for a significantly shortened second reporting period (starting in 2019).

Overall, both the low numbers of ELD cases (including 15 Member States that reported between 0 and 5 cases over the whole 15-year period of ELD application) and the downward trend in the number of cases indicate the ELD's low effectiveness.

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[49] See the relevant case study described in Annex I, Section 12 to the Support Study.

[50] See the detailed description in the study on facilitating enforcement of the ELD, Member States Reports, Hungary and Poland.

It has been argued that a low number of ELD occurrences means that the ELD is being implemented effectively and that it is achieving its objective of preventing environmental damage occurrences (see also the fourth objective below). It has also been argued that the low number of ELD occurrences reflects a reduction in the impact of damage to below the significance criteria of the ELD. Both developments would have resulted from the implementation of risk management measures and stricter environmental standards [51]. However, no evidence has been provided to substantiate either of these arguments. Indeed, **for these arguments to be valid, the number of non-ELD environmental damage occurrences must also be low**. However, comparing the numbers of ELD and non-ELD occurrences in Member States for which numbers are available shows that the latter far exceed the former. The Support Study provides the following figures regarding the non-ELD environmental damage cases[52]:

- In Denmark, there were 3 114 environmental damage occurrences in 81% of municipalities (the primary ELD authorities) between 1 July 2008 (when the ELD was transposed into Danish law) and 15 August 2011. The municipalities screened 1 187 of those occurrences to determine whether national ELD legislation applied. The Article 18(1) report from Denmark includes only 1 ELD occurrence since 1 July 2008. That occurrence happened in 2018.
- In Estonia, there were 879 environmental damage occurrences between 2012 and 2017 but only 13 occurrences of an imminent threat of, or actual, environmental damage under the ELD between 2009 and 2019. In 2020, there were 136 environmental damage occurrences but only 4 ELD occurrences.
- The Finnish Environment Institute (*Suomen ympäristökeskus*) studied 627 occurrences of environmental damage between 2013 and 2019 in detail. It concluded that only 3 of them were plausible ELD occurrences.
- The central ELD competent authority in Hungary received and screened data from authorities for 189 environmental damage cases between 26 June 2019 and 31 December 2021. It concluded that only 14 were ELD cases.
- The Irish Environmental Protection Agency screened 62 environmental damage incidents (not including incidents reported under environmental permitting legislation) between 1 January 2013 and 30 September 2021. It concluded that most of the incidents were not ELD cases. Ireland did not report any ELD occurrences in its Article 18(1) report.
- In Romania, there were 4 ELD cases between 2007 and 2017. In the same period, there were 1 186 non-ELD environmental damage occurrences.
- The German Insurance Association (*Gesamtverband der Deutschen Versicherungswirtschaft*; GDV) recorded 3 265 environmental damage claims in 2010-2020 under its insurance schemes (model ELD environmental extension to general liability policies). By contrast, Germany reported 60 ELD cases to the Commission for the first reporting period and 147 ELD cases for the second reporting period (including 12 handled under German federal ELD legislation).
- Italy reported 7 cases under the current Article 18(1) to the Commission for the second reporting period. By contrast, the Italian co-reinsurance pool (Pool per l'Assicurazione e la Riassicurazione della Responsabilità per Danni all'Ambiente) informed the Commission of 870 ELD cases that it had handled between 5 January 2006 and 22 December 2018.
- In Slovenia, ECOLEX LIFE, which carried out an ELD dedicated programme, stated that there were 13 ELD cases for the single year of 2019. Slovenia reported 5 imminent threats of, and actual, environmental damage occurrences for the second reporting period.
- The IMPEL report entitled 'Criteria for the Assessment of Environmental Damage (CAED)' referred to case studies based on environmental damage cases in Ireland and Malta. However, neither Ireland nor Malta reported a single ELD case in their Article 18(1) reports.

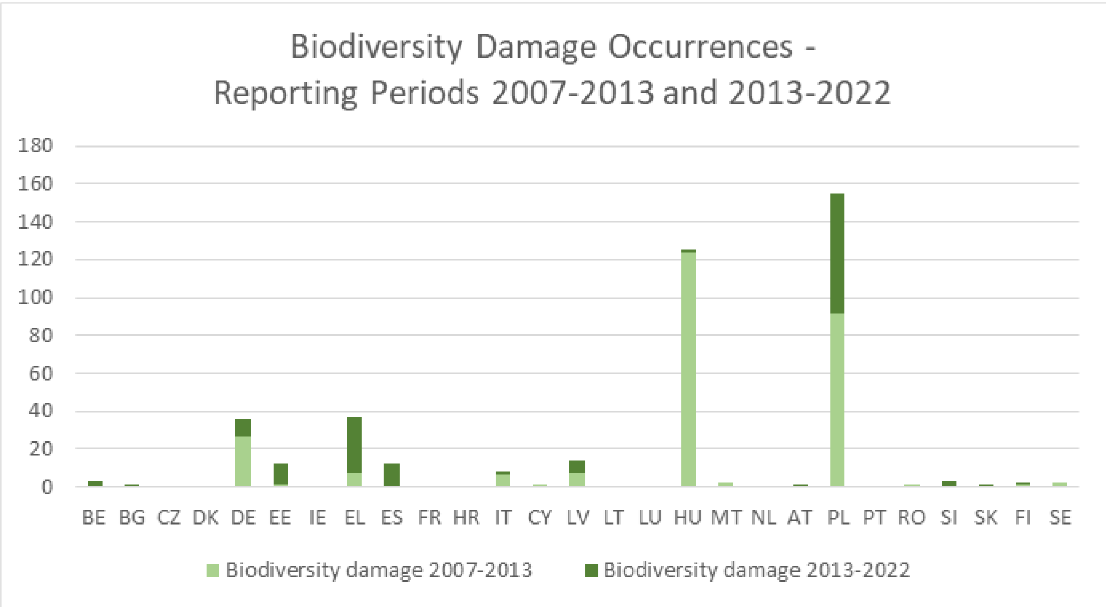
[51] See 2016 ELD evaluation report, p. 37.
[52] See Support Study, 36-38.

It is not clear whether figures on ELD cases provided by sources other than Article 18(1) reports are indeed (i) cases handled under the ELD; (ii) cases which would qualify under the ELD but have been handled under other legislation; or (iii) cases which are environmental damage occurrences but do not qualify under ELD, mostly because of the low damage significance.

However, such figures are a **clear further indicator of the high number of overall environmental damage cases**, and they are a reason for further investigating the hypothesis that the Member States are underusing the ELD. The obvious consequence of handling of the potential ELD cases under other, non-ELD, national environmental legislation, is that the ELD remediation standards are not applied, particularly as regards the complementary and compensatory remediation unknown to the other national legal regimes. Further analysis of factors limiting the ELD's effectiveness and of the interaction between the ELD with national environmental legislation is provided below (particularly in Sections 4.1.2 and 4.1.3).

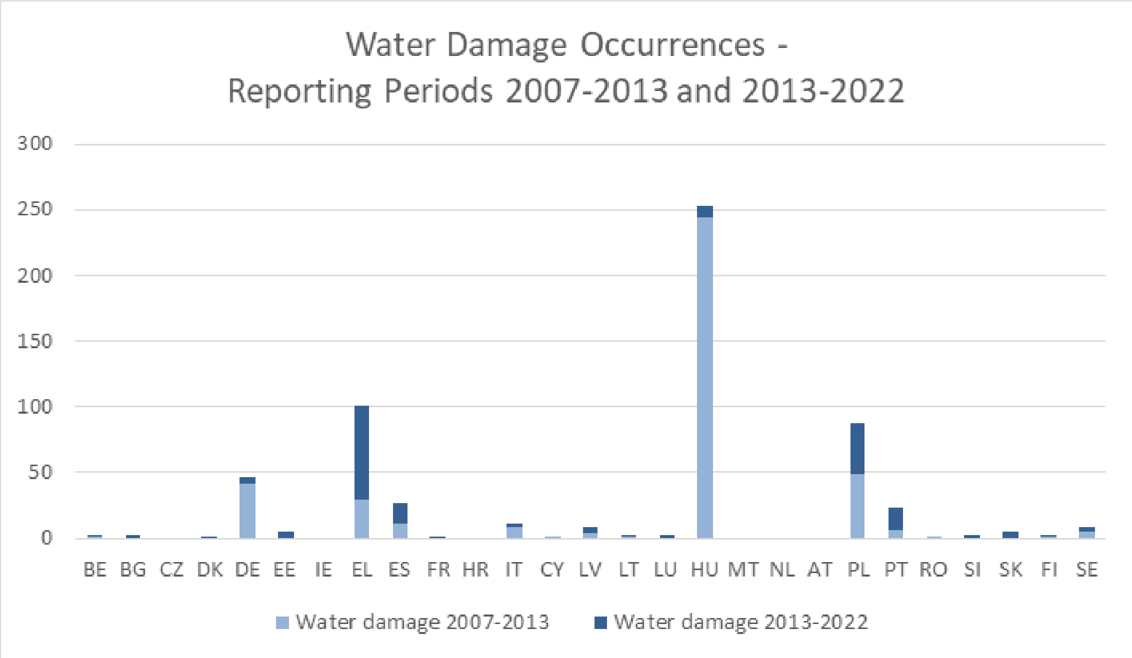
The Article 18(1) reports, combined with the evidence collected in their enhanced summaries [53], also allow comparison (summarised in Figure 3 below) between the frequency of the ELD's application with regard to biodiversity, water and land damage cases for both reporting periods.

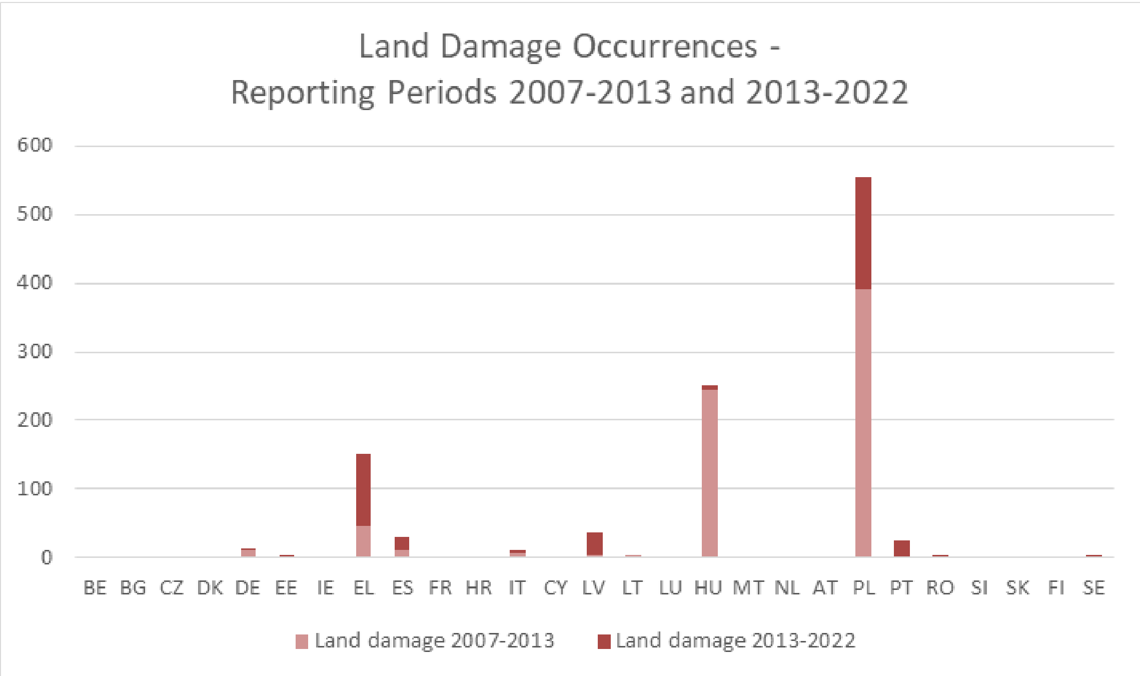
Figure 3. Number of different types of environmental damage during both reporting periods [54]



[53] Annex I to the Support Study.

[54] The number of ELD cases in Figure 3 differs from those in Table 2 of the 2016 ELD evaluation because some Member States reported different numbers of cases under reports submitted by them under the current Article 18(1) due to the dismissal of some previous cases that had been reported as potential cases under the previous version of Article 18(1). The difference in numbers between Figure 2 and Figure 3 is due to Member States reporting occurrences that damaged more than one natural resource separately for each natural resource (Figure 3) while the total number of confirmed cases does not include multiple reporting (Figure 2).
For the second reporting period, Germany reported 147 ELD occurrences. 135 of those 147 were resolved under relevant national sectoral legislation. 33 of those 147 concerned biodiversity damages, 75 concerned water damage and 48 concerned land damage. Of these, 12 occurrences were handled under national ELD legislation and the other occurrences were handled under national non-ELD legislation.
The figures for Luxembourg do not include the 2014 ELD occurrence in Belgium (Flemish Region) that also caused damage in Luxembourg (see Annex I to the Support Study, Section 4)
Figure 2 differentiates (when data was available) between imminent threats of, and actual, environmental damage. Figure 3 does not do so due to the absence of sufficient data.





The Article 18(1) reports reveal that 724 ELD cases in the first reporting period were land damage cases, 403 were water damage cases and 270 were biodiversity damage cases. The same proportions could be seen in the second reporting period: 364 land damage cases, followed by 192 water damage cases and 145 biodiversity damage cases. When the numbers for each type of damage in the two reporting periods are added, the number of land damage cases far exceeds the number of water and biodiversity damage cases.

This is worthy of remark because the ELD addresses biodiversity and water damage more than land damage and provides more advanced tools to address the first two types of damage.

The Article 18(1) reports did not differentiate between water damage occurrences reported for inland and marine waters. Although the data is imprecise, it seems to indicate that water damage occurrences reported for marine waters were rare.

Only limited evidence is available regarding the question of whether Member States have ensured that remediation under the ELD achieves a high standard of environmental protection by requiring, in the case of water and biodiversity damage, the application of complementary remediation if primary remediation does not restore the waters or biodiversity to their baseline condition, and by requiring compensatory remediation.

As explained above, **complementary and compensatory remediation for environmental damage is a major innovation of the ELD.** These two types of remediation measures distinguish the ELD from national non-ELD legislation. Unless a competent authority enforces national ELD legislation, the remedial measures for water and biodiversity damage will not include complementary or compensatory remediation. Complementary and compensatory measures have been included in the ELD to avoid net loss to the relevant environmental resources, even if damage is not fully reversible or its remediation takes time.

A concrete example of the added value of complementary and compensatory measures under the ELD is an Italian case of groundwater damage. Halogenated solvents that had been intentionally discharged from an industrial site had seeped through soil and bedrock to the groundwater body. In 2017, this contamination extended to almost 14 km^2 and 42 000 000 m^3 of groundwater. The pollution lowered the chemical status of the groundwater body under the Water Framework Directive (WFD) and caused abstracted water to fail to comply with requirements for drinking water. While primary remediation of the deep aquifer was considered impossible, the Italian authorities required (i) complementary remediation (consisting of remediation of water pollution at other sites in the region); (ii) compensatory remediation for interim loss of water supply services (consisting of measures to protect other groundwater bodies in the region and to optimise services from them); and (iii) preventive measures to reduce the risk of further groundwater damage to the deep aquifer. The latter measures (consisting of removing solvents from the upper aquifer) were defined under national legislation on contaminated sites remediation (non-ELD legislation), because the event of contamination started before the national transposition of ELD. Complementary remediation measures have been defined using equivalency analysis under the ELD[55] with the aim of avoiding a net loss in water resources and services. The remediation is still ongoing.

The requirement to carry out complementary and compensatory remediation obviously comes at a cost, which can be significant. A French government paper published in 2010 [56] estimated that the cost of remediating a release of herbicides, insecticides and fungicides caused by a fire at a manufacturing facility was just over EUR 10 000 under national non-ELD legislation but EUR 4 million under national ELD legislation. It further estimated that the cost of remediating a leak of bleach from a paper manufacturer was EUR 42 700 under national non-ELD legislation but between EUR 140 000 and EUR 400 000 under national ELD legislation.

The case studies in Annex I to the Support Study show – not surprisingly – that operators have argued to competent authorities and national courts that national ELD legislation does not apply to water and/or biodiversity damage caused by their activities. The precise arguments vary, but the

55 The ELD requires that determining of the scale of complementary and compensatory remedial measures, should be based on equivalency analysis. Equivalency analysis consist of (i) assessment and quantification of losses and (ii) identification of complementary and compensatory remedial measures to provide a similar level of natural resources and/or services as were foregone. Under these approaches, actions that provide natural resources and/or services of the same type, quality and quantity as those damaged shall be considered first (including, as appropriate, at an alternative site, which should be geographically linked if possible). Where this is not possible, then alternative natural resources and/or services shall be provided.

56 Commissariat General au développement durable, *La directive « Responsabilité environnementale » et ses méthodes d'équivalence*, April 2010, https://temis.documentation.developpement-durable.gouv.fr/docs/Temis/0066/Temis-0066722/18711.pdf.

underlying reason is always the same: it costs more to remediate environmental damage under the ELD than it does under national non-ELD legislation due to the inclusion of complementary and compensatory remediation in the ELD.

An example is the operator of a facility that manufactured an insecticide and neonicotinoid in Austria. Toxic chemicals entered a groundwater body and caused extensive pollution. An environmental NGO requested the relevant competent authority under Article 12 of the ELD to bring proceedings against the operator to require it to remediate the damage. One of the NGO's arguments was that a progressive release of pollutants had begun before 30 April 2007 and continued after 20 June 2009 (i.e. after the national legislation transposing the ELD entered into effect). The operator argued that national ELD legislation did not apply because the pollutants had only entered the groundwater body before the national ELD legislation entered into effect. The lack of evidence that any pollutants had entered the groundwater after June 2009 meant that the competent authority could only apply the national Water Management Act and not the ELD. It could therefore not impose complementary or compensatory remediation measures. The competent authority's decision was confirmed by the Austrian court [57].

It is surprising that, when Member States are enforcing national ELD legislation for water and/or biodiversity damage, competent authorities only very rarely require operators to carry out complementary or compensatory remediation. The reporting obligation for Member States does not cover information on whether specific ELD cases involved the application of complementary and compensatory measures. The reports by some Member States that provided such information on a voluntary basis (Bulgaria, Greece, Austria, Portugal and Romania) together with the evidence gathered through case studies and exchanges with stakeholders nevertheless show that, in the overwhelming majority of ELD cases of water and biodiversity damage, operators had carried out or had been required to carry out only primary remediation. This confirms the findings of the 2016 ELD evaluation indicating no progress in this area.

It is worth remembering that measures by governmental authorities to prohibit fishing in a damaged river or to designate a damaged area as a protected area do not qualify as compensatory remediation measures. To qualify as a compensatory remediation measure, the liable operator must be able to carry it out itself or bear responsibility for the costs incurred by others in carrying it out. Neither of the above measures meet these criteria because only a government can prohibit fishing in a river or designate an area as a protected area.

A few Member States (e.g. Italy and Finland) have reduced the likelihood that competent authorities will not require liable operators to carry out complementary and compensation remediation for ELD occurrences. Finland's main non-ELD legislation (its environmental law) distinguishes between 'contaminated groundwater' and 'substantially contaminated groundwater'. Operators that substantially contaminate groundwater must carry out remedial measures under the ELD (thus including complementary and compensatory remediation if applicable). National ELD legislation in Italy requires operators to remediate water and biodiversity damage in accordance with national ELD legislation, even if the damage occurred before 29 April 2006 (date of ELD transposition in Italy).

Even taking these very positive developments into account, **complementary and compensatory remediation under the ELD remains underused and this limits its effectiveness.** The possible reasons for this are discussed in Section 4.1.2 below. The underuse of complementary and compensatory remedial measures in handling ELD cases substantially diminishes the added value of their being handled under the ELD by comparison with other legal regimes (particularly national

[57] See the case study from Austria in Annex I, Section 2 of the Support Study.

non-ELD liability regimes, permitting legislation and criminal proceedings – see Section 4.1.3 below).

Third objective – to ensure that the costs of preventing or remediating environmental damage are borne by the operators that have caused the damage.

In the context of the ELD, the implementation of the polluter pays principle (PPP) needs to be assessed at two different levels: the level of the legal framework and the level of its implementation.

As regards the legal framework and as reflected in its Article 1, the ELD is meant to *ex post* embody the PPP. The aim of the PPP is to attribute to the responsible operator ('internalise') the externalities (costs of preventing and remedying environmental damage) resulting from its economic activity – particularly from emissions discharged into the air, soil or water that have a detrimental effect on flora and fauna or human health and that would otherwise be borne by society as a whole ('community pays'). Further analysis of the way the ELD implements the PPP (including more theoretical aspects of the PPP concept) can be found in the PPP fitness check [58] and one of its supporting issue papers, which addresses the environmental liability.

In the present evaluation, it is important to note that any limitations or weakness in the ELD framework (as analysed under the first ELD objective (above) – whether in the ELD itself or in the national law transposing the ELD) limit the effectiveness of the PPP with regard to environmental damage. An obvious example is the permit defence which Member States can opt to apply, and under which operators that are liable are not required to bear the costs of the remedial action if the damage was caused by emissions or activity that was lawfully authorised in the context of permitting legislation. In other words, if a Member State opts to apply the permit defence, remediation of a damage occurrence covered by this is subject to a 'community pays' system, as mentioned above. The obvious general limit to the PPP's implementation through the ELD is that it only covers damage to the environment per se and does not include civil liability for damage to human health and property that results from environmental damage. Civil liability is explicitly excluded from the scope of the ELD.

As regards, on the other hand, the ELD's implementation, the third objective appears to have been achieved in some cases and in some Member States more than in others. Operators have often not borne the remediation costs of the damage they have caused because they have become insolvent or were otherwise unable to pay the costs of remediation measures (or the costs of preventing an imminent threat of damage). No statistical data exist at EU level, but the Support Study has compiled evidence of many such cases in a substantial number of Member States [59] (Bulgaria, Greece, France, Croatia, Italy, the Netherlands, Poland, Finland and Sweden) with the result that either the Member State (and therefore indirectly its taxpayers) has borne the costs or the damage has not been remediated. The amounts of money involved in such cases were sometimes very high – regardless of whether or not there was an imminent threat of, or actual, environmental damage.

One incident in Bulgaria concerned an imminent threat of environmental damage to water and land/soil under the ELD from 2 663 tonnes of waste trichloroethane that had partially leaked from a tank into the bund that surrounded the leaking tank and another tank. The operator initially cooperated with the authority but then became insolvent. The authorities later applied to the bankruptcy court for reimbursement of the total costs of preventive measures of EUR 8 552 912 [60].

[58] SWD(2026)402 and SWD(2026)403 – Commission Staff Working Document: Fitness Check of the Polluter Pays Principle (PPP).

[59] See Annex B to the Support Study, Question 1.4.

[60] See Support Study, Annex I, Section 5.

Another case in Finland [61] involved the operator of a nickel and zinc mine that became insolvent. The Finnish government ultimately spent EUR 100 million on measures to prevent damage to nearby lakes.

The ELD does not provide for liability for the capital group, nor for the executives of liable operators. This means that companies are not prevented from setting up low capitalised subsidiaries which then assume responsibility for polluting activities and enter into insolvency if these activities cause environmental damage[62]. It also means that individuals that take decisions which cause the damage may not be personally liable for the consequences. This limits the effectiveness of the PPP (at the ELD implementation level).

In its 2021 EP ELD resolution, the European Parliament highlighted several aspects related to the third objective and problems with operator's insolvency. It particularly called on the Commission to set up protection and support schemes for the victims of environmental damage (including in insolvency cases); and to assess the feasibility of introducing a mandatory financial security system for ELD liabilities and a secondary liability regime (for chain and parent-subsidiary liability). It further welcomed the Commission's initiative on corporate due diligence and corporate accountability. This initiative, materialised in form of the Corporate Sustainability Due Diligence Directive[63] (CSDDD), adopted in 2024 and imposing obligation of identifying and addressing potential and actual adverse environmental impacts in the company's own operations, but also their subsidiaries and, business partners in their chain(s) of activities, as well as the relevant civil liability. To note that CSDDD has only very limited overlap with the scope of application of the ELD[64].

In its 2021 special report on the PPP, the European Court of Auditors concluded that the ELD only requires partial application of the PPP. It recommended that the Commission should examine the potential to make more use of instruments that provide financial security.

Section 4.1.7 below contains a specific analysis of whether the current ELD approach (in which financial security for ELD liabilities is not compulsory) is appropriate.

Fourth objective – to induce operators to adopt measures and develop practices to minimise the risk of environmental damage

It is important to clarify from the outset that, in the ELD context, the fourth (precautionary) objective should be distinguished from the specific obligation to take preventive measures against any imminent threat of environmental damage (the prevention principle), which are part of the main ELD mechanism described under the ELD's second objective.

The precautionary objective is not directly operationalised in the ELD. In other words, the ELD does not impose specific obligations on operators (e.g. to establish an environmental management system; adopt environmental safety measures; or carry out regular checks and maintenance of their facilities). A system that implements liability for environmental damage is instead expected to

[61] Support Study, Annex I, Section 8.

[62] See discussion on limited liability of companies and the externalisation of risks to the environment and relevant examples in Faure M., *Environmental Liability of Companies*, study commissioned by the European Parliament in 2020, p. 42.

[63] Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence, OJ L, 2024/1760, 5.7.2024

[64] The CSDDD applies to large scale companies only and refers specifically to environmental prohibitions and obligations set out in international conventions in the domain of environmental protection. See also Section 4.1.11.

create a major incentive for operators to adopt measures and develop practices to minimise the risk (the precautionary principle).

Those Member States (Czechia, Ireland, Spain, Portugal and Slovakia) that adopted mandatory financial security systems for ELD liabilities helped to achieve this objective by requiring operators subject to the systems to carry out environmental risk assessments as part of the process for complying with them. Other Member States have introduced similar obligations for specific industry sectors (see Section 4.1.7. on financial security instruments).

In Spain, the ELD induced environmental risk management process has been established for hazardous Annex III activities, which are also subject to mandatory financial security. The determination of the need for a financial security and its amount is based on the environmental risk analysis. In order to streamline the process and minimise costs for operators, the authorities provide an environmental risk analysis tool online and free of charge. This tool makes it possible to identify and analyse scenarios that cover 95% of environmental risks. It is integrated with an interactive map that makes it possible to take account of natural resources that may be affected. It is preconfigured for 10 industry sectors. The tool simulates changes in risk probability and in insurance premiums, taking account of the proposed risk management measures, and thus facilitates risk management decisions. The risk management process is assumed to limit the number of incidents and their severity, thus helping to achieve the precautionary objective. The financial security should allow damage to be remediated if an incident is still happening.

Preventive measures were also encouraged by the growth of the voluntary environmental insurance market that emerged following the ELD's introduction. Underwriters of environmental insurance policies assess risk by determining whether to offer a policy to an operator and, if so, the premium to be charged. They thus create a financial incentive for operators to adopt preventive measures.

In Italy, Pool Ambiente (an Italian co-reinsurance consortium for environmental risks, private entity) developed a 'UNI-protected environment certification' standard. The respect of the standard is deemed to prevent risk at the origin of 73% of ELD occurrences. The system was developed to support the use of voluntary insurance schemes [65].

It is certain that more operators have adopted preventive measures and developed practices to minimise environmental damage since the ELD came into effect. However, it is not possible to determine the extent to which the ELD itself has induced them to do so. In other words, it is not possible to distinguish between the ELD's preventive effect, on the one hand, and more concrete obligations introduced by the IED and its predecessors and other non-ELD environmental legislation on the other hand.

The scope of application of the IED and national environmental permitting legislation has increased since the ELD's adoption in 2004. This has resulted in more operators holding environmental permits and therefore being subject to requirements in those permits to carry out preventive measures.

Fifth and sixth objectives – to encourage the development of insurance and other financial security instruments and markets and to allow participation of interested persons.

These two further objectives of the ELD, which are set out in the intervention logic (see Figure 1), are discussed in Section 4.1.4 (as regards participation of interested parties) and Section 4.1.7 (as regards availability of financial security instruments).

[65] Support Study, Annex P.

In the **public consultation**, operators and public authorities expressed views regarding the ELD's main benefits (e.g. preventing and remediating damage in the EU and applying the polluter pays principle) that were more positive than the views expressed by citizens and NGOs/academia. The respondents to the public consultation primarily agreed that the ELD had helped raise awareness of environmental issues and enabled interested persons to request competent authorities to act.

4.1.2. Have any factors limited the effectiveness of the ELD?

Several different factors limit the ELD's effectiveness. Some are specifically related to the ELD's architecture and scope and are therefore addressed in the section on relevance criterion (Section 4.3.2). They particularly concern (i) various limitations on the scope of environmental damage covered (notably scope of land and biodiversity damage, lack of coverage for damage to air, etc); (ii) various liability limitations resulting from liable actors status (such as absence of liability for land and water damage and absence of strict liability for non-Annex III operators, limitation of actors subject to liability to economic operators, etc).

Other factors relate to the ELD's internal and external coherence and are discussed in the sections on coherence criterion (Sections 4.1.10 and 4.1.11). They particularly concern: (i) 'more stringent' national provisions and (ii) joint application of the ELD with the IED, ECD and WFD.

Further factors relate to the difficulty of ensuring that the costs of preventing or remediating environmental damage are borne by the operators that cause the damage. These factors are discussed in the section on the third ELD objective (Section 4.1.1) and on the section relating more specifically to financial security instruments (Section 4.1.7).

During the **public consultation**, the various stakeholder groups expressed differing opinions on the factors that decreased the ELD's effectiveness. Most public authority respondents singled out insolvency or the impossibility of identifying liable operators in some cases. Citizens and NGOs/academia particularly underlined inactivity and lack of capacity of competent authorities. Citizens and NGOs/academia also pointed to liability exclusions such as 'permit defence' and the 'state-of-the-art defence', but operators and the (re)insurance industry did not consider these factors to be relevant. Furthermore, most NGOs/academia, public authority and citizen respondents agreed that the issues highlighted in the recent recommendations by the European Parliament and the European Court of Auditors had impaired the ELD's effectiveness. Finally, all stakeholder groups agreed that the following factors had prevented the ELD from meeting its objectives: (i) lack of enforcement and enforcement capacity; (ii) lack of awareness about the ELD; (iii) the ELD's narrow scope; and (iv) the restrictive definition of 'environmental damage'.

This section addresses the major factors related more specifically to the **ELD's implementation**.

The first such factor is the **restrictive interpretation** by some Member States (or their competent authorities) of the ELD's definitions of water damage and biodiversity.

Some Member States (this is confirmed for Denmark, France and Slovenia) have interpreted the definition of biodiversity damage in Article 2(1)(a) of the ELD as requiring the damage to be 'severe' or 'almost catastrophic'. At least one Member State (Poland) require that damage to a protected species must affect its favourable conservation status in the territory of the Member State, the territory of the entire EU or the natural range of the species.

These restrictive definitions mean that the number of environmental damage occurrences that meet the significance criteria for water damage and biodiversity damage under the ELD is necessarily reduced because fewer environmental damage occurrences fall within the scope of the ELD.

The 2021 EP ELD Resolution [66] and the 2021 ECA Special Report on the PPP [67] have highlighted the need to clarify the criteria for defining environmental damage and its significance, and to provide relevant guidance.

The Commission adopted guidelines on environmental damage in 2021 to address the problem of restrictive interpretation of the environmental damage definition. These guidelines (which only bind the Commission but are partially based on CJEU case law) have reduced the ambiguities in the damage definition, but not all Member States were following them when this evaluation was written. The guidelines are further discussed in Section 4.1.8 below.

Implementation of national non-ELD legislation instead of national ELD legislation by competent authorities in some Member States has limited the ELD's effectiveness. The Commission emphasised, both before and after the ELD's adoption, the duty placed by the ELD on competent authorities to identify liable operators and to ensure that they carried out or financed the necessary preventive and remedial measures. The Commission also distinguished this duty from the competent authorities' discretion to decide whether or not to enforce national non-ELD legislation to require liable operators to prevent and remediate environmental damage.

The duty to enforce the ELD – as opposed to the discretion to enforce most national non-ELD legislation – means that, even if a competent authority enforces national environmental permitting legislation or other national non-ELD legislation for an occurrence that meets the ELD criteria, the authority should also enforce national ELD legislation unless national non-ELD legislation is more stringent (this is never the case for water or biodiversity damage).

The Article 18(1) reports, case studies, previous studies contracted by the Commission and other research nevertheless show that Member States have been much more likely to enforce national environmental permitting legislation (including transposed IED) and other national non-ELD legislation than national ELD legislation. There is therefore a considerable mismatch between the EU's intention in adopting the ELD and its practical implementation and enforcement in many, if not most, Member States. The enforcement of national ELD legislation is limited by the insufficient integration between national ELD and national non-ELD legislation. These aspects are further analysed in Section 4.1.3.

The Article 18(1) reports (and their enhanced summaries) and case studies also show that, when competent authorities have enforced national ELD legislation on its own or in addition to national non-ELD legislation, they have **rarely required liable operators to carry out complementary or compensatory remediation for water and biodiversity damage (**as discussed above in Section 4.1.1, second objective). A likely reason, in addition to the high costs of such measures, is lack of sufficient expertise on the part of the competent authorities.

A further limit on the effectiveness of the ELD's implementation is a **lack of ELD expertise**[68] **in the competent authorities and lack of awareness of the ELD on the part of operators and other ELD stakeholders**.

The ELD's implementation can be complex and require a **range of expertise** to cover all its different aspects. These aspects include environmental damage assessment; information on the baseline condition of the resource concerned; assessment of remedial measures (including through equivalency analysis in the case of complementary remedial measures); and monitoring and

[66] Recommendations 24 and 27.

[67] Recommendation 2a

[68] See notably, Annex B to the Support Study, Section 2.12.; COWI, Prospect, and Justice and Environment '*Improving the implementation of the ELD and the evidence base*', (2021), final report, p. 60 and Country reports;

assessment of the remedial process. The EP ELD Resolution [69] identified a lack of persons in the competent authorities with the specific expertise needed to enforce the ELD as one of the obstacles to the ELD's implementation. The European Parliament called on the Commission to establish an EU ELD task force of 'highly qualified experts and Commission officials' to support Member States, upon their request, 'with the implementation and enforcement of the [ELD] on the one hand and to support and advise victims of environmental damage on the available options for legal action at EU level on the other (comparable to SOLVIT)'.

The **lack of awareness of the ELD** affects many of the stakeholders concerned, including not only national authorities that implement other environmental legislation (see Section 4.1.3), but also operators and some NGOs[70]. The ELD imposes a duty on operators to carry out measures to prevent an imminent threat of environmental damage 'without delay' and to inform the competent authority 'as soon as possible' if the measures do not dispel the threat. Operators also have a duty to 'immediately' control, contain, remove or otherwise manage environmental damage in order to limit or prevent further damage, an adverse effect on human health or further impairment of services by the damaged natural resource. Unless operators are aware that this duty exists, they will not necessarily carry them out.

The lack of awareness on the NGOs' side means that they will not request competent authorities to prevent or remediate potential environmental damage or seek access to courts under Articles 12 and 13 of the ELD. Factors limiting the effectiveness of the ELD participatory mechanism are also discussed in Section 4.1.4.

It is important to highlight the difficulties resulting from the **lack of reliable and comparable data** on the ELD's implementation. The 2016 ELD evaluation advised all Member States to 'record data on ELD incidents and publish ELD registers if they have not done so already'. The Commission responded to this by putting forward a proposal on the alignment of environmental reporting[71], including the relevant parts of the ELD. This was aimed to improve the ELD's evidence base and make regular evaluation pursuant to Better Regulation requirements legally obligatory. The reporting obligation was initially designed by the Commission as modern continuous online data gathering but the scope of the reporting was substantially limited in the legislative procedure [72].

The public registers of ELD and other environmental damage cases have only been implemented in a limited number of Member States [73]. Public registers exist in Czechia, Denmark, Spain, Latvia and Slovakia. Partial registers exist in Belgium, Croatia and Sweden (as regards contaminated sites), Luxembourg (restoration measures) and France (industrial accidents and incidents). There are no public registers in Bulgaria, Ireland, Greece, Cyprus, Lithuania, Hungary, Malta, the Netherlands, Austria, Poland and Slovenia. Annual or biannual reports on ELD cases are published in Germany, Estonia, Italy, Portugal, Romania and Finland.

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[69] Paragraph 15 of the 2021 EP ELD Resolution.

[70] See notably, Annex B to the Support Study, Section 2.14.; COWI, Prospect, and Justice and Environment *'Improving the implementation of the ELD and the evidence base'*, (2021), final report p. 50 and Country reports; Valerie Fogleman, *'Improving financial security in the context of the Environmental Liability Directive'* (2020); final report; and Member State reports;

[71] Proposal for a Regulation of the European Parliament and of the Council on the alignment of reporting obligations in the field of environment policy and thereby amending Directives 86/278/EEC, 2002/49/EC, 2004/35/EC, 2007/2/EC, 2009/147/EC and 2010/63/EU, Regulations (EC) No 166/2006 and (EU) No 995/2010, and Council Regulations (EC) No 338/97 and (EC) No 2173/2005_COM_2018_381_final.pdf (europa.eu)

[72] See Section 4.1.1 on caveats regarding the lack of consistent Member State data on damaging occurrences that come within the scope of the ELD.

[73] Environmental Implementation Review 2022 – Environmental Implementation Review - European Commission (europa.eu).

In its 2021 EP ELD Resolution, the European Parliament called for improved ELD data collection for a comprehensive monitoring system.

Most **public consultation** respondents from NGOs and academia, public authorities, re/insurance industry, operators and some citizens are aware of the existence of information on the ELD and of registers of ELD occurrences. Such information is mostly accessed by public authorities. Some respondents from NGOs and academia as well as the re/insurance industry have experienced difficulties accessing such information.

4.1.3. How has the ELD's interaction with national environmental legislation affected the ELD's implementation?

The 2016 ELD evaluation stated that some Member States were still applying national non-ELD legislation instead of national ELD legislation to ELD occurrences. The evaluation concluded that some Member States (Belgium (Flemish Region), Germany, Ireland and the Netherlands) had continued to do so, even though their competent authorities recognised the occurrences as ELD occurrences.

Statistical data are not available on this aspect for the current evaluation period (Member States' Article 18(1) reports only cover cases handled under the ELD). However, this issue is still occurring (see, in particular, explanations for differences between the numbers of ELD and non-ELD occurrences under Section 4.1.1, second objective – for example as regards Germany). We therefore try to focus in this evaluation on identifying which types of national rules interact and overlap with the ELD at national level and how this affects the effectiveness of environmental protection for such cases.

The ELD allows Member State to maintain more stringent provisions in relation to the prevention and remedying of environmental damage (see Section 4.1.10). The national provisions interacting or overlapping with the ELD can be national non-ELD liability rules but can also be other types of environmental law provision.

Interaction of **national non-ELD environmental liability legislation** with the ELD varies between Member States. The national ELD and national non-ELD legislation of some Member States (Greece, Cyprus, Latvia and Poland) only differs in a few respects. In other words, there is only one environmental liability regime (i.e. national ELD legislation) that mainly applies to the prevention and remediation of land, water and biodiversity damage. In Lithuania, only national ELD legislation applies to liability for causing biodiversity damage.

However, national non-ELD liability legislation in some Member States (e.g. Luxembourg) focuses on the imposition of sanctions such as fines and requires a person to remediate environmental damage only if the person is convicted of an offence. In such a case, the scale of the occurrence does not count but rather the question of whether to act is legal or illegal.

Interaction of the ELD with the national legislation that requires a person who has caused environmental damage to pay **monetary compensation to the State** if it is not possible to remediate or restore the damage has affected the ELD's effective implementation in some Member States. Such legislation which exists in Czechia, Germany, Estonia, Croatia, Latvia, Lithuania and Poland shall not be applied to cases which qualify under the ELD as it is incompatible with the requirement in the ELD for liable persons to carry out primary and compensatory remediation plus complementary remediation if the primary remediation does not fully restore water or biodiversity damage. Whereas the ELD requires remediation in kind, the compensation legislation requires monetary compensation that is not necessarily used to remediate the damaged natural resources.

Lithuania has continued to apply such legislation for ELD occurrences. Latvia is also potentially continuing to apply it.

A case in Lithuania, which does not qualify as an ELD occurrence, demonstrates the difference between national compensation legislation and national legislation on the remediation of environmental damage. A massive fire at a large tyre-recycling facility in Alytus, which had a permit to operate under national non-IED pollution legislation, burned for 9 days and destroyed 2 202 626 tonnes of rubber, rubber products and waste rubber as well as a substantial part of the structure in which the tyres and other rubber stocks were stored. Air pollutants from the fire included dioxins and organic volatile compounds (including styrene, benzene, ethanol, 2-ethoxyethanol) and inorganic compounds (including sulphur dioxide and carbon black, soot and other particulate matter). Under Lithuanian law, the operator was required to pay monetary compensation to the State for environmental damage caused by the fire. The amount of compensation for damage caused by pollutants entering the ambient air from the fire was calculated using the applicable methodology at EUR 5 944 334.52. The amount calculated for water damage caused by the discharge of 62 656.05 cubic metres of contaminated firefighting water into surface water bodies was EUR 285 243.93. The amount calculated for damage to wildlife for the asphyxiation of a hare was EUR 342.78 [74].

More generally, the ELD does not interact easily with national non-ELD liability legislation in Member States that have such legislation. Such legislation is often easier to implement due to thresholds (often numeric thresholds for land/soil and water damage) in national liability legislation, to the absence of a requirement to carry out complementary or compensatory remediation, and, generally, no permit or state-of-the-art defences[75]. In addition, national non-ELD legislation tends not to limit liability for remediating land/soil damage to damage that occurred only after a specified date. It rather applies to both, albeit with different remediation requirements in some Member States (e.g. Belgium and the Netherlands).

Proceedings for handling environmental damage are often initiated by default under such national non-ELD legislation because it is not clear at that stage whether or not the ELD criteria have been fulfilled.

In theory, the application of non-ELD rules should not pre-empt the application of ELD in order to complement the remedial measures imposed for a given case up to the ELD's required standard. In practice, however, authorities competent to implement the different legal regimes do not always cooperate or even communicate when handling the same environmental damage occurrence[76]. This is even more difficult to do if the damage has been subject to financial compensation.

As regards interaction between the provisions of the ELD and **national environmental permitting legislation** (including transposed IED legislation) [77], the Article 18(1) reports and the case studies for this study demonstrate that, when environmental damage occurrences qualify under the IED, competent authorities often enforce only the IED or other national non-ELD legislation [78].

National environmental permitting legislation is easier to enforce than national ELD legislation. The environmental permitting legislation provides authorities with extensive preventive powers. These include the power to issue variation, suspension, revocation and other types of notices; and to order measures to prevent further damage (e.g. upgrading pollution-control equipment). Operators

74 See the case study in the Support Study, Annex I, Section 13.
75 Member State may choose to apply such defences under the ELD (optional permit and state-of-the-art defences)
76 See Chapter 3 of Annex B to the Support Study, and Valerie Fogleman, 'Facilitating enforcement of the ELD by competent authorities' (31 December 2021); main report, p. 162 and following; https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/9b423999-cc41-41ea-9629-5682e3bb6b2b/details?download=true;
77 See also Section 4.1.11 as regards the relation between the ELD and the IED mechanisms.
78 See the Support Study, Annex I, Section 11.

that breach their permits may be issued with warning letters or cautions, or may be prosecuted in addition to the above measures.

Competent authorities generally begin enforcing national environmental permitting legislation before – if at all – they consider whether national ELD legislation also applies. In some cases (cases confirmed notably in Belgium, Germany, Ireland and the Netherlands[79]), they have continued to enforce only national non-ELD legislation even when they have recognised the occurrence as an ELD occurrence. A major reason for this in such cases is that enforcement of national ELD legislation would duplicate procedures, especially if the authority for national environmental permitting legislation is different from the competent authority for the ELD. In addition, a competent authority needs, in order to apply the ELD, to first determine whether the significance criteria have been reached or exceeded (see also Section 4.1.5).

However, the significant downside of enforcing only national environmental permitting legislation for water damage (and, in some cases, for biodiversity damage) caused by permit holders is that doing so fails to include the EU added value of the ELD and especially its imposition of liability for complementary and compensatory remediation. Greater consistency in enforcing both instruments by Member States could improve the ELD's effectiveness.

Interaction of national ELD legislation with **national criminal legislation** has affected the effective implementation of the ELD in some Member States due to procedures in national criminal legislation. In some Member States, liability for environmental damage can be decided as part of the criminal proceedings.

This solution has its advantages and disadvantages when compared with handling environmental damage cases under the ELD. On the one hand, criminal law may allow financial compensation instead of remediation in kind, especially in cases where the primary remediation would not be effective or sufficient (and where the ELD would therefore propose complementary and compensatory remediation). If financial compensation is applied, criminal law does not require the remediation costs to be used as a basis for defining the amount of compensation nor (as opposed to the ELD) does it provide technical methodology to define which remedial measures should be used. In terms of expertise, a criminal court is in principle less equipped to handle the technical aspects of such cases. It may therefore arbitrarily define or reduce the amount of such compensation and not fully ensure that the actors being granted such compensation will actually carry out the state-of-the-art remediation process. On the other hand, the compensatory solution allows the court to choose not to place the remedial process in the hands of environmental crime perpetrators and to address criminal, environmental and civil liability under the same proceedings.

An example of an environmental damage case handled under criminal law concerns illegal fishing that took place between 2013 and 2017 in France's Calanques National Park (*Parc national des Calanques*), which is also a Natura 2000 site. An investigation concluded that 4 497.3 tonnes of fish, 288.9 kilos of octopus (*Octopus vulgaris*) and 16 170.5 dozen sea urchins had been taken (approximately 33% of fish, 0.3% of octopus and 9% of sea urchins in the no-take zone). The poached fish and shellfish, some of which were protected and/or endangered species, were sold in Marseille.

The case was processed under France's Law No 2016-1087, which introduced liability for ecological damage (*préjudice écologique*) into the French Civil Code (*Code civil*) in 2016. Law No 2016-1087 provides that a person who causes 'non-negligible' damage to the natural environment (including air, water, land/soil, landscapes and biodiversity) is liable to pay

[79] Information from Member States ELD reports under Article 18 and case studies in the Support Study, Annex I,

compensation. It also prioritises reparation of environmental damage in kind. However, if this is not possible or if the restoration is inadequate, the person who caused the damage must pay damages and interest. This compensation is then to be used to restore the environment.

In this particular case, the national park did not request the poachers to repair the environmental damage but instead sought monetary compensation so that it could carry out the necessary measures to remediate the environment that were compatible with the marine ecosystem.

The Marseille Judicial Court (*Tribunal judiciaire de Marseille*) awarded the park EUR 350 060 for its claim (the amount was later reduced on appeal to EUR 52 068.34). In making the award, the court stated that the damage was non-negligible and that it did not need to analyse provisions of national law that implement the ELD [80].

Another illustration of the interaction between national ELD legislation and national criminal legislation is a sugar refinery case in France that had caused pollution of the River Scheldt (Escaut/Schelde) in France and Belgium due to a ruptured dyke at a settling pond at the refinery. The Lille Correctional Court fined the sugar refinery and also granted monetary compensation to various claimants (including Belgium's Walloon Region) pursuant to the French law on ecological damage. The court stated that French administrative procedures under national ELD legislation and national environmental permitting legislation were limited to French territory. It therefore converted the environmental remediation procedure for all the remediation measures in kind for environmental damage under the ELD to monetary compensation for the damage under civil law.

However, while the Walloon Region established the remediation cost at EUR 16 810 998, the court only awarded damages of EUR 9 044 203.27 (EUR 8 864 515 for ecological damage, EUR 50 000 for moral damage, EUR 129 688.27 for material damage and EUR 10 000 for irrecoverable costs). The report that substantiated the Walloon Region's claim described three types of remediation measures: primary, complementary and compensatory remediation (as described in Annex II to the ELD), which were monetised on the basis of resource-to-resource or service-to-service equivalence analyses. The court stated that such methods do not monetise the remediation of environmental damage but rather allow the monetisation of remediation measures. An appeal with regard to this case was still pending when the present ELD evaluation was being completed [81].

This evaluation does not specifically assess whether the case should qualify as an ELD occurrence. It needs however, to be highlighted that the ELD remediation standard should be respected and applied to all cases responding to the ELD criteria, based on the precedence of EU law over national law.

Another interaction between the ELD and national criminal legislation concerns reports by some ELD competent authorities that they have been unable to enforce the ELD because the police do not share information about a case until a prosecution has been finalised or the ELD proceedings have been stayed pending the outcome of criminal proceedings.

Civil judicial proceedings pursuant to ELD legislation concerning damage from a wastewater treatment plant in the Brussels-Capital Region were stayed in 2016 due to pending criminal proceedings. The Brussels civil court concluded that there could be contradictory decisions if it ruled that the operator and/or other defendants had not committed an extra-contractual fault and the

[80] See case study in Support Study, Annex I, Section 10.
[81] See the case study in the Support Study, Annex I, Section 9.

criminal court ruled that they had committed a criminal offence – which implied a civil offence. The civil proceedings have not been re-activated[82].

An integrated enforcement policy between administrative enforcement for national ELD legislation and criminal proceedings have been advocated by the practitioners to advance the ELD effectiveness[83].

The Support Study further analyses the interaction of national ELD legislation with **national spatial planning legislation** and **national waste legislation**[84].

To conclude, application of **non-ELD legislation** has not always resulted in a lower standard of remediation. This is often the case as regards **land damage**. Concentration thresholds for specified pollutants in land/soil in national non-ELD legislation may well result in land being remediated to a higher level than under the ELD because the thresholds are lower than the significance criteria in the ELD. Similarly, implementation of national non-ELD legislation does not necessarily mean that preventive measures result in remediation below the ELD's remediation standard. This is because differences between measures to prevent an imminent threat of environmental damage under the ELD and preventive measures under national non-ELD legislation tend not to be significant. Furthermore, measures to carry out primary remediation of water and biodiversity damage under the ELD tend to be the same as measures to remediate them under national non-ELD legislation, but national non-ELD legislation in some Member States does not impose liability for the remediation of biodiversity damage.

In some cases, however, where environmental damage occurrences which would qualify under the ELD, have been instead addressed under non-ELD legislation, there have been no remediation in kind required or such remediation has been limited in that it has not included complementary or compensatory measures, meaning that the ELD's standard of environmental protection has not been observed.

The impact of this conclusion is unfortunately weakened by the fact that, when the ELD is initially applied, complementary and compensatory remediation is only rarely used in practice (see Section 4.1.1 above, second objective).

4.1.4. To what extent have stakeholders been engaged in the process of improving the ELD's implementation at national level?

The effectiveness of the ELD's participatory mechanism

One of the ELD's objectives is to make it possible for interested persons to participate in its implementation. Under Articles 12 and 13 of the ELD, the parties concerned can notify the relevant authorities of any environmental damage or imminent threats; present observations; request action; and challenge the administration's actions aimed at remedying damage (or their failure to act). Member States can choose whether the mechanism also applies to cases of imminent threat of environmental damage (see Section 2.1.2 above).

The ELD mechanism implements the Aarhus Convention[85] and particularly its Article 9(3). The 'access to justice' pillar of the Aarhus Convention has not been implemented through horizontal EU

[82] See the case study in the Support Study, Annex I, Section 3.
[83] Lavrysen, L., guest editorial, eucrim 4-2022; https://eucrim.eu/articles/guest-editorial-eucrim-4-2022/.
[84] See the Support Study, Section 4.3.
[85] The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, known as Aarhus Convention. Both EU and all its Member States are Parties to the

legislation that would be applicable in all sectors. However, access to justice provisions has been included in many EU legal acts and this is also supported by the relevant CJEU jurisprudence. The role of civil society as a compliance watchdog is being increasingly recognised, particularly in the Biodiversity Strategy [86] and the ZPAP [87].

In practice, the effectiveness of the ELD participatory mechanism has been limited.

In the **public consultation and ELD evaluation workshop**, the NGOs specifically complained of the procedure's length and costs, and of the restrictive interpretations of the competent authorities regarding the obligation to accompany any civil society complaint with supporting information and data.

> An NGO in Germany submitted a request for action under Article 12 and then brought the case to the court under Article 13 of the ELD with regard to an occurrence of damage to a population of black tern (*Chlidonias niger*), which is listed in Annex I of the Birds Directive, at a bird sanctuary (biodiversity damage). The case reached the CJEU through a preliminary ruling procedure, which allowed the CJEU to provide important caselaw interpretations [88]. However, the NGO does not consider the intervention as successful, because the long court litigation process (the case started over 15 years ago) has still not been concluded with any remedial action and the black tern population had further declined over this period from 28 breeding pairs when the damage was first reported to just 15.

Article 12(5) of the ELD allows Member States to only apply the said participatory mechanism to cases of environmental damage – and thus to exclude occurrences of an imminent threat of environmental damage. 10 Member States apply this limitation [89].

The ability of other qualified parties (apart from NGOs) to make effective use of the participatory mechanism has been limited by some competent authorities' restrictive interpretations of Articles 12 and 13.

> A member of the public who owned fishing rights to a river downstream from a hydroelectric power station in Austria brought a legal action against the competent authority under Article 13 of the ELD. They alleged that fluctuations in the level of the river caused by maintenance of the power plant that involved routinely shutting down off turbines had a significant adverse effect on the ecological status of the river, because it reduced the flow of water in the river to its main channel and resulted in the death of fish. The legal action resulted in the CJEU interpreting Articles 12 and 13 in such a way as to conclude that persons directly affected by environmental damage come within the scope of those two articles [90]. The Commission then brought infringement proceedings against 15 Member States, resulting in the revision of national ELD legislation and policies by Member States that had restrictively interpreted the articles.

In the **public consultation**, respondents have expressed diverse views on participatory rights. Awareness of **public participation mechanisms**, which have been established under the ELD, was quite high among most respondents, but not among some representatives of the citizens stakeholder

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Convention. The Convention empowers people with the rights to access information, participate in decision-making in environmental matters and to seek justice.

86 Biodiversity Strategy, Section 3.2, p. 16.

87 ZPAP, Section 3.1, p. 14.

88 Judgment of the Court of Justice of 9 July 2020, *Naturschutzbund Deutschland – Landesverband Schleswig-Holstein eV* v *Kreis Nordfriesland*, C-297/19, ECLI:EU:C:2020:533. See also Annex VII to this report.

89 See Annex VII to this report.

90 Judgment of the Court of Justice of 1 June 2017, *Folk* v *Unabhängiger Verwaltungssenat für die Steiermark*, C-529/15, ECLI:EU:C:2017:419. See also Annex VII to this report.

group. However, the mechanisms are not used widely and, when they are used, the experience has usually been negative. Citizens, NGOs, academia and the re/insurance industry mostly agreed that participatory rights had a major or some added value, but other stakeholder groups (i.e. operators and public authorities) were less convinced.

Other stakeholders' engagement in the ELD's implementation

The **European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL**) actively supports the ELD's implementation and enforcement. It has carried out two dedicated projects.

- The study on financial security for environmental damage[91] was published in three phases: Financial provision; Protecting the Environment and the Public Purse (September 2016), Phase II (September 2017), and Phase III (November 2018).
- Reports in the study on Criteria for the assessment of Environmental Damage[92] were also published in three phases: Criteria for the assessment of Environmental Damage (CAED) (22 June 2020), Criteria for the assessment of the Environmental Damage (CAED), Practical Guide (1 June 2021), and Criteria for the assessment of the Environmental Damage, Practical Tables (1 June 2021). In 2022, the Practical Guide and Practical Tables were developed to include the assessment of an imminent threat of environmental damage as well as environmental damage. In 2023, the Practical Guide and Tables were enhanced by the addition of new checklists for screening non-ELD cases, the identification of imminent threat of damage cases, and new indicators for environmental damage cases. Training pursuant to the reports was carried out, with further training held in 2023 and 2024.

Other IMPEL projects with relevance regarding the implementation of the ELD include the project on 'Water and Land Remediation'[93], and on 'Lessons learnt from industrial accidents'[94].

Members of the **re/insurance industry** have raised awareness of the ELD by giving presentations to governmental authorities, brokers, operators and other ELD stakeholders. They have pointed out differences between the insurance cover provided by general liability and property policies and the much broader cover provided by environmental insurance policies. The presentations have not only raised awareness of the ELD but have also encouraged operators to purchase insurance that provides cover for ELD liabilities and to train operators, brokers and other ELD stakeholders in the difference between such insurance and insurance (e.g. most general liability and property policies) that usually does not provide such cover even when the policies contain environmental extensions). Pool Ambiente (the Italian co-reinsurance pool) has been instrumental in developing and promoting risk assessment certification.

Member States' efforts to support the ELD's implementation have already been discussed in Section 3 and Annex VII. Member States' representatives and the Commission together form an ELD governmental expert group that usually meets twice a year to discuss any relevant ELD developments (e.g. multiannual work programmes, ongoing studies and other projects, best practices and caselaw).

The Commission supports stakeholders in their efforts to assist the ELD's implementation by organising stakeholders' conferences and workshops. Five such events have taken place since the 2016 ELD evaluation. They have made it possible to bring different stakeholders' groups together and to discuss actions undertaken following the 2016 evaluation, as well as developments specific

91 Financial Provisions | Impel
92 Criteria for the Assessment of the Environmental Damage (CAED) | Impel
93 Contaminated sites | Impel
94 Seminar series on 'Lessons learnt from industrial accidents' | Impel

to the different stakeholders' groups. The last stakeholder workshop, which was held in November 2022, was dedicated to the ongoing ELD evaluation.

EFFICIENCY

4.1.5. To what extent have the ELD's costs been justified – overall and for different stakeholder groups – given the benefits that the ELD has delivered?

When the Commission proposed the ELD, it stated that its major impact would be to shift costs from society in general to persons that cause damage in line with the polluter pays principle. In other words, the ELD would result in **internalisation of the costs of preventing and remediating environmental damage** by operators that caused the damage (see the discussion on the third objective of the ELD under Section 4.1.1 above). Given that the reporting obligation for Member States no longer covers the financial costs associated with cases, such data are only incidentally available for cases where Member States have voluntarily shared the information with the Commission [95]. However, each case of environmental damage and imminent threat thereof that is reported by a Member State as having been handled under the ELD implies that the intended shift has indeed occurred. It is also clear that the shift in costs has been limited by the limits in the ELD's architecture and, more importantly, by its weak implementation. One notable weakness relates to the underuse of complementary remediation if primary remediation does not fully restore damaged biodiversity or waters (both when applying the ELD and when national liability rules are applied instead of the ELD). In such cases, it is not the polluter but rather society as a whole that pays the costs of the damage – notably because the quality of the environment, and the quality of ecosystem services are reduced.

In addition to internalisation of the costs of preventing and remediating environmental damage, there are costs related to implementation and enforcement of the ELD. These include the costs of the following:

- for operators: measures to minimise the risk of environmental damage;
- for operators: mandatory financial security for ELD liabilities in Member States which have introduced such obligations;
- for operators: voluntary insurance to cover possible costs of remediating ELD occurrences;
- for competent national authorities: implementation and enforcement of ELD legislation; and
- for NGOs and other interested persons making use of the ELD participatory mechanism.

There is no statistical data on whether these ELD costs have been incurred or justified by reference to the changes/effects they have achieved.

Regarding **measures to minimise the risk of environmental damage**, the ELD does not impose any specific requirements on the operators. However, the liability introduced by the ELD encourages operators to adopt such measures in order to avoid and mitigate any damage (e.g. to install pollution-control equipment, monitor the environment in the vicinity of industrial plants, introduce environmental management systems, and train employees). While a causal link between the adoption of preventive measures and the ELD may not always be established (considering also that they may stem from other environmental protection legislation, such as IED) and no relevant statistical data are available, it is still indisputable that measures taken by operators to prevent or mitigate environmental damage have had a beneficial effect and are justified.

[95] See case studies and enhanced summaries of Member States reports, Annexes I and J of the Support Study.

Costs associated with the **mandatory financial security systems** in Member States where the system exists are justified because operators have funds to remediate environmental damage that they would not otherwise have had. They are further justified because such financial security systems have resulted in operators subject to them carrying out risk assessment measures that have a preventive effect. Statistical data were not available on the extent to which the systems have ensured that sufficient funds are available to carry out remediation measures. Some evidence nevertheless indicated that operators in some Member States with mandatory financial security systems (cases confirmed in Portugal and Slovakia) had still become insolvent, with the result that at least part of the cost of remediating environmental damage that they caused was paid by the public purse. Research would therefore need to be carried out to determine how competent authorities have implemented mandatory financial security measures and whether, for example, they have ensured that operators have provided appropriate and adequate financial security (with the caveats that environmental insurance is not available in some Member States to provide cover for all ELD liabilities; and that terms and conditions of insurance policies vary) – whether (i) operators have continued to maintain adequate financial security after an initial assessment that they had such financial security provided by the relevant competent authority; or (ii) the environmental damage was caused by illegal operations.

Costs associated with the **voluntary purchase of insurance for ELD liabilities** are justified similarly to the costs of mandatory financial security instruments. The inclusion of cover for the remediation of environmental damage under non-ELD legislation and other losses in environmental insurance policies has also likely had a beneficial effect.

The costs of **implementing and enforcing the ELD by competent authorities** are well justified in Member States that have actively enforced national ELD legislation. However, it is more questionable whether implementation costs are justified in Member States in which there are no or very few reported ELD occurrences. It may be difficult to justify costs incurred by competent authorities that do not have procedures for integrating enforcement of national ELD and national non-ELD legislation (especially legislation that transposed the IED). Competent authorities almost invariably enforce national environmental permitting legislation before they enforce national ELD legislation (see Section 4.1.3 above). A good procedural integration at national level of the ELD with the IED and non-ELD national liability legislation would make it possible to avoid the need for double procedures and cost-reducing inefficiencies.

The costs for NGOs (and other interested persons) making use of the ELD participatory mechanism are the costs of identification or investigation of the damage. NGOs in some cases have been required to prove that an operator caused environmental damage instead of providing observations to show that there was a plausible case of environmental damage Considering the very limited resources of NGOs, also procedural costs (related to administrative and judicial proceedings) can have a deterrent effect on them[96].

In the public consultation, most of the stakeholders from the different groups agreed that the overall costs of the ELD and the costs for different stakeholder groups were justified given the benefits that the ELD had delivered.

[96] See: COWI, Prospect, and Justice and Environment 'Improving the implementation of the ELD and the evidence base', (2021), final report p. 193, Stakeholders Workshop of 22 November 2022 (workshop carried out as part of this evaluation)

4.1.6. Are there significant differences between Member States in implementation of the ELD and its efficiency. If so, what is causing them?

Significant differences exist between Member States in implementing the ELD. Some Member States have used optional provisions in the ELD (for example, those regarding permit and state-of-the-art defences – see Section 4.3.2) and this has led to variations in the efficiency of the ELD. The adoption of mandatory financial security for preventing and remediating environmental damage by some but not all Member States is another significant difference.

Further significant differences are due to the way in which Member States have transposed the ELD. These aspects, which were left to the discretion of Member States according to their national law, include the number of competent authorities, procedures for implementing the ELD and sanctions for breaching obligations.

The number of competent authorities differs widely between Member States. Some Member States (e.g. Ireland, Malta and Portugal) have designated a single competent authority. The competent authorities in some other Member States include regional and/or decentralised authorities (e.g. Belgium, Germany, Greece, Spain, France, Austria, Slovenia and Finland) and/or local authorities (e.g. Czechia, the Netherlands and Sweden). This is because some Member States have federal systems of government. Still further, in some Member States (e.g. Bulgaria, Czechia, Denmark, Cyprus, Hungary, Romania and Finland), some (but not all) competent authorities were designated according to their function (e.g. national parks, fisheries, water authorities, military land, GMOs, coastal and marine areas).

The division of responsibility for implementing and enforcing the ELD between many competent authorities has reduced the ability of personnel in the authorities in some Member States to learn how to implement it. Conversely, the designation of a single ELD competent authority (e.g. an environmental regulatory authority) can result in the absence of expertise in the prevention and remediation of biodiversity damage, for which a nature conservation authority or other specialised authority has the relevant expertise.

Procedures for administering the ELD also vary. In some Member States (e.g. Spain, Hungary, the Netherlands and Portugal) an operator that challenges a remedial order must bring proceedings before the competent authority before having access to a court. However, operators in some other Member States (e.g. France, Italy and Finland) may appeal directly to a court. Sanctions for failing to comply with national ELD legislation include administrative and judicial fines (or a combination of the two).

Many of the above differences have resulted in costs and benefits associated with the ELD differing between Member States.

4.1.7. Is the current approach (in which financial security for ELD liabilities is not compulsory) appropriate?

The ELD does not provide for a mandatory financial security system (even as an optional provision). However, it does explicitly call for Member States 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 ELD.

Some Member States (Czechia, Spain, Portugal and Slovakia) have introduced **mandatory financial security systems for ELD liabilities**. Ireland has introduced a hybrid system that includes mandatory financial security for environmental responsibilities such as the closure of a landfill as well as environmental liabilities. These measures are expected to contribute to the achievement of the ELD's objectives by helping to ensure funding for remediation measures if the liable operator were to become insolvent or could not otherwise pay for them.

Many Member States have introduced **mandatory financial security for** some of the **activities listed in Annex III to the ELD**, notably for waste management activities and for integrated pollution prevention and control activities (including activities under the IED). Some Member States have introduced mandatory financial security for Seveso III establishments and for other activities listed in Annex III to the ELD. Mandatory financial security for these activities is not directly linked to the ELD, but it is indirectly linked and has boosted the efficiency of the ELD by ensuring secure, sufficient and available funding to remediate or prevent further environmental damage.

In Member States that do not have a mandatory system, there is a wide disparity in the number of operators that have purchased **voluntary insurance for ELD liabilities**. Environmental extensions in model general liability policies drafted by the German and Austrian insurance associations have become commoditised. Most operators in Germany and Austria therefore have cover for ELD liabilities, albeit only for third-party claims for remediating environmental damage and not for remediating on-site damage. By contrast, data from a statistical survey carried out by the Italian National Insurance Association (*Associazione Nazionale fra le Imprese Assicuratrici*; ANIA) and processed by Pool Ambiente (the Italian environmental re/insurance pool) on environmental insurance policies purchased by almost all operators (from micro-enterprises to SMEs to large multinationals) in Italy show that only 0.45% of operators purchased environmental insurance policies in 2021 [97].

Both the European Court of Auditors [98] and the European Parliament [99] called on the Commission to strengthen the use of the financial security instruments. The EP specifically requested that the Commission should assess the introduction of a mandatory financial security system.

In the **public consultation**, respondents from the groups representing public authorities, the re/insurance industry and operators considered that the ELD had improved or at least partially improved the availability of insurance for ELD liabilities. By contrast, most respondents from NGOs/academia and citizens disagreed.

Responses to the public consultation (including position papers) set out various arguments for and against an EU-wide mandatory financial system.

Responses from ELD stakeholders against such a system (from re/insurance industry) argued that:

- a system based on a one-size-fits-all approach would not work due to different conditions between operators (including the size of operators and the industrial/commercial sector) and between individual Member States;
- such a system would hamper the development of an environmental insurance market in the few markets in which it has not yet fully matured;
- Member States should be allowed to take the approach best suited to their individual circumstances (including market demand);
- a one-size-fits-all approach would result in some operators failing to carry out preventive measures or robust risk management measures; and
- insurers would become pseudo-regulators and could prevent an operator from continuing to operate.

[97] Associazione Nazionale fra le Imprese Assicuratrici, La prima rilevazione statistica ANIA sulla diffusione delle polizze di responsabilità ambientale in Italia (October 2023).
[98] 2021 ECA Special Report.
[99] 2021 EP ELD Resolution.

The respondents therefore stressed the importance of freedom of contract as a precondition for adapting insurance cover to operators' different needs.

Conversely, responses from proponents of an EU-wide mandatory financial security system for ELD liabilities argued that:

- only a mandatory financial security system protects the public from the costs of remediating environmental damage;
- such a system creates a market for environmental insurance;
- there may be enough flexibility within mandatory systems to cater for operators' different needs and conditions;
- such systems are in principle risk-based and therefore contribute to promoting risk management procedures and preventive measures;
- premiums for insurance policies are reflected in the price of goods, which contributes to implementation of the polluter pays principle; and
- awareness of the risk of environmental damage helps corporate decision-making.

It is difficult to determine the degree to which the absence of an EU-wide mandatory financial system has affected the ELD's efficiency. In order to determine whether the current approach (in which financial security for ELD liabilities is not compulsory) is appropriate, it is crucial to assess whether benefits of introducing the mandatory system at the EU level would have outweighed its potentially detrimental effects.

The potential **nature and scope** of an EU-wide mandatory financial security are crucial for this assessment. Factors include: (i) whether the system would have applied to all Annex III operators; (ii) whether it would have been risk-based and applied only to some of them; (iii) whether there would have been exclusions for some operators (e.g. SMEs and/or natural persons); and (iv) whether there would have been exceptions for some operators or occupational activities. Other relevant factors include (as indicated above) the types of financial security that would have been acceptable to competent authorities and the minimum amounts of financial security. Mandatory financial security systems introduced in some Member States only apply to (some) Annex III operators, based on different forms of risk assessments.

A further issue is **the range of possible financial security instruments and mechanisms** that would satisfy an EU-wide mandatory financial security system. A system that allows only insurance as a financial security instrument would be restrictive and could therefore be detrimental to operators and re/insurers in limiting the choices of financial security. Conversely, insurance must be part of a mandatory financial security system due to its advantages to SMEs and other operators that may not be able to access other types of financial security.

Another issue is **whether operators in individual Member States would have financial security for ELD liabilities in the absence of a dedicated mandatory system**. Operators in some Member States have voluntarily purchased environmental insurance policies that provide insurance for ELD liabilities as well as the remediation of environmental damage under national non-ELD legislation and other losses. The scope of insuring agreements in some Member States is broad, with the caveat that the scope (and availability of the policies) depends on individual Member States, individual insurers and their reinsurers. Environmental insurance policies may cover the following points:

- remediation of on-site and off-site environmental damage under the ELD caused by operations (including transportation) carried out by the insured operator during the policy period;
- remediation of pollution under other environmental legislation caused by operations (including transportation) carried out by the insured operator during the policy period;
- remediation of pre-existing environmental damage (including pollution at or emanating from sites owned or occupied by the insured) provided that the damage is disclosed by the insured

to insurers or is unknown to the insured before the inception of the policy;

- third-party claims for bodily injury and property damage from environmental damage (including pollution);
- first-party business interruption costs and extra expense caused by environmental damage (including pollution);
- third-party business interruption costs and extra expense caused by environmental damage (including pollution);
- remediation of pollution from waste generated by the insured at a non-owned disposal site that is authorised to accept the waste when the waste is disposed of there;
- crisis response costs arising from an incident that has caused environmental damage (including pollution);
- emergency measures to prevent or remediate environmental damage (including pollution) that occurs during the policy period; and
- related legal costs.

As indicated, some of the risks covered by the policies arise from legislation (including but not limited to national ELD legislation) to prevent and remediate pollution and other environmental damage. Other risks are derived from civil/common law (claims for bodily injury; property damage; pure economic loss (when a Member State's law recognises it); and non-statutory losses (including business interruption losses and crisis response costs)).

A further issue is **whether it would have been feasible for the EU to introduce an EU-wide mandatory financial security system for ELD liabilities**. An obligation to have financial security for specified operations does not mean that insurance cover becomes automatically available. **Insurance for ELD liabilities is widely available to global and other large operators with sites and/or operations in more than one Member State**.

However, insurance for ELD liabilities is not always widely available – or even available – to operators with sites and/or operations in a single Member State. Much depends on individual Member States. Insurance for ELD liabilities is generally available to operators in most, but not all, Member States that were Member States before the ELD was adopted in April 2004. Environmental insurance markets had begun or were beginning to be developed by then in many of those Member States. Spain, France, Italy and the Netherlands had already created re/insurance pools for environmental insurance (although the Dutch pool no longer exists).

In other Member States, however, **insurance is available only for limited ELD liabilities** – mostly the remediation of off-site pollution that is subject to liability under national non-ELD legislation – **or not at all**. A major reason for this unavailability is the general lack of enforcement of the ELD by competent authorities in some Member States and the consequent low number or absence of environmental damage occurrences that are determined to be ELD occurrences. Lack of enforcement reduces the demand for environmental insurance. Insurers will not spend time and money developing and marketing environmental insurance policies for businesses with sites and/or operations in a single Member State unless there is a demand for such policies. An example is Slovenia, where the LIFE project on the ELD in 2018 and 2019 investigated the potential development of environmental insurance policies for ELD liabilities. EcoLex, which led the project, held meetings about the potential policies with several insurers and insurance organisations. The leading insurance company in Slovenia had been interested in developing environmental insurance policies and had previously carried out its own investigations (including gathering data on market demand and practices in other States) but concluded in mid-2019 that there was insufficient demand and postponed development of environmental insurance policies until demand increased.

The main underlying issue is therefore the scale of implementation and enforcement of national ELD legislation by competent authorities. There will be no demand from business for environmental insurance policies if (as is the case in many Member States) competent authorities are not or are insufficiently actively enforcing the ELD. The businesses would simply be spending money on insurance premiums for a risk that does not realistically exist. A corollary issue is of course whether there is demand for environmental insurance policies that provide cover for non-ELD liabilities. If (as seems to be the case[100]) competent authorities are enforcing such legislation, businesses may demand environmental insurance, although the policies do not necessarily include cover for all – or even some – ELD liabilities in some Member States.

Another problem with the introduction of an EU-wide mandatory financial security system for ELD liabilities is illustrated by the situation in Cyprus. In its first ELD report to the Commission, Cyprus stated that consultations had been carried out with the financial security sector in Cyprus during and following transposition of the ELD, but also stated that it was not possible to create a national market for financial security instruments because Cyprus's small size and the dominance of SMEs meant that the instruments would be too costly.

4.1.8. To what extent have actions undertaken by the Commission and Member States since 2016 (particularly in response to the 2016 ELD evaluation) made the ELD more efficient?

The Commission and Member States have taken various measures to make the ELD more efficient, especially in response to the 2016 ELD evaluation. **The Commission's measures** are described in Section 2 of Annex VII.

The Commission's **Guidelines on environmental damage** call for a more extensive interpretation of the definitions of biodiversity and water damage in the ELD than interpretations by some Member States. The Commission's interpretation is not binding and does not contain specific criteria or thresholds for the ELD's application, because this would require legislative change. However, the Commission Guidelines are likely to make the ELD more efficient by providing criteria that are partly based on CJEU judgements to assist competent authorities and other ELD stakeholders in the determination of environmental damage. Courts in Denmark and Sweden have already referred to the Commission Guidelines qualifying on its basis the analysed environmental damage occurrences as ELD cases. Bulgaria has provided a link to them on its ELD website. The use of the Commission Guidelines is expected to further increase in the future.

The Commission has continued the **development and encouragement of training programmes on the ELD**. The first training materials and methodologies were already developed in the first ELD reporting period. The Commission has since 2016 organised and participated in several training programmes (including presentations on the ELD and its implementation). The Commission's continuing development and encouragement of such programmes has contributed to making the ELD more effective and efficient. This is due not only to the programmes themselves but also to raising awareness of the ELD.

The Commission has also supported through relevant grants IMPEL's development of **training tools and methodologies** related to the ELD (see Section 4.1.4).

The Commission has **encouraged the development of financial security instruments and markets** by commissioning reports on mandatory financial security and the status of insurance for ELD liabilities in all Member States and across the EU. These reports have raised awareness among operators, competent authorities and other ELD stakeholders of the availability of and demand for

[100] Status of the availability of and demand for, insurance for ELD and other environmental liabilities in each Member States is summarized in the ELD Support Study, Annex B, Section 7 and (dedicated) Annex N.

insurance and other financial security instruments for ELD liabilities and environmental insurance markets.

The Commission has also **launched a major screening and infringement proceeding** against Member States that had failed to properly implement Articles 12 and 13 of the ELD (see Section 1.2 of Annex VII). It is assumed that proper transposition of these provisions will help increase public participation and improve access to justice for civil society and environmental NGOs, thus improving the ELD's implementation.

Public consultation respondents were able to rate the measures taken by the Commission since 2016 to improve the ELD's efficiency. For almost all proposed actions, most expressed opinions in all stakeholder groups (with some exceptions concerning re/insurance industry and operators, which were more positive) describe the improvement as limited. Issuing the Commission Guidelines with a view to promoting a common understanding of the definition of 'environmental damage' as well as encouraging training programmes received slightly more positive opinions by stakeholders than the other measures (i.e. compilation and publication of national registers of actual and imminent threats of environmental damage; and promoting the availability of and demand for insurance for ELD liabilities).

Member States' actions are described under Section 3 of Annex VII. Some Member States have carried out **training sessions on national ELD legislation**. The training sessions have raised awareness of the ELD. The LIFE programme run in Greece is also raising awareness of financial security with a view to introducing mandatory financial security for ELD liabilities. Member States that have introduced mandatory financial security have also undertaken other actions meant to increase the ELD's efficiency, especially through developing relevant methodologies and IT tools and organising relevant training.

Following the 2016 ELD evaluation, Member States have also been encouraged to **develop and publish national registers** of ELD occurrences. A third of the Member States had already created such national registers. Bulgaria, Hungary and Slovenia have since created them. The registers/databases build on registers/databases of environmental damage occurrences created under non-ELD legislation. However, the registers/databases are not publicly available in many Member States and, even when they are available, it is often difficult to use them to determine the number of ELD occurrences. The public registers/databases of ELD occurrences have contributed to raising awareness of the ELD and its implementation in those Member States. It should nevertheless be noted that registers/databases created by Member States with no or few ELD occurrences will be of limited value until the number of ELD occurrences in those Member States increases.

There is substantial evidence that more insurers have entered **environmental insurance markets** in the EU since the ELD was adopted. Except for the introduction of mandatory financial security by some Member States in the following years, however, there is only anecdotal evidence to link the increase to measures carried out by Member States. The growth rather appears to be due to adoption of the ELD itself and measures carried out by the re/insurance industry and other ELD stakeholders to raise awareness of the ELD itself and the need for insurance for ELD liabilities. The growth in environmental insurance policies has made the ELD more efficient and more effective by allowing operators to increase their financial capacity to remediate damage caused by their activities.

The **revision of Article 18(1) of the ELD** by Regulation (EU) 2019/1010 on the alignment of reporting obligations in the field of legislation related to the environment has affected the ELD's efficiency and effectiveness for both the better and the worse. The original Article 18(1) required Member States to report ELD occurrences and related information to the Commission only once, by 30 April 2013. The new version requires Member States to report ELD occurrences and related information to the Commission periodically – by 30 April 2022 and every 5 years after that date. However, despite the 2016 ELD evaluation conclusions that the exercise suffered from a lack of sufficient information and data, the revised version of Article 18(1) substantially limited the scope of the reporting obligation. It removed the obligation to provide the following data: instances of liability under the ELD; the date of proceedings initiated under the ELD; the activity classification code of a liable legal person; the outcome of the remediation process; the date of closure of proceedings; and specific optional information, such as the costs of prevention and remediation measures. As in the original version of Article 18(1), there is still no explicit requirement for Member States to report imminent threats of environmental damage, detailed information about ELD occurrences or the overall amount paid to remediate environmental damage. As a result of, and in contrast to, most reports under the former Article 18(1), some reports by Member State to the Commission under the revised Article 18(1) are of half page or less. Some reports by Member States (e.g. Bulgaria, Germany, Estonia, Greece, Spain, Hungary, Poland and Portugal) contain much valuable information (including tables of ELD occurrences), but a substantial number of the reports contain only limited information. Given the paucity of information submitted by some Member States, Annex J to the Support Study includes enhanced versions of the reports.

4.1.9. Could the ELD's efficiency have been improved?

This section does not discuss the benefits that would be derived from structural simplification of the ELD and its relationship to EU and national non-ELD environmental legislation. The complex nature of the ELD – and its effect on the effectiveness and efficiency of the ELD – are discussed in Sections 4.1.3, 4.1.10, 4.1.11 and 4.3.2. This section focuses instead on possible ways to improve the implementation of the ELD in its current form.

No unnecessary burdens on businesses have been identified. Furthermore, no evidence has been found that the introduction of mandatory financial security systems and the costs for businesses in carrying out risk assessments using them and paying premiums for insurance policies and the costs of other financial security instruments were unnecessary burdens – compared with the number of insolvencies of operators that resulted in some Member States having to pay to remediate environmental damage (see Section 4.1.7).

The ELD's efficiency could have been improved by **simplifying the ELD's implementation to reduce unnecessary burdens on competent authorities**. As described in Section 4.1.5, a substantial number of competent authorities have maintained separate administrative processes when enforcing national ELD and national non-ELD legislation, including national environmental permitting legislation. Some Member States have integrated ELD and non-ELD proceedings and introduced formal or informal procedures to screen environmental damage occurrences in order to determine whether national ELD legislation was applicable. Some of these procedures nevertheless resulted in only a few ELD occurrences being identified by comparison with a large number of non-ELD occurrences (see Section 4.1.1). The use of such procedures by competent authorities in more Member States could lead to improvements in the efficiency of the ELD, but this would depend on the interpretation of the ELD's provisions by the authorities carrying out the screening.

The ELD's efficiency has been improved by **simplifying or reducing unnecessary burdens on NGOs and other interested persons**, but these depend on specific Member States. NGOs in some Member States commented that they had encountered problems in receiving responses to their requests to competent authorities under the public participation provision in Article 12 of the ELD. Such problems included being required to prove that an operator had caused environmental damage – as opposed to being required to demonstrate that there was a plausible case of environmental damage – and that the authorities had taken a long time to respond to their requests. In Slovakia, over 3 years elapsed after environmental NGOs requested action and submitted observations on a potential ELD occurrence to the competent authority. However, some of the difficulties faced by environmental NGOs and other interested persons are not subject to the ELD itself but rather to the restrictive application of Articles 12 and 13 by competent authorities in some Member States.

The ELD's efficiency could also have been improved **by further measures to improve awareness** of the tool and **further training** to all the concerned stakeholder groups (with a particular focus on the competent national authorities as well as other national authorities involved in the implementation of legislation that interacts or overlaps with the ELD – including the IED and national non-ELD liability regimes). Both Member States and the Commission should contribute to these objectives.

Further Commission measures to improve the ELD's implementation could have included (i) enhanced monitoring by the Commission of the grounds for the **complaints** that it receives and that refer to the ELD's application or larger environmental liability issues; and (ii) further development of the **Commission Guidelines** to focus on the joint application of the ELD and other regimes (e.g. the ELD and permitting legislation, and the ELD and criminal proceedings).

It should be noted that the **2021 EP ELD Resolution** included several non-legislative recommendations to improve the ELD's implementation; notably to use soft-law instruments (guidance); improving ELD expertise by creating a dedicated task force; improving ELD data collection; and introducing a comprehensive system to monitor compliance with environmental legislation.

COHERENCE

4.1.10. To what extent is the ELD internally consistent and coherent?

Overall, the architecture of the ELD is internally consistent and coherent. However, the implementation of some of the ELD's provisions has resulted in some important inconsistencies in the ELD's application. The Commission Guidelines [101] clarify the interpretation of some relevant provisions, but they are not binding on Member States and, because they have only been adopted recently, the EU's courts have not yet referred to them in their judgments, thereby possibly confirming the legal interpretation set out therein.

Article 16 of the ELD refers to **'more stringent' provisions** by stating that the ELD:

> 'shall not prevent Member States from maintaining or adopting more stringent provisions in relation to the prevention and remedying of environmental damage, including the identification of additional activities to be subject to the prevention and remediation requirements of this Directive and the identification of additional responsible parties'. (emphasis added).

Paragraph 26 of the Commission Guidelines clarifies that this provision is in line with Article 193 of the Treaty on the Functioning of the European Union (TFEU) and that the entitlement to have more stringent provisions should not be confused with either an entitlement to have different provisions that do not fulfil the ELD's requirements or to set aside the liability of operators for 'environmental damage' under the ELD. The ELD's requirements must, as a minimum, be fulfilled in all cases.

The present evaluation has served as an opportunity for further analysis of this provision.

[101] Commission Notice of 7 April 2021, *Guidelines providing a common understanding of the term 'environmental damage' as defined in Article 2 of Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage*, OJ C 118, 7.4.2021, p. 1.

The intent behind Article 16 is to apply the most stringent possible standard of remediation to any given case of environmental damage, but the term 'more stringent provisions' may raise questions, when comparing the ELD with national non-ELD legislation.

When compared *in abstracto*, a Member State's non-ELD liability legislation will often cover a much larger range of damage than the ELD. It may cover liability for water and land damage caused by actors other than operators of hazardous activities listed in ELD Annex III. In the case of land damage, it may cover damage to the environment that does not create a risk to human health. It may also be based on strict liability, while the ELD will, with regard to non-Annex III operators, only apply liability based on fault or negligence, etc. Given the wording of Article 16, these are all good reasons to consider such national legislation as more stringent (at least in certain aspects) and therefore to maintain it in place as compatible with the ELD.

However, the notion of 'more stringent provisions' should be understood as taking into account the ELD's subject-matter and objectives. To be considered as more stringent provisions, national law should raise the standard of environmental protection within the ELD's subject-matter. According to the CJEU's case law, more stringent protection measures must 'first, seek to attain the objective of Directive 2004/35 as defined in Article 1 thereof, namely, to prevent and remedy environmental damage and, second, to comply with EU law, in particular its general principles, which include the principle of proportionality' [102].

In the case of parallel liability regimes (national and ELD-based), Article 16 should be interpreted as meaning that a competent authority should determine on a case-by-case basis (comparison *in concreto*) which legal regime is more stringent in the case at hand. With its advanced remediation standards (including complementary and compensatory remediation), the ELD potentially provides a more stringent response to such cases and particularly to cases of water and biodiversity damage for which the liability under the ELD can be invoked.

In practice, however, once the national non-ELD liability rules are maintained on the basis of a first *in abstracto* test, they are often applied as instruments of first choice, especially because it is often unclear at the outset whether the ELD significance criteria are fulfilled. National authorities will then only rarely apply a second *in concreto* test to see whether, on the basis of the concrete circumstances of a given case, the national non-ELD rules or national ELD rules allow a more stringent remediation of a specific damage occurrence.

Relying on a narrow interpretation of Article 16 has allowed Member States to only apply their national liability regimes to environmental damage cases which qualify under both regimes, thus making the ELD less effective and efficient. In particular, the Support Study reveals that many Member States have handled water damage cases <u>only</u> under national non-ELD legislation, even though such national legislation does not provide for complementary or compensatory remediation.

The need for case-by-case or *in concreto* comparison between the stringency of response under national ELD-based and non-ELD rules is particularly obvious given the national authorities' duty to enforce the ELD with regard to all cases which even partly qualify to be handled under this framework (as opposed to a power but not a duty to implement other relevant national rules).

The definition of 'damage to protected species and natural habitats' in Article 2(1)(a) has led to inconsistencies in the ELD's application.

The concept of 'conservation status' of habitats and species in the ELD is almost identical to that of the same term which is used in the Habitats Directive. The same is the case for the term 'favourable

[102] Judgment of the Court of Justice of 13 July 2017, *Túrkevei Tejtermelő Kft.* v *Országos Környezetvédelmi és Természetvédelmi Főfelügyelőség*, C-129/16, ECLI:EU:C:2017:547, paragraph 61.

conservation status' for natural habitats [103] and species [104]. The ELD intentionally uses 'the same definition (of environmental damage), so that common criteria can be used and uniform application promoted' [105]. However, the ELD also refers, in its definition of conservation status, to the natural range for habitats and species as being (in addition to the European territory of the Member States to which the Treaty applies and which is referred to in both texts) 'the territory of a Member State or the natural range of that habitat or of that species' [106].

Some Member States (e.g. Poland) have interpreted this geographical reference restrictively as meaning that biodiversity damage only occurs if the damage significantly adversely affects the favourable conservation status of a protected species or natural habitat in an entire Member State, the territory of the EU or its natural range.

The Commission Guidelines clarify that biodiversity damage occurs even if damage to a species or natural habitat only occurs at a local level. They link this reasoning with an ELD's Annex I provision that also refers to this level. It remains to be seen how the Commission Guidelines will impact the ELD's implementation in individual Member States.

The definition of 'water damage' in Article 2(1)(b) of the ELD has led to inconsistencies in its practical application – does it apply to 'waters' or only to 'water bodies' under the WFD? There is also inconsistent application as to whether or not water damage in the ELD only occurs when it can be established that the status of a water body has deteriorated as a result of damage so that it is in a lower 'class' in terms of ecological or chemical or quantitative status. The Commission Guidelines clarify that water damage also occurs if the damage affects only part of a water body and notwithstanding whether the water body's classification needs to be lowered.

The ELD does not state whether **a single environmental damage occurrence may be divided** – into land, water, and/or biodiversity damage – or whether all aspects of the damage must be included in measures to remediate the occurrence under the ELD. Dividing the occurrence could result in a reduction in measures to remediate environmental damage.

An example is damage to a river by a fertiliser spill in Denmark. The operator argued that liability for remediating pollution in the soil and banks of the damaged watercourses should be split from liability for remediating water damage. The competent authority agreed to the split with the consequence that (i) national non-ELD legislation applied to remediation of the pollution in the soil and banks of the watercourses; and (ii) national ELD legislation applied to remediation of the water pollution. The presence of polluted water at the banks of the river arguably meant that ELD-based remediation measures relevant to water damage (including complementary and compensatory measures) could have been taken. The competent authority in Denmark divided remediation of environmental damage from pollutants that entered a river into contaminated land under national non-ELD legislation and water damage under national ELD legislation. The authority determined that damage to the land/soil and banks of the river was not land damage under Article 2(1) of the ELD, even though the herbicide had entered the river through its banks and groundwater [107].

A further occurrence in Denmark that involved liquid nitrogen from a tank fire entering land and coastal waters was also split into land damage and water damage even though pollutants from groundwater entered coastal waters.

[103] Habitats Directive Article 1(e); ELD Article 2(4)(a).
[104] Habitats Directive Article 1(i); ELD Article 2(4)(b).
[105] ELD recital 5.
[106] Habitats Directive Article 1(e) (natural habitats), 1(i) (species); ELD Article 2(4)(a) (natural habitats); ibid Article 2(4)(b) (species).
[107] See the case study analysed in the Support Study, Annex I, Section 6.

Dividing the occurrence in this way is only justifiable if more stringent national rules could make it possible to remediate the part of the damage handled under non-ELD rules to a higher standard.

The provision of **Article 17 on the ELD's temporal application** has been subject to diverging interpretations, in particular where it states that the ELD 'shall not apply to 'damage caused by an emission, event or incident which takes place after [30 April 2007] when it derives from a specific activity that took place and finished before [30 April 2007]'. Conversely, the ELD does apply to damage caused by an activity which ended after 30 April 2007 but possibly started many years earlier. However, Article 17 does not specify the date for determining the baseline condition for such damage occurrences. The question has therefore arisen of whether the baseline condition is to be measured on the date when the national ELD legislation entered into force or on an earlier date.

Further questions on the interpretation of ELD provisions have been identified and analysed in the Support Study [108]. These particularly include the question of **whether compensatory remediation obligation can be limited** in cases where the competent authority considers that **the costs of doing so are disproportionate** (see Section 1.3.3 of Annex II to the ELD); the question of whether Article 15(3) on **cooperation between Member States** only applies to cases of environmental damage, or also to cases of an imminent threat of environmental damage; and a question regarding the **meaning of the term 'public'** as referred to in Article 2(13) of the ELD in the definitions of 'services' and 'natural resource services'.

4.1.11. To what extent is the ELD consistent with other EU environmental legislation and wider EU policies?

Important issues have arisen in the joint application of the ELD on the one side and the IED and the Seveso III Directive on the other.

There are overlaps between the **provisions of the ELD and IED** [109] **concerning measures to be taken following environmental damage** under the ELD which also qualifies as an incident/accident involving 'pollution' [110] under the IED.

Item 1 of Annex III to the ELD includes all activities in Annex I to what is now the IED except for installations or parts of installations used for research, development and testing of new products and processes. The ELD therefore applies strict liability to operators that have a permit under the IED to prevent or remedy all three types of environmental damage to activities subject to the IED.

Article 7 of the currently applicable (pre-2024) IED states that:

> 'Without prejudice to (the ELD), in the event of any incident or accident significantly affecting the environment, Member States shall take the necessary measures to ensure that:
>
> (a) the operator informs the competent authority immediately;
> (b) the operator immediately takes the measures to limit the environmental consequences and to prevent further possible incidents or accidents;
> (c) the competent authority requires the operator to take any appropriate complementary measures that the competent authority considers necessary to limit the environmental consequences and to prevent further possible incidents or accidents.'

[108] See the Support Study, Section 7.1.
[109] This applies to both the IED version currently in force and the 2024 IED revision.
[110] Article 3(2) of the IED defines the term 'pollution' as 'the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment'.

Therefore, if an incident/accident significantly affects the environment, an operator must: (i) immediately inform the IED and (where these are separate authorities) ELD competent authorities; (ii) immediately take measures to limit the environmental consequences of the incident/accident and to prevent future possible incidents/accidents; and (iii) take any appropriate complementary measures considered necessary by the IED and ELD competent authorities to limit the environmental consequences of the incident/accident and to prevent further possible incidents/accidents.

Where the authorities are separate, both competent authorities should work together because the IED includes preventive measures that are not covered by the ELD; and because the ELD includes remediation measures (i.e. complementary and compensatory remediation) that are not covered by the IED. Measures to limit the environmental consequences of an incident/accident under the IED and the ELD, which must be carried out 'immediately' under both directives, are roughly equivalent.

Competent authorities have, however, tended to enforce only the IED and have not liaised with ELD competent authorities, which tend to be different authorities or different divisions within an authority, to determine whether the pollution incident/accident is also covered by the ELD (see also Section 4.1.3 above).

Article 7 was modified as part of the 2024 revision of the IED, but the rules of interaction between the two instruments remain unchanged.

A somewhat similar issue may arise in the context of the Seveso III Directive. Article 17 of this directive directs Member States to require the competent authority following a major accident to 'take appropriate action to ensure that the operator takes any necessary remedial measures'. Competent authorities in at least one Member State (the Netherlands) have not enforced the ELD together with the Seveso III Directive[111]. The Dutch authorities in charge of the Moerdijk disaster enforced only national legislation that implemented the Seveso III Directive and national water and soil legislation, considering that the non-ELD legislation overlapped with national ELD legislation and that both legislations were equivalent.

There is a limited overlap between the ELD and the new Environmental Crime Directive (ECD). The new ECD defines a number of accessory penalties or measures for environmental offences (these are optional for Member States to adopt), which include reinstating the environment. If the damage is irreversible or the culprit lacks the capacity to carry out remediation measures, the ECD further allows financial compensation as an accessory sanction or measure. The potential overlap with the ELD is not very substantial because environmental damage needs to result from a crime (thus corresponding to only a portion of ELD cases) and because the ELD would only apply to some of the damage cases that fall within the ECD's scope of application given the ECD's relatively wide definition of damage.

As regards the penalty or measure of reinstatement, the ECD provides no methodology for reinstating the environment and leaves that to national law. However, recital 43 explains that the ECD should not affect civil liability under national law or the obligation to compensate, in accordance with EU or national law, for harm or damage caused as a result of a given criminal offence defined in the ECD. The coherent implementation of the ELD and the ECD will require that for cases where both instruments apply, the remediation in kind required under the ELD is not replaced by a financial compensation under the ECD.

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[111] Fire at ChemiePack on the 5th of January 2011 in Moerdijk (Netherlands), discussed in the 2016 ELD evaluation, p. 25

There is a potential risk of incorrect implementation of the ELD due to its interaction with the (WFD). The WFD requires Member States to establish and review their management plans to address shortcomings in the status of water bodies in their territories and to ensure that they have good status every 6 years. The timeframe of these general management measures has sometimes been seen as an obstacle to requiring direct remediation of the water damage under the ELD. However, the WFD does not allow any derogations from the ELD and does not allow Member States to make such derogations in their national management plans. Any issues which may occur are therefore linked to the way that the directives are implemented and not to any rules contained in them.

An example is a Swedish case of environmental damage to a lake due to the operation of a hydroelectric power plant that resulted in significant fluctuations in the lake's water level. The operator of the power plant was in compliance with its permit, which had been issued before either the WFD or the ELD came into effect. The relevant ELD competent authority ordered the operator to remediate the damage and to prevent further damage. The operator argued that it should not be required to do so until its permit was reviewed in 2036, when measures to achieve good ecological status would be known. Derogations concerning environmental quality standards had been proposed that involved extensions beyond two further updates of the river basin management plan. This meant (if the proposals became effective) that the waters would not achieve good ecological status until 2039. The reviewing court agreed with the operator and stated that the competent authority's order was not intended to remedy environmental damage that had occurred or to prevent such damage but was rather a complete re-assessment of the operator's activities. The court therefore considered that it was appropriate to lift the injunction [112].

It needs to be emphasised that cases of incorrect implementation or application should not be considered as inconsistency between the EU instruments concerned. Such instruments should always be implemented in a way that ensures their mutual consistency. In a recent judgment, the CJEU [113] required competent authorities to take into account temporary deterioration of water quality (including short-term impacts without lasting consequences) in the water management process. The CJEU stated that competent authorities must adapt the monitoring process accordingly. This judgment was rendered in the context of assessing the compatibility of a programme or project with the objective of preventing the deterioration of water quality, but it may also facilitate a more coherent implementation of the ELD and the WFD in the future.

Attention will be required to ensure the **parallel implementation of the ELD and the NRL consistent with their relevant objectives,** and namely that any remediation of biodiversity damage required under the ELD for the area subject to NRL, is not postponed to follow the timeframes set out for relevant restoration targets under the latter.

The ELD in its current form is not well suited to support the objectives of the **Soil Monitoring Law (SML)** and the **Regulation on plastic pellets**[114] (discussed in Section 4.3.2).

This evaluation has found no inconsistencies or unclarities between on the one side the ELD and on the other the Waste Framework Directive [115], the Birds Directive, the MSFD, the still applicable

[112] See the case study in the Support Study Annex I, Section 14.

[113] Judgment of the Court of Justice of 5 May 2022, *Association France Nature Environnement* v *Premier ministre, Ministre de la Transition écologique et solidaire*, Case C-525/20, ECLI:EU:C:2022:350, paragraph 41. See also judgment of the Court of Justice of 28 May 2020, *IL and Others* v *Land Nordrhein-Westfalen*, Case C-535/18, ECLI:EU:C:2020:391, paragraph 82.

[114] Regulation (EU) 2025/2365 of the European Parliament and of the Council of 12 November 2025 on preventing plastic pellet losses to reduce microplastic pollution

[115] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste [2008] OJ L312/3, as revised by Directive (EU) 2018/851 [2018] OJ L150/109 (consolidated version);

ECD of 2008[116], the Environmental Impact Assessment Directive[117] or the Invasive Species Regulation[118]. The ELD is, furthermore, consistent with and complements other EU environmental policies and wider EU policies. These include the Ship-Source Pollution Directive (SSPD), including its 2024 revision[119], the LIFE programme, the Technical Assistance Cohesion Fund, EU4Environment and the Just Transition Fund, the CSDDD and the proposed directive on harmonising certain aspects of insolvency law[120].

The public consultation questions on coherence received a relatively low number of responses. However, there is quite a clear division between the views of stakeholders. Most of the respondents from public authorities and operators, and all respondents from re/insurance industry are of the view that the ELD is consistent and coherent internally and fully or substantially consistent with other EU legislation and policies as well as international conventions. However, most citizens, NGOs and members of academia are of the opposite view and consider that the ELD lacks consistency and coherence.

4.2. How did the EU intervention make a difference?

EU ADDED VALUE

4.2.1. What is the EU added value of the ELD compared with what is likely to have been achieved by Member States in its absence?

The ELD's principal EU added value lies in defining a high minimum standard of environmental protection applicable in the case of environmental damage. This standard was not, in many aspects, matched by pre-existing national liability instruments[121].

This high standard consists primarily of the rule that damage is to be remediated in kind to the baseline condition (*restitutio in integrum*). Remediation in kind allows the environment to become a direct beneficiary of the proceedings, represented but not replaced by the competent authorities. The remedial measures under the ELD consist of primary but also possibly complementary and compensatory remediation. This combination of measures is designed to ensure that the damage does not result in a net loss in environmental resources.

The obligation of remediation in kind existed in some Member States before the implementation of the ELD (see Section 4.1.1. first objective). In other Member States, however, the damage would only be subject to financial compensation. Moreover, the pre-existing national rules did not recognise the concept that a person who causes environmental damage must carry out complementary remediation (if primary remediation does not remediate the damaged water or biodiversity to its baseline condition – i.e. its condition at the time of the damage if the damage had not occurred), or/and compensatory remediation (in case the remedial process takes time). Only Germany imposed liability for complementary remediation but to a much lesser extent than the

[116] 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.

[117] 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 (consolidated version).

[118] Regulation (EU)No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species (consolidated version).

[119] Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on ship-source pollution and on the introduction of penalties for infringements, last revised by Directive (EU) 2024/3101 of 27 November 2024 ; the SSPD covers penalties for illegal discharges from ships and specifically refers to the damage caused by the discharge to the environment. However, there is no overlap between the Ship-Source Pollution Directive and the ELD.

[120] See further analysis in the Support Study, Sections 7.2 and 7.3, and Annex B, Sections 14 and 15.

[121] See also 2016 ELD evaluation, p. 58.

ELD (see Section 2.2.1). **Complementary and compensatory remediation for environmental damage**, which was first devised and implemented in the USA through its CERCLA legislation [122] **is the ELD's principal innovation**.

The inclusion of biodiversity damage in the scope of environmental liability was also very innovative when the ELD was adopted because no national legislation imposed such liability at that time. Today, both complementary and compensatory remediation techniques and liability for biodiversity damage are to be found in the national legislation transposing the ELD.

The ELD also strengthened the standard of liability by introducing a duty rather than only a power for competent authorities to pursue polluters. The pre-existing national liability rules would give national authorities a wide margin of discretion on whether to intervene.

EU-level liability legislation clearly shows its added value when handling occurrences of cross-border damage. Environmental pollution and contamination know no borders, so the activity of an operator in one Member State often causes damage in another Member State. The Article 15 mechanism lays down principles of cooperation between the concerned Member States in such cases.

Furthermore, the ELD's objectives are better achieved by intervention at EU level, because this allows maximum consistency with the other EU level instruments protecting specific environmental resources (particularly the Birds Directive, the Habitats Directive, the WFD and the MSFD), which the Directive complements as regards liability.

While all these results could not have been achieved efficiently by Member States acting alone, the ELD is well aligned with the subsidiarity principle.

Also, the EU's intervention has been designed in accordance with the principle of proportionality and with the intention of not going beyond what is necessary in order to achieve its objectives [123].

However, this evaluation demonstrates that the ELD's added value is in practice substantially lessened by the limited scope and relatively low uptake of the instrument. The ELD's effectiveness (both merits and limits) in pursuing its objectives are further analysed in Sections 4.1.1 to 4.1.2 and 4.1.4. The implications of the scope limitations are more specifically analysed in Section 4.3.2.

The ELD's limited scope, various optional provisions allowing differentiated application by Member States and often maintained parallel national liability regimes (considered as 'more stringent' by Member States concerned) mean that the Directive cannot fully ensure a comprehensive level playing field for operators throughout the EU [124]. It nevertheless contributes to this objective by establishing the minimum common standard of environmental protection with regard to the damage within its scope. By approaching the environmental standards applicable in the different Member States the ELD reduces the risk that operators would relocate their most environmentally hazardous activities to Member States that have the most lenient liability regime.

The stakeholder views on the EU added value of the ELD should be considered as positive in general. Most respondents to the public consultation agreed on an added value of the ELD contributions. These include (i) creation of a level playing field for all Member States to prevent and remediate environmental damage; (ii) the introduction of a minimum standard for preventing and remediating environmental damage; (iii) the reinforcement of the polluter pays principle; and

[122] Comprehensive Environmental Response, Compensation, and Liability Act (United States of America).
[123] See recital 3 of the ELD.
[124] 2016 ELD evaluation, p. 38.

(iv) the introduction of complementary and compensatory remediation for water and biodiversity damage.

The ELD has added EU value in respect of the EU's international obligations. If the ELD had not existed, a separate instrument would have been required for the EU to implement the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress [125], which entered into force on 5 March 2018 [126].

4.3. Is the intervention still relevant?

RELEVANCE

4.3.1. Does the ELD still correspond to the needs of the EU?

The needs at the origin of the ELD intervention were to prevent and remedy environmental damage in accordance with the polluter pays principle; and, more specifically, to assist in halting the loss of biodiversity, reducing the number of contaminated sites and protecting the environmental quality of ground and surface waters. These needs not only remain but are becoming more important for the EU. The same can be said of the ELD's more specific objectives, as described in its intervention logic (see Section 2.1.1 above).

The 2016 ELD evaluation found that the ELD's objectives were still relevant and corresponded to existing needs due to the continued occurrence of environmental damage across the EU.

In view of the further worsening and increased awareness of the environmental crisis and given the importance which the EU attaches to its tackling, these needs and objectives are even more crucial now than they were when the EU adopted the ELD in 2004 and evaluated it in 2016.

To build a healthy planet for all, the European Green Deal called in 2019 for the EU to better monitor, report, prevent and remedy air, water, soil and consumer products pollution; and to preserve and restore ecosystems and biodiversity. In 2020, the Commission affirmed in the Biodiversity Strategy that biodiversity loss and ecosystem collapse count among the biggest threats facing humanity in the next decade; and set out a further comprehensive plan to protect nature and reverse the degradation of ecosystems to ensure that the EU's biodiversity will be on the road to recovery by 2030. The objectives of these strategic documents and of the ELD are fully convergent.

In 2021, the Commission set out a comprehensive vision in the Zero Pollution Action Plan (ZPAP); and proposed a concrete set of actions to reduce air, water and soil pollution to levels that are no longer considered harmful to health and natural ecosystems and that respect the boundaries our planet can cope with, thus creating a toxic-free environment by 2050. The present evaluation is one of the ZPAP's key actions, as the ELD is instrumental to its objectives.

Following the intensive legislative activity in the area of the environment under the European Green Deal, the focus of the 2024 Commission priorities shifted to **reinforced implementation, compliance assurance and simplification**. In this context, the relevance of the ELD becomes even more apparent.

As a cross-cutting instrument, the ELD supports the implementation and compliance assurance for the other EU environmental legislation. More specifically, it provides **a liability component to the sectoral environmental legislation.** This is particularly important for instruments that do not have their own mechanism of handling environmental damage (e.g Birds Directive, Habitats Directive,

[125] https://treaties.un.org/doc/Treaties/2010/12/20101215%2005-26%20PM/Ch_27_8_c.pdf
[126] https://www.cbd.int/doc/press/2018/pr-2018-03-05-nklsp-en.pdf

WFD, MSFD) as the ELD helps to protect environmental resources addressed by these instruments. The ELD thus responds to systemic needs of the EU environmental order.

The liability regime is particularly important as a safeguard of environmental compliance for those other environmental or environmentally relevant areas that are less regulated. Furthermore, the liability mechanism protects the competitiveness of European businesses avoiding the freeride from operators which are not compliant with the law.

Finally, to note that the ELD objectives are convergent and complementary with the **Water Resilience Strategy**[127] which aims, among others, to protect and restore aquatic ecosystems. The Strategy emphasises the urgent action needed to tackle water and marine pollution at source and calls for decisive efforts to clean up sites already strongly polluted, recognising that cleanup should be based on the polluter pays principle.

4.3.2. Is the ELD's scope still appropriate?

The ELD's central mechanism obliges an operator that has caused an imminent threat of, or actual, damage to prevent such damage or to restore in kind (including through primary complementary and compensatory remediation) the damaged natural resources to the condition that they would have been in if no damage had occurred. Thus defined mechanism remains appropriate for the prevention and remediation of environmental damage.

The ELD is, however, far from providing overall horizontal coverage for all the different types of environmental damage that occur in different types of circumstances. The ELD's complex structure and especially its limited scope have caused difficulties in its effective implementation and efficiency. The following aspects of the ELD scope have been identified as limiting the ELD's relevance.

Differentiated liability of the different actors

The ELD differentiates between operators according to the type of activity they are carrying out. Operators within industry sectors listed in Annex III of the ELD (covering occupational activities 'which present a risk for human health and the environment' [128]) are subject to strict liability. By contrast, other operators are subject to fault-based liability – and only in the case of biodiversity damage. It is questionable whether the **ELD's dual strict and fault-based liability system** is still appropriate. The requirement of fault for liability for non-Annex III activities reduces the relevance of the ELD with regard to the polluter pays principle because it is more difficult to prove that an operator was at fault in causing biodiversity damage than it is to prove that an operator was strictly liable for causing it.

According to literature[129], the dual system was based on the early focus of the discussion on the future ELD on traditional environmental liability (i.e. civil liability for third-party claims for health and property damage resulting from environmental damage). Under most Member States' laws, strict liability is imposed for traditional damage caused by 'dangerous activities' and fault-based liability is imposed for traditional damage caused by other activities. However, the ELD's focus changed so that it only covers pure environmental damage. No national administrative regime for the prevention and remediation of environmental damage in the EU has a dual liability system for

[127] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 4 June 2025 - *European Water Resilience Strategy,* COM(2025) 280 final

[128] See the ELD's recital 8, where these activities are further referred to as 'hazardous activities'.

[129] See European Commission, White Paper on Environmental Liability (COM(2000) 66 final, 9 February 2000), section 4.2.2, pages 15-16; https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52000DC0066;

hazardous activities and non-hazardous activities[130]. Except for contaminated land regimes for historic pollution in some Member States, they impose strict liability for the prevention and remediation of land and water (and sometimes biodiversity) damage. Variation in the standard of liability in the ELD has contributed to competent authorities in a substantial number of Member States considering that national non-ELD liability legislation is more stringent than the ELD and imposing liability under such legislation instead of under national ELD legislation. The result has been that a liable operator is not required to carry out complementary or compensatory remediation for water and biodiversity damage.

An alternative consideration is whether the **scope of Annex III** continues to be relevant or whether other activities should be added to it. The scope of the annex has been slightly extended during this evaluation period (earlier changes are discussed in the 2016 ELD evaluation). The changes introduced since 2016 are indirect. While manufacture, use, storage, etc of substances and mixtures covered by the CLP Regulation is referred to in ELD Annex III (point 7), and while the 2023 CLP Regulation revision introduced new hazard classes and criteria for the classification, labelling and packaging of substances and mixtures (such as endocrine disruptors or persistent, bioaccumulative, toxic and persistent, mobile, toxic chemicals, such as some per- and polyfluoroalkylated substances (PFAS)), processing of these substances and mixtures in now subject to the strict liability regime of the ELD. Similarly, the 2024 revision of the IED extended the list of permit requiring activities, indirectly extending strict liability regime of the ELD to cover damage resulting from metal mining, pig and poultry industrial farming (with lowered thresholds) and large-scale battery manufacturing. The time limits for transposition of both revisions have not yet expired.

The fact that Annex III does not cover pipeline transportation was discussed in the 2016 ELD evaluation. The Support Study and the public consultation for this evaluation have further seen criticism that the scope of Annex III is outdated; and have seen proposals for new types of activities to be considered as hazardous (e.g. windfarms and other sectors of industrial farming). In addition, many activities that affect good water status (including changes to continuity and hydromorphology; changes to water body levels that affect water bodies without these being justified under Article 4(7) WFD; and inputs of nutrients beyond applicable thresholds) are not covered by Annex III activities, even though these can seriously damage water quality or quantity.

The scope of Annex III has been called into question by a 2023 accident involving a discharge of plastic pellets at sea from a container lost by a cargo ship (Liberian flagged) and which affected the Spanish coastline and required major clean-up actions on beaches in North Spain. Transportation of plastic pellets is not currently considered to be a hazardous activity covered by the ELD's Annex III. The incident could therefore only be subject to an ELD remedial action if there had been significant damage to biodiversity (but not to water or land) and only if the operator had been at fault or negligent.

In addition, the 2021 EP ELD Resolution[131] called on the Commission to evaluate the idea of extending the scope of coverage of occupational activities listed in the ELD's Annex III in line with the precautionary principle.

The very approach of Annex III has been also criticised due to its being based on references to other EU legal instruments – rather than the use of autonomous criteria. This architecture makes the ELD

[130] Belgium's Flemish Region distinguishes between responsibility and liability. The Flemish Soil Decree (Decreet van 27 oktober 2006 betreffende de bodemsanering en de bodembescherming); https://navigator.emis.vito.be/mijn-navigator?woId=304 (in Dutch)) states that, if a person that is responsible for remediating contamination does remediate it, that person may claim against the person that is liable for remediating it. This of course assumes that the liable person can be found and can afford to pay the claim.

[131] 2021 EP ELD Resolution, Recommendation 28.

inflexible. It should be highlighted that Annex III has become very difficult to read over time, because most references to legal acts have become outdated as the legal acts have been replaced by the new legislation.

Further on, **the ELD only addresses the liability of 'operators' that carry out 'occupational activities'**. In accordance with the polluter pays principle, the person who should be primarily liable for preventing and remediating pollution is the person who caused the environmental damage. The principle does not require that this person is an 'operator'. National non-ELD legislation in most Member States imposes liability on any person who causes environmental damage. The ELD limitation excludes from its scope damage that results from cases where the damage cannot be linked to the economic activity of the perpetrator, e. g. a private person intentionally harms biodiversity by constructing roads or buildings on their own property situated in a Natura 2000 area; a forest fire is caused by an individual, either intentionally or through negligence, a damage is caused by a terrorist attack; or where damage is caused by the acts of public authorities, e.g. the damage is due to a lack of local or regional development plans in the context of spatial legislation.

In its 2021 EP ELD Resolution, the European Parliament expressed its opinion that the definition of the 'liable operator' in the ELD should be further clarified.

Scope of the environmental damage addressed by the ELD

The dual liability system described above substantially affects the scope of damage covered by the ELD. **Absence of liability under the ELD for non-Annex III operators that cause land and water damage** has not helped ensure a high level of environmental protection across the EU. As regards water, this absence limits the ELD relevance in supporting the objectives of the **Water Resilience Strategy** with one of its main objectives being the protection and restoration of aquatic ecosystems.

Some Member States have sophisticated liability systems for remediating land damage and these systems could result in better remediation of land damage than would be the case under the ELD. However, many Member States do not have sophisticated liability systems for water damage. Many national systems are limited to liability for remediating the pollution of land/soil and water under environmental permitting legislation.

The **limitation of the scope of land damage** compared with the scope of water and biodiversity damage is not appropriate. The ELD did not adopt a holistic approach but instead addressed land/soil and water separately. Liability for the prevention and remediation of land damage under the ELD is much more restrictive than liability for water or biodiversity damage. Firstly, land damage is limited to cases of contamination that cause a significant risk of an adverse effect on human health, whereas any type of damage to water and biodiversity is covered. Secondly, the standard of remediation is limited to the removal, control, containment, or diminishment of contaminants – as opposed to primary, complementary and compensatory remediation of water and biodiversity damage.

This limitation means that large areas of land in the EU (e.g. many forests and wetlands) are not subject to liability under the ELD if they are damaged, because public access to such areas is limited. It also means that liability for land damage differs from national non-ELD legislation in most Member States, because national non-ELD legislation does not require a significant risk of an adverse effect on human health. This difference has also raised the issue of whether national non-ELD legislation is more stringent than the ELD. Furthermore, the limitation means that the ELD may not sufficiently support the objective of the SML to reduce the soil contamination 'to levels no longer considered harmful to human health and the environment'.

Some Member States impose liability for remediating groundwater (and sometimes surface water) together with liability for remediating land/soil. The separation of land damage from water damage under the ELD results in a marked difference between national ELD and national non-ELD legislation. The separation also raises the issue of the appropriate standard of remediation when land and water are both damaged by an ELD occurrence (as evidenced in reports by Member States to the Commission under Article 18(1) of the ELD) due to the different remediation measures for them under the ELD. Separation of land and water damage may also result in an operator – with the agreement of a competent authority – splitting an ELD occurrence that caused damage above the significance criteria for water and damage but below the significance criteria for land. An example is the damage to a river by a fertiliser spill in Denmark described in Section 4.1.10 above.

The scope of the **biodiversity damage covered by the ELD** has also been questioned. The definition of 'protected species and habitats' refers to the Birds and Habitats Directives and does not include species protected solely under national law unless the Member State explicitly chooses to include them. In particular, the definition does not include wild pollinators even though the Commission stated in 2023 that it is imperative to halt and reverse the decline of wild pollinators if the EU is to preserve biodiversity.

Most targeted stakeholder survey respondents agree or strongly agree that the definition of damage to species and natural habitats protected by the Birds and Habitats Directives in the ELD should be broadened to include species and natural habitats that are not protected by these directives.

The issue of limitations in the scope of environmental damage covered under the ELD is connected to the issue of restrictive interpretation and ambiguities in the definitions of water and biodiversity damage, which are discussed in Sections 4.1.2 and 4.1.10 respectively.

It is also questionable **whether the absence of liability for preventing and remediating damage to the quality of air** is still appropriate. Given the current state of art, damage to air would need to be subject to compensation, and not remediation in kind, while the ELD model of remedies focuses on remediation in kind. It should be noted that several (potential) ELD occurrences reported by Member States to the Commission under Article 18(1) have involved damage to air from large fires. Some of the costs of dealing with air pollutants (e.g. firefighting) would arguably be covered by the ELD if air were included in its scope. It is not possible to remediate air pollution in the same way that it is possible to remediate damage to land, water and biodiversity. However, measures to extinguish a fire to prevent it from spreading reduce the amount of pollutants emitted into the air. The ELD does not cover the costs of such measures, even though this means that fewer pollutants from the air will settle onto land and water and thus harm protected species and other plants and wildlife. An example of the predominance of damage to air over damage to water is the Lithuanian non-ELD case analysed in the Support Study [132]. Various ELD stakeholders have suggested that the ELD should include air pollution.

Exclusions and defences provided in the ELD are further elements that have been highlighted as limiting the scope of application of the ELD and thus its relevance and effectiveness. The conclusions of the analysis provided in the 2016 ELD evaluation regarding these defences and exclusions remains relevant.

The ELD defines **two optional defences – permit and state-of-the-art** defences and allows Member States to choose whether to incorporate them into their transposing legislation or not: the permit defence allows an operator who invokes it successfully to exonerate himself from environmental liability if he demonstrates that he was not at fault and that he acted in conformity with the authorisation and all conditions based thereof when causing a damage; the development risk defence allows the operator to free himself of liability if he demonstrates that he was not at

[132] See Section 13 of Annex I to the Support Study.

fault and that the risk was not known according to the state of scientific knowledge at the time when the emission was released or the activity took place leading to the damage.

The proportion of Member States having chosen to apply each of the defences and those who have not incorporated them is almost exactly half-half (see Annex VI), which creates an important variation in the environmental liability regime throughout the EU. The 2016 ELD Evaluation[133] qualified the resulting situation as a 'patchwork" and warned that the defences may undermine the strong incentive provided by the strict liability of Annex III operators to invest in risk minimising technologies and to undertake additional precautionary efforts, thus reducing the effectiveness and efficiency of the ELD. It however also explained that no clear correlation between the number of ELD cases and the existence of such defences could be confirmed and that they are strongly supported by some groups of stakeholders.

The current evaluation public consultation saw substantial criticism of both optional defences – permit and state-of-the-art defences – notably in the NGOs' position papers, which called for their abolition. Operators' trade associations have the opposing view, stating that these defences are necessary in order to keep the ELD reasonable, balanced and predictable. In their opinion, the harmonisation of these defences throughout the EU by making them mandatory could prevent unevenness of environmental standards to be applied.

In view of a long-standing body of conventions and protocols concerning damage caused by nuclear activities, as well as in the field of pollution at sea (oil pollution in the first place), the ELD further provides for **exclusion for incidents** or activities in respect of which liability or compensation falls within **the scope of any of the marine and nuclear conventions listed in Annexes IV and V ELD**.

The 2016 ELD evaluation[134] compares the regime of the marine conventions at issue with the ELD pointing out notably to the differences between compensation regime (conventions) and environmental remediation (ELD), the limitation of liability under the conventions and the fact the conventions do not cater for complementary and compensatory remediation of environmental damage. At the same time, the conventions offer a range of other advantages (no significance threshold, mandatory financial security, right of direct recourse against the insurer, three tier financial security for oil pollution damage, world-wide scope). The way the ELD interacts currently with these conventions reflects the specific character of the sector and the complex issues surrounding the relationship between the IMO Conventions and the EU law. As regards nuclear conventions, the 2016 ELD evaluation concluded that to avoid controversies, nuclear liability should remain under the Euratom Treaty rather than under the TFEU.

While no further elements of analysis have been brought in the present evaluation, it is still useful to note that legal developments in the **maritime and nuclear conventions** have made the current references in the ELD either outdated or at least unclear.

Absence of civil liability

It is questionable whether the **absence from the ELD of compensation for civil liability claims** (particularly for health damage but also potentially for economic loss) is still appropriate. The Commission's White Paper, which was adopted on 9 February 2000, proposed two regimes: the remediation of contaminated land and biodiversity damage; and liability for personal injury and property damage. The former would be subject to a threshold; the latter would not. On 30 July 2001, the Commission adopted a working paper that removed the civil liability regime and switched to a purely administrative regime for remediating environmental damage. The ELD

[133] See 2016 ELD evaluation, 50 and 75.
[134] See 2016 ELD evaluation, 61, 75.

specifically states in its Article 3(3), that it does not apply to compensation of the private parties as a consequence of environmental damage (civil liability for bodily injury, property damage and economic loss). It was considered at the time that the EU was not ready to legislate in the area of civil liability, even while the area is covered by the PPP, as this domain was traditionally reserved to national law.

The EU has nevertheless introduced civil liability or compensation in three recent legal acts and revisions. The **CSDDD** imposes on large EU and non-EU companies civil liability for violations of specified obligations, including obligations regarding 'environmental adverse impacts' concerning their own operations and operations of subsidiaries and business partners in their chains of activities. The 2024 recast of **AAQD** introduces a right for people whose health has been damaged as a result of the breach of prescribed rules on air quality plans and short-term action plans by the competent authorities to claim and obtain compensation for that damage. The 2024 revision of the **IED** includes a right for individuals whose health has been damaged to claim compensation for the damage from relevant natural or legal persons. Human health damage is also the one of the main focus of the ongoing discussions on **PFAS** and PFAS restrictions. In view of these developments, the continuing absence of compensation for civil liability claims in the horizontal liability regime of the ELD may no longer be appropriate.

Implementation model

Two aspects of the ELD's implementation model have been identified as limiting its relevance and therefore its effectiveness.

Firstly, the prevailing reliance as regards the remediation process on actions by operators has been pointed out as limiting the ELD's effectiveness in some cases. Under the ELD, the competent authorities are entitled to carry out remedial measures (and pass the invoice on to the liable operator) only as a measure of last resort. This approach is potentially problematic if the damage results from intentional action and even more so in the case of environmental crime. In such a case, it is indeed difficult to count on the culprit's honest cooperation and to entrust them with the remedial measures. To note that while this issue has not been reported as part of analysed case studies, this seems to confirm that such cases have been handled under criminal law only (including through civil claims for compensation of the damage handled as part of criminal case), and not under the ELD.

Secondly, the ELD assigns the implementation to 'competent authorities'. In some Member States, this is understood as limiting the duty of ELD enforcement to administrative authorities alone (i.e. not including judicial authorities).

In the **public consultation,** when asked about the scope of the ELD regime, most stakeholders' groups (citizens, NGOs/academia and public authorities) were inclined to disagree with a statement that the current scope of the ELD was still appropriate. **Most NGOs and academics expressed a general view that the scope of the ELD is too narrow**. In their opinion, the ELD should cover areas such as climate change, air quality/air pollution, and diffuse pollution (currently outside the scope of the ELD). Further areas, where especially NGOs would like to see the ELD reinforced, are damage from livestock production (now to be covered to a larger extent by the IED, and thus indirectly under ELD strict regime), invasive species, coal mining and, larger, consumer products, agriculture and aquaculture[135].

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[135] While environmental damage in these areas is already now subject to the ELD, these voices must be understood as requesting strengthening of the liability in their respect, possibly by including them in the ELD strict liability regime. To note that livestock production will now be covered to a larger extent by the IED, and thus enter indirectly

By contrast, many **re/insurance industry associations and the operator trade associations** considered**, that the ELD is fit for purpose and the current scope of liability is sufficient and appropriate**. In their view, the ELD's scope should not be extended because any major changes to it could have unintended adverse impacts on the further development of environmental liability insurance markets. They also considered that the exemptions should be kept. Overall, according to operator trade associations, it is important to properly implement the ELD in its current form at a Member State level instead of extending its scope.

4.3.3. Has the ELD been able to respond to new and/or emerging environmental issues?

As explained in Section 4.3.1, the ELD is consistent with the objectives of the 2019 Commission strategic documents (notably the Green Deal, Biodiversity Strategy and the ZPAP) and the priorities of the 2024 Commission (reinforced implementation and compliance assurance, simplification). This does not necessarily mean that it provides an adequate response to the environmental issues they address. Indeed, analysis of the ELD's effectiveness (see Section 4.1.1) and relevance shows that the ELD has a very limited scope, is underused and, therefore, delivers on its objectives only to a limited extent.

Both the Biodiversity Strategy and the ZPAP emphasise the need for stricter implementation and enforcement of environmental legislation and, in the case of the ZPAP, for specifically reinforcing the application of the polluter pays principle. **The ZPAP even specifically envisages an evaluation and, if need be, a revision of the ELD**, as a measure to improve compliance by all relevant national authorities with EU environmental laws. The zero-pollution ambition can only be achieved with an effective application of the ELD.

The ELD does not at first sight appear well suited to supporting the **EU's efforts to address climate change**, because the ELD imposes liability for preventing and remediating environmental damage by operators that caused the damage. In other words, there must be a link between an operator and environmental damage caused by that operator – liability for diffuse environmental damage is excluded. In addition, EU climate change legislation does not impose liability for damage caused by climate change. The Biodiversity Strategy, Soil Strategy[136] and ZPAP nevertheless recognise the important causal links between the biodiversity loss and climate change, and between pollution (including contamination of water and land) and climate change. The remediation and prevention of environmental damage under the ELD thus contributes to climate change mitigation and adaptation.

Obligation to restore natural resources under the ELD can support Member States' implementation of the **Nature Restoration Law (NRL)**[137] objectives for the non-deterioration and restoration of biodiversity. The ELD is also fully convergent and complementary with regard to the objectives of **Water Resilience Strategy**, namely, to protect and restore aquatic ecosystems. However, the limits in the ELD scope diminish the Directive relevance with regard to both initiatives.

The ELD is only partially relevant as regards the objectives of the **SML**. Article 13(1) of the SML directs Member States to manage risks to human health and the environment of potentially contaminated and contaminated sites; and to bring sites with an unacceptable risk to human health and the environment to an acceptable level, taking account of the environmental, social and

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under ELD strict liability regime.

[136] Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of Regions of 17 November 2021- *EU Soil Strategy for 2030 - Reaping the benefits of healthy soils for people, food, nature and climate,* COM(2021)699

[137] 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

economic impacts of soil contamination. The ELD only requires the remediation of land (soil) if there is a significant risk of an adverse effect on human health. The issue is also discussed in Sections 4.4.2 and 4.1.10. The ELD is not well suited to supporting the objectives of the **revised AAQD** because the ELD does not impose liability for preventing and remediating air pollution.

The ELD explicitly excludes **diffuse pollution** from its scope (i.e. pollution where the author cannot be specifically identified). Furthermore, the ELD is not well suited to dealing with new (or newly discovered) **damage resulting from historic industrial activities** (e.g. damage to groundwater in post-closure mines and brownfields reconversion) due to the limitation of its temporal scope.

The ELD does not specifically address many forms of environmental damage that are being recognised as a cause for **concern due to their high pollution/contamination potential and the risk they pose to biodiversity and human health, e.g. PFAS**.

In the context of the discussion on the PFAS restriction[138], while restrictions have been adopted under REACH[139], when it comes to the universal PFAS restriction proposal[140], the Commission has announced the intention to 'support the continued use of PFAS in industrial applications, in particular critical ones, under strictly controlled conditions until acceptable substitutes are found, accompanied by strict emission and disposal rules to limit their release into the environment'. As evidenced in this evaluation, while the PPP applies to such cases, the current ELD system will (in most situations) not offer an effective safety net in cases where new or continued PFAS manufacturing and use leads to significant pollution.

If environmental damage results from activities that are not covered by Annex III to the ELD, it will be subject to a lower standard of liability. The scope of coverage of Annex III to the ELD is further discussed in Section 4.3.2 above.

5. MAIN CONCLUSIONS FOR EACH EVALUATION CRITERION

Effectiveness

The ELD has been effective in ensuring that environmental damage is recognised as a category of damage that needs to be addressed across the EU. All EU Member States now have rules addressing environmental damage in the area covered by the ELD. It has also been effective in setting up a high standard of remediation of environmental damage that falls within its scope, thus contributing to the implementation of the polluter pays principle enshrined in the Treaty. The main focus of remediation under the ELD is to restore nature after it has been damaged. According to this standard, remediation should be carried out in kind and in the form of primary remediation (i.e. remedial measures that return the damaged natural resources and/or impaired services to their original condition) and is to be reinforced with complementary and compensatory remediation.

The ELD ensures that environmental damage is addressed in all Member States, but the high standard of remediation/environmental protection set out in the Directive is rarely applied to its full

138 Per- and polyfluoroalkyl substances (PFAS) restriction proposals under discussion in the European Chemicals Agency's (ECHA) in view of legislative proposal from the Commission expected in 2026-2027

139 Most recently Commission Regulation (EU) 2025/1988 of 2 October 2025 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council as regards per- and polyfluoroalkyl substances in firefighting foams, OJ L, 2025/1988

140 https://echa.europa.eu/hot-topics/perfluoroalkyl-chemicals-pfas

effect. The ELD is not evenly applied in all Member States. In some Member States, the ELD has significantly contributed to remediating environmental damage and to preventing environmental damage in the case of imminent threats of such damage. Almost 600 ELD cases have been reported for the 2013-2022 reporting period with 236 cases handled in Poland, 165 in Greece and 6 further Member States having reported between 10 and 50 cases (Germany, Estonia, Spain, Latvia, Hungary and Portugal). However, 5 Member States reported no ELD cases in the entire period of 14 years from 30 April 2007 to 30 April 2022. 13 other Member States reported 7 or fewer ELD cases in that period. Fewer ELD cases were reported in the second reporting period (2013-2022) than in the first one (2007-2013).

The main reasons for underuse of the ELD by many Member States are as follows:

- the limited scope of environmental damage and activities covered under the ELD (as explained below under the relevance criterion).
- the 'significant' damage is unclear and is perceived in many Member States as very high;
- a perceived lack of clarity regarding interaction with other instruments relevant for addressing environmental damage (the IED, criminal proceedings and 'more stringent' national liability rules) with the result that many potential ELD occurrences are only handled under those other regimes.
- the limited margin of manoeuvre in terms of how the method to remedy environmental damage should be applied by the competent authorities (as explained under the relevance criterion).
- the optionality of certain provisions under the ELD (particularly the possibility for Member States to introduce a permit and state-of-the-art defence, limiting its effectiveness in terms of achieving a level playing field in the EU).

The Commission Guidelines include definitions of biodiversity, water and land damage that are based in part on rulings of the CJEU. However, there is not enough data to assess how helpful they would be in improving the ELD's implementation. In particular, no EU case law currently exists that refers to the Commission Guidelines, although they have already been applied by courts in some Member States. However, other Member States and competent authorities have continued to apply restrictive interpretations.

The ELD coexists and is being applied in parallel with other rules that address environmental damage (either the IED or national liability rules). Member States often claim that those national liability rules are 'more stringent' than the ELD. However, the option of applying more stringent national rules does not dispense Member States from their obligations under the ELD for the types of damage that fall within its scope. As regards the damage covered by the ELD, diverging liability regimes are an issue of implementation by Member States. This also reduces the ELD's application, because procedures for environmental damage are usually initiated under those other instruments and are then often carried out by the different authorities. Once the procedure is initiated, the authorities concerned are reluctant to re-qualify the procedure under the ELD.

- When the environmental damage is addressed as part of criminal proceedings, the ELD standard of remediation is often not applied. The damage is instead subject to partial remediation or financial compensation.
- There is little evidence as to whether damage occurrences handled under non-ELD liability rules receive in practice a comparatively similar or lower standard remedial response (a lower standard response is to be expected due to the lack of complementary and compensatory remediation).

Application of the ELD only rarely leads to application of complementary and compensatory remediation measures. Only primary remediation takes place in most cases of environmental damage, even if this does not allow the damaged site to be restored to its original (baseline) condition. The underuse of complementary and compensatory measures is possibly due to the competent authorities' limited technical expertise.

Remediation in kind is a cornerstone of the ELD, directly contributing to limiting the net loss of environmental resources. However, relying on the operators as actors responsible for carrying out remedial action can sometimes limit its effectiveness. Under the ELD, the competent authorities are entitled to carry out remedial measures (and pass the invoice on to the liable operator) only as a measure of last resort. This approach is potentially problematic if the damage results from intentional action and particularly so in the case of environmental crime.

The ELD has not always been effective in ensuring that the polluter pays (i.e. that the liable operator executes and pays for the remedial measures that have been decided). Remedial measures tend to be expensive and liable operators often lack the financial capacity to carry them out. Due to the lack of insurance coverage and a mandatory insurance system, many major environmental damage cases result in bankruptcy of the liable operator. In practice, operators may also try to circumvent responsibility by deliberately limiting the financial capacity of liable companies within their capital groups. Indeed, the ELD does not impose liability on a liable operator's capital group or executives.

The ELD liability incentivises the general prevention of environmental damage. The use of financial security instruments (both voluntary and, in some Member States, mandatory) requires environmental risk management approaches that are in line with the precautionary principle.

The ELD provides a participatory mechanism in line with the Aarhus Convention. However, the engagement of environmental NGOs is relatively low due to the instrument's other weaknesses.

Efficiency

As explained under effectiveness, the ELD is often applied in parallel with other liability regimes that address environmental damage. The ELD's efficiency is decreased by its limited scope (particularly in terms of environmental damage and activities covered) and the complexity of its own architecture (notably different liability standards and exclusions), which requires parallel maintenance of and often joint application of national rules addressing environmental damage. This complexity undermines the ELD's overall efficiency and leads to its underuse.

Positive developments in some Member States regarding methodologies and procedures should facilitate the ELD's application, also jointly with other rules that address environmental damage and national ELD training initiatives. However, they are limited to a few Member States because administrations generally invest little in the ELD due to the low number of cases.

Non-integration of ELD procedures with those applied on the basis of other non-ELD liability rules may result in double procedures and therefore double costs for national administrations and operators. It is inefficient and more costly if Member States carry out two different administrative or judicial procedures to remediate the same single damage occurrence.

More training on the ELD would clearly be beneficial in order to improve expertise in the competent authorities and awareness among all the stakeholder groups.

A positive trend concerning ELD efficiency is the increased uptake of the financial security instruments concerning environmental liability in some Member States, through both mandatory (at national level) and voluntary insurance schemes. Moreover, the use of financial security incentivises the prevention of environmental damage in general by requiring operators to adopt environmental risk management approaches. This is not uniform across the EU, however, and the ELD does not make financial security instruments mandatory.

Another ELD efficiency issue is that costs for environmental NGOs willing to use the ELD's participatory mechanism can be discouragingly high in some Member States.

Coherence

There are no direct inconsistencies with other liability regimes under EU law, but interfaces with them may raise some challenges.

- Overlaps between some provisions of the ELD and the IED result in the underuse of the ELD.
- When an environmental damage case is handled under criminal proceedings, courts often rule on damage remediation and compensation. They often do not apply the ELD provisions, because they consider that the ELD provisions are directed to the administrative authorities (and thus binding only on them).

The ELD is not applied in practice when specific damage cases are assessed under such other legal regimes.

Another challenge is linked to interaction between the ELD and national liability rules. Article 193 TFEU and Article 16 of the ELD allow Member States to maintain 'more stringent' national rules. However, these provisions do not allow them to set aside the ELD as far as its subject-matter is concerned. National liability regimes are often maintained in parallel with the ELD, as they have a wider scope of application. This may prompt Member States to consider such national rules as more stringent, even though the standard of damage remediation they require is less stringent than under the ELD. In practice, national rules may overlap with the ELD and be applied to cases where the ELD could offer a more stringent standard of remediation (particularly through complementary and compensatory measures). This is an issue linked to the underuse of the ELD.

There exist some potential unclarities as regards the ELD interaction with the EU's sectoral environmental legislation. The ELD aims to provide a liability component to these instruments, but their parallel application has given rise to some inconsistencies. This is particularly the case regarding the relationship between the ELD and the WFD's good water status objectives. The WFD addresses the water body, while the ELD covers all significant environmental damage to water, including to a part of a water body and including if such damage does not result in a deterioration in the status of the water body as a whole. Coherence with the other relevant EU instruments could be further advanced by promoting a consistent interpretation and joint implementation of the different EU instruments (e.g. further Commission and national guidelines).

Interfaces with other instruments could also be better or clearer defined in the ELD itself. Indeed, there have been many important developments in EU environmental law since the ELD was adopted.

Another issue of reduced consistency with EU environmental law concerns the way in which the ELD was drafted. Its Annex III, which lists activities to which the ELD applies in full scope, refers to pieces of EU environmental legislation. However, this annex, which was prepared in 2004 and only revised to add new items, contains today many completely outdated references, making it very unpractical to use.

EU added value

The ELD's EU added value consists in setting out a high minimum standard of environmental protection concerning environmental damage caused by operators. When implemented, it ensures that environmental damage should be addressed across the EU. The standard established under the ELD is not matched by national liability frameworks.

The ELD's minimum standard of protection in the event of environmental damage provides a level playing field to operators throughout the EU and reduces incentives for 'forum shopping' (i.e. incentives to relocate environmentally risky activities to Member States with lower requirements). The ELD also makes it easier to handle cases of transboundary damage in the EU.

However, these advantages are reduced by the limited scope of environmental damage covered by the ELD and the limited uptake of the instrument in certain Member States.

Relevance

The ELD's objectives and mechanism remain highly relevant in the context of addressing the triple planetary crisis and the EU's actions to protect and restore EU natural resources. As a cross-cutting instrument, the ELD supports the enforcement and implementation of other EU environmental legislation and the efforts towards a cleaner environment. The ELD remains also highly relevant in the context of the 2024 Commission priorities supporting the implementation and compliance assurance for the other EU environmental legislation, notably providing a liability component complementing the sectoral legislation related to the protection and preservation of biodiversity and water and a safeguard of environmental compliance in less regulated areas. The ELD thus responds to systemic needs of the EU environmental legal order.

Several issues have been identified concerning the scope of the ELD. Overall, the ELD's scope (in terms of environmental damage covered) is limited to the extent that it reduces the instrument's relevance and effectiveness.

- For activities that are not listed in Annex III of the ELD, operators are liable only for damage to protected species and habitats, but not for damage to water or land, and only in the case of fault/negligence. This major differentiation of regimes is particularly inconsistent with the fairness principle and the polluter pays principle. Moreover, the limits in liability for water damage make
- the ELD less relevant in supporting the objectives of the Water Resilience Strategy.
- The list of activities considered as potentially 'hazardous' in Annex III to the ELD is limited and outdated. In addition, this annex refers to specific legal acts instead of taking a more holistic approach. This limits the ELD's flexibility to address emerging new challenges.
- The scope of the damage covered under the ELD is limited at different levels: (i) the criterion of 'significant' damage used as a threshold for the application of the ELD is imprecise; (ii) damage to biodiversity is limited to species and habitats protected at EU level only; (iii) damage to land is limited to cases that cause danger to human health; (iv) damage to air quality is not covered at all.
- The range of potentially liable parties is limited to economic operators. The ELD does not cover liability for damage caused by individuals acting in their private capacity or by public authorities through their actions or omissions to act. It is not clearly specified whether or not the ELD covers other damage to the environment that has been caused through illegal activity (e.g. organised environmental crime, terrorism) and this reduces the ELD's legal clarity and fairness.
- The ELD's implementation is entrusted to 'competent authorities'. In some Member States this is understood as limiting the duty of ELD enforcement to administrative authorities (thus excluding judicial authorities).

The ELD does not completely protect environmental resources because soil contamination is covered by the ELD only insofar as it affects human health (and not the environment). Moreover, it does not cover damage to the air (or air quality). One of the reasons for this is the ELD's exclusive focus on remediation in kind in all situations. Given the current state of art, damage to air would need to be subject to compensation, rather than to remediation in kind.

The objectives of the ELD are fully convergent and complementary with regard to those of the Water Resilience Strategy and the Nature Restoration Law, as the obligation to restore natural resources under the ELD can support the implementation of requirements for the non-deterioration and restoration of water resources and biodiversity. However, the limits in the ELD scope diminish its relevance with regard to both initiatives. In addition, the ELD has limited relevance to emerging challenges such as microplastics or PFAS, however, the polluter pays principle applies also to these domains.

Finally, the ELD's horizontal liability regime does not address compensation for damage to human health, which has been included in the recently updated sectoral instruments (the 2024 revised IED and the 2024 AAQD).

ANNEX I. PROCEDURAL INFORMATION

LEAD DG: DG Environment
DECIDE REFERENCE: PLAN/2021/12649

1. Derogations granted and justification

No exceptions were made to the Better Regulation Guidelines during this Evaluation.

2. Organisation and timing

A dedicated inter-service group steered the work on this evaluation. It is set up with representatives from the following Directorate Generals:

- Secretariat General (SG)
- Legal Service (SJ)
- Agriculture and Rural Development (AGRI)
- Climate Action (CLIMA)
- Environment (ENV)
- Energy (ENER)
- European Civil Protection and Humanitarian Aid Operations (ECHO)
- Financial Stability, Financial Services and Capital Markets Union (FISMA)
- Internal Market, Industry, Entrepreneurship and SMEs (GROW)
- Justice and Consumers (JUST)
- Maritime Affairs and Fisheries (MARE)
- Mobility and Transports (MOVE)
- Regional and Urban Policy (REGIO)

The inter-service steering group worked jointly with the internal DG ENV group supporting the ELD evaluation.

The group met four times during the evaluation process, first to steer work related to the support study which was carried out for this evaluation, and then on the draft evaluation. The group was also consulted in writing. The members of the group were invited to the workshop organised in the context of the consultation process described in Annex II of this report. Details on consultations on the Group are provided in the following table.

Date	Topic of discussion
17 February 2022	Presentation of the draft ELD Evaluation study Inception Report followed by written consultation
27 September 2022	Presentation of the draft ELD Evaluation study Interim Report followed by written consultation

27 June 2023	Presentation of the draft ELD Evaluation study Final Report followed by written consultation
20 June 2024	Discussion on the draft evaluation report (Staff working document for the evaluation and executive summary) As part of the written consultation

3. Use of external expertise

The evaluation was assisted by a dedicated external study contracted by the Commission in support of the evaluation of the ELD ('Support Study')[141].

[141] Valerie Fogleman, Stevens & Bolton LLP, Cardiff University School of Law and Politics, supported by RPA Europe and RPA Europe consortium, Study in support of the evaluation of the Environmental Liability Directive and its implementation, https://data.europa.eu/doi/10.2779/034934

ANNEX II. METHODOLOGY

1. General methodology

1.1. Overview

According to the ELD as amended in 2019 by Regulation (EU) 2019/1010, the Directive shall be evaluated every five years.

Following the requirements of the Article 18 of the ELD:

> '1. The Commission shall collect information from Member States, that has been disseminated in accordance with Directive 2003/4/EC of the European Parliament and of the Council, and as far as available, on the experience gained in the application of this Directive. That information shall cover the data set out in Annex VI to this Directive and be collected by 30 April 2022 and every five years thereafter.
>
> 2. On the basis of the information referred to in paragraph 1, the Commission shall carry out an evaluation of this Directive and publish it before 30 April 2023 and every five years thereafter.'

The second ELD evaluation was carried out based on this provision and in accordance with the methodology laid down in the Commission's Better Regulation Guidelines and toolbox.

The Commission contracted an external study to assist the evaluation process, notably to carry out research activities, assist in the consultation process and develop recommendations as to the evaluation findings. This study is hereafter referred to as the 'Support Study'.

The initial list of 14 specific evaluation questions and the initial evaluation methodology were laid down in the Call for Evidence[142] based on the five evaluation criteria: effectiveness, efficiency, relevance, coherence, and EU added value.

The methodology of the evaluation was further finetuned in co-operation with, on one side, the Contractor and, on the other side, the Commission Interservice Steering Group and informal DG ENV group supporting the evaluation.

The evaluation questions have been further reworked together with the Contractor to include specific sub-questions and build the evaluation matrix, developed in the inception phase of the study and further refined in the final study report and the evaluation report (see Annex III to the Evaluation Report).

The scope of the evaluation report varies to a very limited extent from the Call for Evidence covering 15 questions. Some questions have been grouped in comparison with the Support Study (which included 17 questions). In addition to 14 questions set out in the Call for evidence, the evaluation also addresses an additional question 'How has interaction of the ELD with national environmental legislation affected implementation of the ELD?' This

[142] European Commission, Call for Evidence for an evaluation (Ares(2021)7328179, 29 November 2021), Environmental Liability Directive (evaluation) (europa.eu)Environmental Liability Directive (evaluation) (europa.eu)

question was added as relevant in the evaluation process following the findings of the Support Study which identified issues that had not been considered prior to carrying it out.

The evaluation questions link to the intervention logic description which has been revised in comparison with the 2016 ELD Evaluation. Each evaluation criterion has logical links to the various stages of the intervention logic and guides the evaluation of each of the above five criteria by specifying the information and analysis used to develop findings and conclusions.

Various consultation activities have been carried out as part of the evaluation, namely: call for evidence, public consultation, targeted consultation (questionnaire and interviews), three dedicated surveys: for Member States on costs and benefits of the ELD and on the ELD training and for operators on costs and benefits of the ELD. A dedicated ELD stakeholder workshop was held to discuss the preliminary findings of the Support Study. The synopsis report (Annex V) summarises in detail the outcome of the consultation activities.

The following further sources of information and evidence were used to prepare the Support Study and the Evaluation itself:

- Member States' reports on the ELD implementation submitted to the Commission under ELD Article 18(1) and enhanced summaries thereof prepared as part of the Support study.
- Legal research, including European and national legislative acts, rulings of the Court of Justice of the European Union and national court cases.
- Review of existing literature, including academic research, as well as relevant studies, reports, guidance documents and methodologies developed by the European and national level institutions and organisations.
- Empirical research, carried out in form of case studies.

When addressing the individual evaluation question, the underlining data and information were triangulated to the extent possible to ensure an objective result of the evaluation.

1.2. ELD Evaluation Support Study

This evaluation has been supported by the contract carried out for that purpose by the external Contractor (Valerie Fogleman, Stevens & Bolton LLP, Cardiff University School of Law and Politics, supported by the RPO consortium members) between January 2022 and December 2023[143].

The general objective of the contract was to support the Commission's evaluation by undertaking a study of the ELD. The specific objectives of the contract were to:

1. Document the status of implementation of the ELD in the Member States.
2. Provide evidence to underpin the Commission's evaluation in terms of the effectiveness, efficiency, coherence, relevance and EU added-value of the ELD by answering the evaluation questions specified below. As part of this, it will be necessary to examine the economic, social and environmental impacts, and to identify and elaborate on the external factors that affected the impact of the ELD. It is also necessary to assess identify any potential for streamlining, simplification, burden reduction.

[143] Valerie Fogleman, Stevens & Bolton LLP, Cardiff University School of Law and Politics, supported by RPA Europe and RPA Europe consortium, Study in support of the evaluation of the Environmental Liability Directive and its implementation, https://data.europa.eu/doi/10.2779/034934

3. Carry out stakeholder consultation as input to delivering on the objectives above.
4. Provide recommendations on how to address the identified shortcomings.

The actions executed under the contract were compliant with those foreseen in the contract and in some aspects exceeded the contract requirements.

In particular, reports from Member States have been substantially delayed and proved to contain very limited data. This in turn required further evidence gathering by the Contractor. The result of this exercise took form of the 'Enhanced summaries' of the Member States reports.

Following the discussions between the Contractor and the Commission in the inception phase study, the scope of the Support Study was also enlarged with case studies which proved very relevant for the study findings.

1.3. Consultations

Various consultation activities have been carried out as part of the evaluation, namely:

- call for evidence feedback,
- public consultation,
- targeted consultation (questionnaire and interviews),
- three dedicated surveys: for Member States on costs and benefits of the ELD and on the ELD training and for operators on costs and benefits of the ELD.
- A dedicated ELD stakeholder workshop was held to discuss the preliminary findings of the Support Study.

Public consultation

A public consultation (PC) was carried out to gain the views of ELD stakeholders and the public on the ELD and its implementation and to provide them with the opportunity to give their views. A targeted questionnaire was carried out to gain the views of ELD stakeholders with knowledge of the ELD and its implementation. The consultations were supplemented by surveys, a workshop, and websites providing information on the evaluation procedures.

The PC was developed according to the principles and standards in the Better Regulation Guidelines to offer the opportunity to any interested individual and organisation to provide their opinion on the main evaluation questions.

The development of the PC questionnaire was led by the Commission based on a preliminary draft prepared by the Contractor. The draft was developed in close collaboration between the Commission with input and agreement from members of the Interservice Steering Group.

The PC was made available on the Commission's 'Have your say' website for 12 weeks between 12 May 2022 and 4 August 2022. The PC was translated by Commission services from its original English into the remaining 23 official EU languages in order to enable the greatest accessibility to it.

The questionnaire began with an introduction of the ELD and the consultation process. It then set out questions to identify the respondent and their familiarity with the ELD. In order to assist in the analysis of responses, respondents were asked if they belonged to the following group types in addition to the general categorisation on the 'EU survey' portal:

- operator (company or other) subject to the ELD;
- organisation in the re/insurance industry;
- provider of other financial security;
- academic/research institution;
- trade organisation;
- NGO;
- competent authority involved in the implementation of the ELD;
- EU citizen;
- non-EU citizen; and
- other.

Respondents could respond as an individual or on behalf of an organisation. They could state whether they wished to remain anonymous (in which case only the type of respondent, country of origin and contribution would be published) or whether in addition to the above, they agreed to publication of their name.

The questionnaire consisted of 24 questions: eight questions in a generic section aimed at the wider public; and 16 questions in a technical section for comments by persons with a more extensive understanding of the ELD and its implementation. Two free-text comment boxes were included in the general section with a maximum limit of 1,000 characters; seven free-text comment boxes were included in the technical section with a maximum limit of 2,000 characters. The questionnaire also included the ability to upload a contribution file.

Multiple choice questions were based on a six-point Likert scale: strongly agree; agree; neutral; disagree; strongly disagree; and I do not know/No opinion. Questions in the general section were mandatory, except for free-text boxes, with the caveat that respondents could answer 'I do not know/No opinion' as indicated above. Questions in the technical section were not mandatory. The template for the PC is set out in Annex E to the Support Study.

There were 111 valid responses, which were analysed qualitatively and quantitatively. All multiple-choice questions were summarised for headline results and results by stakeholder group. The in-depth analysis of the PC results is presented in Annex E to the Support Study. A factual summary report highlighting the key outcomes of the PC was also prepared for publication on the 'Have your say' webpage.

Targeted consultations

In order to gather information from stakeholders who had a good understanding of the implementation of the ELD, a targeted stakeholder consultation was developed. The aim of the targeted questionnaire was to gather the views of all ELD stakeholder groups.

Respondents were asked to identify themselves and indicate which stakeholder group they represented. They could state whether they agreed that: their name and the name of their organisation may be included in the report for this study; the name of their organisation but not their name may be included in the report; or they did not agree to either their name or the name of their organisation being included in the report.

In order to assist in the analysis of responses, respondents were asked whether they belonged to the following groups:

- operator;
- competent authority
- other governmental authority;
- NGO;
- re/insurer
- broker;
- risk manager;
- loss adjuster;
- academic;
- legal adviser; and
- other.

The targeted consultation questionnaire was developed as a Word document according to the principles and standards in the Better Regulation Guidelines. Its development was led by the Commission based on a preparatory draft by the Contractor for the Support Study followed by close collaboration between the Commission and Contractor.

The questionnaire consisted of 26 questions divided into the following categories:

- experience with and opinion about the ELD;
- information about the ELD occurrences and experience with them;
- insurance and other financial security instruments;
- Commission actions to improve the ELD implementation; and
- European Parliament and European Court of Auditors recommendations.

The questionnaire included 14 free-text boxes including one that asked whether the respondent would like to add any other information to the questionnaire. All free-text boxes had a 2,000-character limit.

The questionnaire was based on the relevant evaluation questions. It consisted of a range of semi-quantitative questions based on a six-point Likert scale in order to assess the degrees of opinions on issues in addition to open questions to allow respondents to provide further explanations and broader opinions.

The questionnaire asked whether a respondent could be contacted for further information concerning their answers.

The survey was available only in English.

The targeted consultation questionnaire is set out in annex F to the Support Study.

The targeted stakeholder survey ran from 28 June 2022 to 31 July 2022 and received 27 responses. The respondents included 13 competent authorities from 11 Member States, seven responses from the insurance sector, four from other public authorities, and one each from academia, trade association, and NGOs. The respondents were from Austria, Belgium, Bulgaria, Croatia, Czechia, Germany, Italy (four respondents), Latvia, Malta, Portugal, Romania (two respondents), Slovakia, Spain, and the UK (England). Moreover, three responses were received from EU-wide organisations.

The in-depth analysis of the targeted consultation questionnaire is set out at Annex F to the Support Study.

Surveys

Three surveys were carried out. The surveys and a summary of responses are set out in Annex G to the Support Study.

Survey for operators on costs and benefits of the ELD

The survey for operators on costs and benefits of the ELD ran from 15 December 2022 to 15 February 2023. The survey received six responses.

Survey for Member States on costs and benefits

The survey for Member States on costs and benefits of the ELD also ran from 15 December 2022 to 15 February 2023. The survey received five responses.

Survey for Member States on training

A survey was prepared by the Commission for Member States on training needs in May 2022.

The survey received 19 responses, 18 of which were from Member States, and one from Iceland.

ELD stakeholder workshop

An ELD stakeholder workshop to support the evaluation was held in person in Brussels on 22 November 2022. Speakers were allowed to give their presentations remotely due to some speakers being unable to travel to Brussels due to the sitting of the European Parliament in Strasbourg and other reasons.

The agenda for the ELD stakeholder workshop and minutes of the workshop are available on the Commission's environmental liability website[144] and in Annex P to the Support Study.

The synopsis report (Annex V to the Evaluation Report) summarises in detail the outcome of the consultation activities.

1.4. Evidence gathering

Evidence was gathered by carrying out legal and empirical research, carrying out detailed and lengthy email exchanges and meetings with ELD and non-ELD stakeholders, and issuing surveys.

Legal research

The legal research consisted of a review and analysis of primary and secondary ELD and non-ELD liability legislation in each Member State and, if available, guidance published by them. The review of primary and secondary ELD and non-ELD legislation drew on previous studies prepared for the Commission, in particular, 'Facilitating enforcement of

[144] European Commission, Register of Commission Expert Groups and Other Similar Entities, Stakeholder workshop on the Support study on the evaluation of the ELD; https://ec.europa.eu/transparency/expert-groups-register/screen/meetings/consult?lang=en&meetingId=45920&fromExpertGroups=391

the ELD by competent authorities'.[145] Information in applicable reports was updated to include further sources of information, and to expand analyses in them.

The above research was supplemented by a review of academic and other literature including articles, research papers, reports, and books on national ELD and non-ELD legislation in the EU and 27 Member States. Research was also supplemented by a review of EU legislation that refers to the ELD or is otherwise related to it, preliminary rulings of the Court of Justice of the European Union (CJEU), documentation adopted and/or published by the Commission, the European Parliament's Resolution on the liability of companies for environmental damage, and the European Court of Auditors special report on the polluter pays principle.

Empirical research

Empirical research was carried out to enable the preparation of (1) case studies of ELD and non-ELD cases of environmental damage, (2) enhancements to reports submitted by Member States to the Commission on implementation of the ELD under Article 18(1) of the ELD (if necessary), and (3) summaries of the status of insurance for ELD and other environmental liabilities in each Member State.

The purpose of the empirical research was to gain knowledge and insights about the implementation and enforcement of national ELD legislation and national non-ELD environmental legislation, their interaction, and reasons for the limited, or non-existent, enforcement of national ELD legislation in some Member States.

The empirical research necessary to write the case studies, enhanced Article 18(1) summaries and summaries of environmental insurance consisted mainly of emails with members of the ELD Government Experts Group and other ELD and non-ELD stakeholders (including NGOs and persons in the re/insurance industry), and remote meetings as relevant in order to gain information and insights. In turn, many members of the ELD Government Experts Group kindly requested assistance from their colleagues in relevant governmental departments.

When drafts of the above case studies, enhanced Article 18(1) reports, and summaries had been prepared, they were emailed to the relevant members of the ELD Government Experts Group as well as, in some cases other ELD and non-ELD stakeholders to check their accuracy, indicate any gaps in them, and provide comments and insights. This procedure was followed by extensive email exchanges and revised drafts, as necessary, to ensure that each case study, enhanced Article 18(1) report and summary is as accurate, up to date, and complete as possible.

2. Robustness and limitations of the methodology

The key challenge in the evaluation of the ELD and its implementation was the lack of statistical data on environmental damage occurrences which have not been reported under the ELD, either a) because, while they fall within the scope of ELD application, Member States chose to handle them under non-ELD liability rules or b) because they do not fall under the current scope of the Directive. This is due to the limited scope of information on the environmental damage occurrences (limited moreover to cases handled under the ELD)

[145] Valerie Fogleman, 'Facilitating enforcement of the ELD by competent authorities' (31 December 2021); final report; https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/9b423999-cc41-41ea-9629-5682e3bb6b2b/details?download=true and Member State reports; https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/4583a0be-3e7a-49a0-9a87-59e59dabe38d/details?download=true

required to be included in the Member States implementation reports (‘Article 18 Reports’). This challenge was strengthened by the differences in interpretation of the ELD by the different Member States, resulting in difficulties in comparability of data.

A corollary problem is the lack of comprehensive data allowing to compare the effectiveness of the remediation process carried out respectively under ELD and non-ELD liability legislation. Also, as discussed in Question 1, second objective, limited data are available regarding the preventing function of the ELD. Finally, the limited number of responses gathered from the targeted consultation and dedicated surveys affected the capacity to assess the costs and benefits of the ELD.

In order to address these challenges the Support Study complemented the information from Member States reports with analysis of a number of ELD and non-ELD occurrences (case studies) and with information obtained through exchanges with the competent national authorities (enhanced summaries of Article 18 reports).

There were three key challenges in gathering evidence to evaluate the ELD and its implementation: the scope of information and data that Member States were directed by the ELD to report to the Commission; the lack of information on ELD and non-ELD occurrences; and differences in interpretation of the ELD by Member States, resulting in low numbers of – or no – declared ELD occurrences in some Member States. Due to these challenges, it was not possible to compare data sets between Member States.

Article 18(1) reports

The availability of evidence was affected by the scope of information and data to be reported to the Commission by Member States under Article 18(1) and annex VI of the ELD. Article 18(2) of the ELD directs the Commission to submit a report to the European Parliament and the Council based on this information and data.

There have been two versions of article 18(1), Annex VI, and Article 18(2).

The original version of Article 18(1) stated that:

> Member States shall report to the Commission by 30 April 2013 at the latest. The reports shall include the information and data set out in Annex VI.

The original Annex VI stated that the Article 18(1) reports:

> shall include a list of instances of environmental damage and instances of liability under [the ELD], with the following information and data for each instance:
>
> 1. Type of environmental damage, date of occurrence and/or discovery of the damage and date on which proceedings were initiated under [the ELD].
> 2. Activity classification code of the liable legal person(s).[146]
> 3. Whether there has been resort to judicial review proceedings either by liable parties or qualified entities. (The type of claimants and the outcome of proceedings shall be specified.)
> 4. Outcome of the remediation process.
> 5. Date of closure of proceedings.

The original annex VI further stated that:

[146] Annex VI stated that the NACE code could be used; Council Regulation (EEC) No 3037/90 of 9 October 1990 on the statistical classification of economic activities in the European Community [1990] OJ L293/1, as amended (consolidated version); https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A01990R3037-20080101

> Member States may include in their reports any other information and data that they deem useful to allow a proper assessment of the functioning of the ELD, for example:
>
> 1. Costs incurred with remediation and prevention measures, as defined in [the ELD]:
>   - paid for directly by liable parties, when this information is available;
>   - recovered ex post facto from liable parties;
>   - unrecovered from liable parties. (Reasons for non-recovery should be specified.)
> 2. Results of the actions to promote and the implementation of the financial security instruments used in accordance with [the ELD].
> 3. An assessment of the additional administrative costs incurred annually by the public administration in setting up and operating the administrative structures needed to implement and enforce [the ELD].

In turn, Article 18(2) directed the Commission to submit a report to the European Parliament and the Council before 30 April 2014, including any proposals for amendment.

All Member States submitted reports to the Commission under the former Article 18(1),[147] albeit that some reports were submitted after 30 April 2013. The reports varied in length and information and data reported in them. The reports also varied in respect of the dates from which the information and data was reported. Some Member States submitted reports from 30 April 2007 (the effective date of the ELD). Other Member States submitted reports for shorter periods, that is, from the date on which their national legislation transposing the ELD became effective. Some reports included information on imminent threats of environmental damage; others did not do so because there was no requirement to record them.

In 2019, Regulation (EU) 2019/1010 on the alignment of reporting obligations[148] substituted new versions of Article 18(1) and Annex VI in the ELD.[149]

The current version of Article 18(1) of the ELD provides as follows:

> The Commission shall collect information from Member States, that has been disseminated in accordance with [the Environmental Information Directive[150]] and as far as available, on the experience gained in the application of [the ELD]. That information shall cover the data set out in Annex VI to [the ELD] and be collected by 30 April 2022 and every five years thereafter.

Annex VI provides as follows:

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147 The only exception was Croatia, which did not join the EU until 1 July 2013.

148 Regulation (EU) 2019/1010 on the alignment of reporting obligations in the field of legislation related to the environment, and amending Regulations (EC) No 166/2006 and (EU) No 995/2010 of the European Parliament and of the Council, Directives 2002/49/EC, 2004/35/EC, 2007/2/EC, 2009/147/EC and 2010/63/EU of the European Parliament and of the Council, Council Regulations (EC) No 338/97 and (EC) No 2173/2005, and Council Directive 86/278/EEC [2019] OJ L170/115, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.170.01.0115.01.ENG

149 Regulation (EU) 2019/1010 also deleted Article 14(2), which had directed the Commission to present a report on the effectiveness of the ELD before 30 April 2010.

150 Directive 2003/4/EC on public access to environmental information [2003] OJ L41/26; https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:041:0026:0032:EN:PDF

> The information referred to in Article 18(1) shall cover cases of environmental damage under [the ELD], with the following information and data for each instance:
>
> 1. Type of environmental damage, date of occurrence and/or discovery of the damage. The type of environmental damage shall be classified as damage to protected species and natural habitats, water and land as referred to in point 1 of Article 2 [which defines such damage].
> 2. Description of the activity in accordance with Annex III [which sets out activities for which operators are subject to strict liability].
>
> Member States shall include any other relevant information on the experience gained from the implementation of [the ELD].

In turn, the current version of Article 18(2) directs the Commission '[o]n the basis of the [Article 18(1) reports, to] carry out an evaluation of [the ELD] and publish it before 30 April 2023 and every five years thereafter'.

The current versions of Article 18(1) and annex VI differ substantially from the former versions. Despite the Commission having stated in the REFIT Evaluation that it had been unable fully to evaluate the ELD due to not having sufficient information and data to do so, the new versions require substantially less information and data to be reported than the former versions.

More specifically, the new versions do not require the following information and data to be reported: instances of liability under the ELD; the date of proceedings initiated under the ELD; the activity classification code of a liable legal person; the outcome of the remediation process; or the date of closure of proceedings. In addition, whereas the former version of Annex VI set out optional information to be reported, the current version simply states that Member States shall include 'any other relevant information on the experience gained' by them in implementing the ELD.

As in the original versions of Article 18(1) and Annex VI, there is no requirement to report imminent threats of environmental damage. The Commission proposed including such a requirement in Regulation (EU) 2019/1010 but during negotiations on the Regulation, the Council prevailed in its proposal not to include it.

Further, Regulation (EU) 2019/1010 applies from the date of its publication in the Official Journal, that is, 25 June 2019. There is, thus, no requirement for Member States to submit reports to the Commission on their implementation of the ELD for the period of 1 May 2013 to 24 June 2019. Due to this lack of a legal obligation, some Member States did not record data on implementation of the ELD during that time.

Thus, as a result of the absence of a reporting obligation during a period of over six years, some reports include information from 1 May 2013 to 24 June 2019, some reports do not do so. Further, due to the absence of a date up to which information should be reported, some Member States include information after 31 December 2021 (the date suggested by the Commission); some Member States have different time periods.

In summary, due to different criteria used by Member States to record and report ELD cases, different time periods for reporting, and other factors described above, it is not possible to compare precisely the number of ELD occurrences – imminent threats and actual environmental damage – as well as other information concerning implementation of the ELD between Member States.

Still further, the current versions of Article 18(1) and Annex VI – which direct the Commission to collect information from Member States disseminated in accordance with the Environmental Information Directive,[151] substantially reduce the information and data from that which was required to be reported up to 30 April 2013.

The Commission has received reports under the current Article 18(1) and Annex VI from all Member States, some of them having been received after the deadline of 30 April 2022. The reports illustrate the deficiencies in the reporting system for information and data on the implementation of the ELD from Member States to the Commission. The length of reports ranges from less than a page up to 104 pages. Some reports contain meaningful information and data to assist the Commission in its evaluation of the ELD and its implementation; a substantial number of reports do not do so, making it impossible to compare complete data sets on all questions covered by the evaluation.

Lack of information on ELD and non-ELD environmental damage occurrences

Another major challenge in gathering evidence was the lack of registers and databases for environmental damage occurrences by competent authorities in a substantial number of Member States. A major reason that the Commission commissioned the study entitled 'Implementation of the Environmental Liability Directive'[152] was to investigate whether Member States had 'systematically gather[ed] the necessary data that can document that the application of the [ELD] in [individual Member States] is effective, efficient and in line with the overall situation in the EU'.[153]

The country fiches prepared for many Member States in the above study showed that such data had not been gathered. Further, the country fiches showed that many Member States did not have registers or databases to record non-ELD pollution incidents.

Differences in interpretation of the ELD by Member States

Member States have implemented the ELD in a wide variety of ways. They were able to do this, not only due to the flexibility of the ELD as a directive, but also due to the many optional provisions in it. As a result, the ELD has resulted in a 'patchwork' of liability systems for preventing and remedying environmental damage across the EU instead of a level playing field. There is nothing wrong in this of course. As noted, implementation of the ELD was designed to be flexible.

The approach taken by individual Member States to establish the 'framework of environmental liability' directed by Article 1 of the ELD often however resulted in a lack of enforcement of the ELD. Some Member States interpreted key terms in the ELD (such as (1) 'environmental damage', (2) the significance criteria for biodiversity, water and land, (3) 'favourable conservation status', and (4) water damage) differently. The result is that environmental damage occurrences that meet the criteria for ELD occurrences are frequently only handled under non-ELD legislation – if at all – in breach of the ELD.

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151 Ibid

152 Milieu Consulting, Deloitte and Bilbomática, 'Implementation of the Environmental Liability Directive' (2019); https://circabc.europa.eu/ui/group/cafdbfbb-a3b9-42d8-b3c9-05e8f2c6a6fe/library/f915e104-ab30-4b43-9c6a-ebe4561d22cf/details

153 Report from the Commission to the Council and the European 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, 14 April 2016), 10; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:204:FIN

As a result of the differences in approach to the implementation and enforcement of the ELD, a substantial number of competent authorities in some Member States have failed to implement the framework established by the ELD for the prevention and remediation of environmental damage consistent with minimum standards for a high level of environmental protection. As a result, an environmental damage occurrence that is considered to be an ELD occurrence in one Member State is not necessarily considered to be an environmental damage occurrence in another Member State.

A further and connected failure to implement the framework established by the ELD occurred when, even in the limited number of occasions in many Member States when competent authorities enforced national ELD legislation, they rarely required liable operators to carry out complementary remediation when primary remediation failed to restore water and biodiversity damage to its condition before it was damaged, or compensatory remediation.

It was thus impossible to compare data sets between individual Member States on all questions covered by the evaluation.

Efforts to gather evidence

Effords have been deployed to mitigate the effect of the above challenges in gathering evidence for the Evaluation.

In addition to extracting information from reports submitted by Member States under the current Article 18(1) of the ELD, the Contractor extended the information provided by Member States by engaging in lengthy and detailed communications with members of the ELD Government Experts Group, their colleagues in relevant national governmental authorities, and other ELD and non-ELD stakeholders. Annex J of the Support Study, entitled 'Enhanced summaries of Article 18(1) reports submitted by Member States', includes this additional information. In turn, this information was used to answer the evaluation questions.

Further, in addition to including case studies to illustrate the extent to which environmental damage cases were handled under pre-existing national legislation, the Contractor included non-pollution cases as well as cases involving environmental liability legislation that requires the prevention and remediation of environmental damage, plus civil liability legislation enacted by some Member States after the deadline for transposing the ELD. The Contractor for the Support Study also included case studies of environmental damage occurrences handled under national environmental permitting and criminal legislation to illustrate different approaches by Member States in handling such occurrences.

Still further, the Contractor included case studies of cases handled under national ELD legislation – often together with national non-ELD legislation such as environmental permitting legislation – to enable comparison of the various different ways in which competent authorities in different Member States have enforced the ELD. Annex I to the Support Study, entitled 'Case Studies of ELD and non-ELD occurrences' contains the case studies. In turn, information from these case studies was used to answer the evaluation questions.

ANNEX III - EVALUATION MATRIX AND DETAILS ON ANSWERS TO THE EVALUATION QUESTIONS (BY CRITERION)

The evaluation questions define the scope of the evaluation since the evaluation methods are designed to gather the evidence required to answer each of the questions. The methodology to be used for answering the questions is presented in the evaluation matrix. Against each question, the following is mapped:

- **Assessment criteria**: These describe the operational questions to be answered for each sub-question. They are also used to support the development of questions to be asked to stakeholders as part of the interviews and surveys.
- **Indicators**: This column highlights indicators that have been used to measure the different components of the intervention logic.
- **Data analysis approach**: This describes the overall approach and the methods and tools used in answering the questions.
- **Data sources and data collection methods**: This describes the key sources used to answer the questions as well as the way in which the data may be gathered e.g., via consultation of selected stakeholders.

1. Effectiveness

The effectiveness criterion assesses how successful the ELD has been in achieving or progressing towards its objectives. It covers four evaluation questions, the three evaluation questions defined in the call for evidence and additionally a question on the impact on the implementation of the ELD of its interaction with national environmental legislation, identified as relevant in the evaluation process.

<table>
<tr><th>Questions and sub-questions</th><th>Assessment criteria</th><th>Indicators</th><th>Data analysis approach</th><th>Data collection methods</th></tr>
<tr><td colspan="5">1. To what extent have the objectives of the ELD have been achieved?</td></tr>
<tr><td colspan="5">1.1 First objective - to establish a framework of environmental liability with minimum standards consistent with a high level of environmental protection across the EU

The 2016 ELD evaluation analysed the standard of environmental protection under the ELD in Section 2 – 'Background to the initiative' and commented on the quality f the legal framework under question 'What has been the practical significance of the Directive as compared to (pre-)existing national legislation?' p. 59. The evaluation notably concluded that there was still "a patchwork of environmental remediation" in the EU, partly also due to the varying interpretation of the ELD, p. 39.

The 2016 ELD Evaluation commented on the added value of setting a minimum level of environmental protection, remediation of environmental damage through primary, complementary and compensatory remediation, the use of economic valuation methods, the inclusion of biodiversity damage in the scope of environmental damage, and public participation and access to justice. However, that the above issues had been reached only to a varying degree especially complementary and compensatory remediation.

1.2. Second objective - to ensure that an imminent threat of, or actual, environmental damage is prevented or remediated, thus contributing to halting the loss of biodiversity and site contamination

The 2016 REFIT Evaluation commented that the ELD has helped improve the level of environmental protection in the EU but only to a limited degree. The Evaluation further commented that the ELD had not fulfilled its potential and was more relevant in some Member States than others. (page 5). many Member States have made progress towards effectively achieving the two main objectives of preventing and remedying environmental damage within the reporting period, but studies have concluded also a 'patchwork of environmental remediation', expressed also in a number of cases with a few Member States with high record of cases and eleven Member States having notified no ELD instance (p. 60).

It further commented that Complementary and compensatory remediation was much less used than the primary remediation, (p. 32).

1.3 Third objective - to ensure that costs of preventing or remediating environmental damage are borne by operators that cause the damage.

The 2016 ELD evaluation analysed the implementation of the PPP by the ELD in Section 2; 2.3, p. 11. It concluded that preventive and remedial costs were effectively internalised in line with the polluter-pays principle where the ELD rules were applied and the (solvent/sufficiently insured) liable operator could be identified, but that</td></tr>
</table>

<table>
<tr><th>Questions and sub-questions</th><th>Assessment criteria</th><th>Indicators</th><th>Data analysis approach</th><th>Data collection methods</th></tr>
<tr><td colspan="5">insolvency/bankruptcy remain a problem, p. 61.

1.4 Fourth objective - to induce operators to adopt measures and to develop practices to minimise the risk of environmental damage

The 2016 ELD evaluation concluded that the better precaution practices are said by many stakeholders to have risen due to the ELD, but it is difficult to estimate,p. 37, p. 60, p. 58.

The 2016 ELD evaluation further commented that the ELD had an enhancing effect on insurers offering environmental liability insurance which resulted in less environmental damage instances occurring.

1.5 Fifth objective - to encourage the development of insurance and other financial security instruments and markets

This Objective is discussed under Question 7)- Is the current approach in which financial security for ELD liabilities is not compulsory, appropriate (no further elements provided under this question.

1.6 Sixth objective - to allow participation of interested persons

This Objective is discussed under Question 4 - To what extent have stakeholders been engaged in the process of improving implementation of the ELD at national level (no further elements provided under this question).</td></tr>
<tr><td colspan="2">Examining of the ELD legal framework and the environmental protection standard it enables (1st objective)

ELD legal framework limitations (not examined, but referred to under this Section - see further elements on scope limitations under relevance question 14, further elements on Article 16 and more stringent rules under coherence criterion, Question 10)

Examining of the ELD transposition and implementation by MSs including options and different interpretations and application of the significance criteria

Examining of divergences between MSs as regards the implementation of water damage, biodiversity damage</td><td>Liability standards components (ELD)

Liability standards in national ELD rules

Extent to which Member States have implemented the ELD or national legislation to prevent environmental damage from occurring

Level of implementation of the Guidelines on environmental damage

Numbers of ELD occurrences reported</td><td>Legal comparative analysis between the ELD and the preexisting national liability regimes

Legal comparative analysis between the ELD implementation in the different Mss at the legal framework level

Qualitative and quantitative analysis of Member states reports

How Member States are complying with the requirements</td><td>• Member States Reports
• Collection of supplementary data on cases reported by Member States, establishing of the enhanced summaries of the MS reports
• Collection of data, and their qualitative and quantitative analysis on the environmental damage occurrences which have not been handled under the ELD
• Case studies
• Previous ELD studies
• Desk research</td></tr>
</table>

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Examining the Commission's Guidelines on providing a common understanding of the term 'environmental damage' (which indicated a site-specific approach to water and biodiversity damage) Examining of the ELD reporting statistics (2nd objective) Limitations in the ELD reporting statistics Examining the overall performance of the ELD across the EU Examining the performance of the ELD since 2016 to date in each Member State Reasons for the divergencies between the different Member States performance Comparing the number of non-ELD environmental damage occurrences with the number of ELD occurrences when available Examining the statistics by type of environmental damage Examining available information on the use and effectiveness of the complementary and compensatory measures Examining of the extent to which the ELD implements the PPP at the level of legal framework (3rd objective) Examining of available data regarding the cases where the PPP could not be implemented due to the insolvency/bankruptcy of the liable operator Examining the correlation between the number of ELD occurrences in Member States that have adopted mandatory insurance for ELD		by MSs Existing monitoring and reporting plans in Member States Available statistical data on non ELD occurrences handled by MSs Available non-statistical data on non ELD occurrences handled by MSs Cases with complementary and/or compensatory remediation Cases where the public funding was required to remediate/prevent the damage Risk management systems and other damage prevention approaches induced by ELD Facts and figures on the use by operators of preventive actions in Member States and across the EU Factors and figures on the use of risk assessment compared to the number of ELD occurrences of environmental	to report ELD implementation and cases under the new article 18(1) of the ELD, noting that some Member States only reported cases from 26 June 2019, which is the effective date of the revision of the ELD that includes the new article 18(1)) Qualitative and quantitative analysis on the environmental damage occurrences which have not been handled under the ELD Caselaw analysis Enhanced summaries of Member States reports Analysis of the MS methodologies on risk assessment	• Public consultation • Targeted consultations and interviews • Workshop

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
occurrences (4th objective) Examining the use of risk assessment for operators in Member States that have mandatory financial security systems for ELD liabilities		damage that could have been avoided in Member States that have financial security for ELD liabilities		
2. Are there any factors that have limited the effectiveness of the ELD? What key gaps, challenges, barriers and root causes of failure have hindered the Member States from further improving the implementation of the ELD as opposed to relying on (pre-) and (co-)existing national rules? *The 2016 ELD evaluation noted that the Legal analysis study suggested that the following factors greatly influenced the extent of the practical application (number of ELD cases) in the EU: (1) publicly accessible records of ELD cases; (2) access of interested persons to submit comments and to co-operate with competent authorities; (3) a secondary obligation of competent authorities to carry out preventive and remedial action if operators fail to do so; (4) repealing overlapping national legislation; and (5) knowledge of the ELD by operators.* *Further, the 2016 ELD evaluation referred to the ELD Implementation Study in stating that that study had concluded that the conditions for application of the ELD, expertise and knowledge and the legislative environment were the main factors in determining its effectiveness (pages 37-38).*				
2.1 Restrictive interpretation by some Member States, or competent authorities in them, of the definitions of water damage and biodiversity in the ELD *Factor previously analysed in the 2016 ELD evaluation: the effectiveness is hampered by diverging interpretations of the significance threshold, affecting in particular the trigger for preventive action, and hence a lower number of ELD cases, , significant lack of clarity and uniform application of key concepts, p.60* **2.2 Implementation of national non-ELD legislation instead of national ELD legislation by competent authorities in some Member States** *Factor previously analysed in the 2016 ELD evaluation* **2.3 Very limited use of complementary and compensatory measures when implementing the ELD** *Factor discussed under question 1, second objective. Factor previously analysed in the 2016 ELD evaluation (no further elements provided under this question)* **2.4 Lack of ELD expertise in the competent authorities and lack of awareness of the ELD by operators and other ELD stakeholders.**				

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods

Factor previously analysed in the 2016 ELD evaluation which concluded that the ability in achieving a high level of environmental protection and in preventing and remedying environmental damage in the EU is hampered by underdeveloped capacities and expertise,

2.5 The lack of awareness of the ELD among the stakeholders concerned

Factor previously analysed in the 2016 ELD evaluation; Low awareness of the Directive by main stakeholders and practitioners was considered as one of main challenges in the ELD effectiveness and efficiency, p. 62,

2.6 The lack of reliable and comparable data on the ELD implementation.

Factor previously analysed in the 2016 ELD evaluation

2.7 Various limitations in the scope of environmental damage covered

Factor related to ELD architecture and scope and thus discussed under relevance criterion (question 14) (no further elements provided under this question). Factor previously analysed in the 2016 ELD evaluation

2.8 Absence of liability under the ELD for non-annex III operators that cause land and water damage

Factor related to ELD architecture and scope and thus discussed under relevance criterion (question 14) (no further elements provided under this question). Factor previously analysed in the 2016 ELD evaluation

2.9 Limitation of liable actors to economic operators

Factor related to ELD architecture and scope and thus discussed under relevance criterion (question 14) (no further elements provided under this question) Factor previously analysed in the 2016 ELD evaluation

2.10 Coexistence of the ELD with the more stringent' national provisions

Factor related to the internal coherence of the ELD and thus discussed under coherence criterion (question 10). (no further elements provided under this question). Factor previously analysed in the 2016 ELD evaluation

2.11 Difficulties in the joint application of the ELD with IED, ECD and WFD

Factor related to the external coherence of the ELD and thus discussed under coherence criterion (question 11) (no further elements provided under this question). Factor previously analysed in the 2016 ELD evaluation

2.12 Difficulties in ensuring that costs of preventing or remediating environmental damage are borne by operators that cause the damage

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Factor related to the effectiveness and efficiency of the implementation of the polluter pays principle and thus discussed under effectiveness criterion (question 1, 3rd objective - to ensure that costs of preventing or remediating environmental damage are borne by operators that cause the damage.). (no further elements provided under this question) *Factor previously analysed in the 2016 ELD evaluation*				
Examining of the ELD transposition and implementation by MSs including options and different interpretations and application of the significance criteria Examining of divergences between MSs as regards the implementation of water damage, biodiversity damage Examining the CJEU's ruling in *Naturschutzbund Deutschland* (Case C-297/19) (for the significance criterion for biodiversity damage) Examining the Commission's Guidelines on providing a common understanding of the term 'environmental damage' (which indicated a site-specific approach to water and biodiversity damage) Examining the effect of a Member State's and/or competent authority's perception of the significance criteria of the ELD as being high. Further analysis under Question 10 Examining the application of national non-ELD legislation versus national ELD legislation by competent authorities Duty of enforcing of the ELD versus discretionary power to enforce non ELD liability rules Factors explaining the relative facility of enforcing non ELD liability rules in comparison with the ELD, reasons why competent authorities		Facilitating study, Member State reports in the study and research carried out for it Feedback from environmental departments and competent authorities in Member States on: • the number of ELD occurrences in their Member State compared with the number of ELD competent authorities; • the secondary obligation in some Member States to carry out preventive and remedial actions if operators fail to do so; • the effect of overlapping legislation with the ELD; • whether the ELD has high, medium or low significance criteria for environmental damage; and • the perceived complexity of the ELD. ELD Country Fiches and Country	Analysis of the issues raised by the European Court of Auditors Analysis of the effect in Member States and across the EU of the specified indicators. Qualitative and quantitative discussion on reporting and monitoring requirements across Member States based on logical analysis and input from stakeholders Analysis of the effects of the application of national non-ELD legislation instead of national ELD legislation for environmental damage occurrences by competent authorities including differences between such legislation, its application, and reasons for applying it, as well as joint application of both types of	**Data collection methods:** • Case studies • MSs ELD reports • Enhanced summaries of the ELD reports • Previous ELD studies • Desk research • Public consultation • Position papers • Targeted consultation and interviews • Survey Members States training and training needs • Workshop

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
apply national non-ELD legislation instead of national ELD legislation Examining the differences between national non-ELD legislation and national ELD legislation in ensuring a high level of environmental protection Further analysis under Question 3 Lack of expertise – lack of knowledge of the baseline condition of a natural resource Lack of expertise – lack of persons at competent authorities with expertise to enforce the ELD, in particular difficulties in defining and defending the complementary and compensatory measures Lack of awareness of the ELD in the authorities involved in the implementation of the non-ELD liability rules and sectorial environmental legislation Lack of awareness of the ELD among the NGOs Lack of awareness of the ELD among operators, insurers and other stakeholders Lack of reliable data - publicly accessible records of ELD cases Lack of reliable data – inconsistences in the reporting process Lack of reliable data - difficulties in analysing environmental damage cases which have not been handled and reported under the ELD See also question 1.2. Examining the effect of the number of ELD competent authorities in a Member State on implementation of the ELD		Reports (provide an overview on the implementation of the ELD in all Member States) Feedback from ELD competent authorities, operators, re/insurers, environmental NGOs, and other ELD stakeholders European Parliament Resolution of 20 May 2021 and background papers – awareness, expertise issues	legislation Analysis of the issues raised by the European Parliament	

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
3. **How has interaction of the ELD with national environmental legislation affected implementation of the ELD?**				
3.1 National non-ELD environmental liability legislation, including rules allowing for monetary compensation instead of remediation of the damage *Factor previously analysed in the 2016 ELD evaluation The 2016 ELD evaluation stated that some Member States continued to apply national non-ELD legislation instead of national ELD legislation to ELD occurrences. The evaluation concluded that some Member States (e.g., Belgium (Flemish Region), Ireland, Germany, the Netherlands) had continued to do this, even when competent authorities recognised that the occurrences were ELD occurrences.* **3.2 National environmental permitting legislation** *Not examined in the 2016 ELD Evaluation* **3.3 National criminal legislation and proceedings** *Not examined in the 2016 ELD Evaluation*				
Interaction with national non-ELD environmental liability legislation in the different Member States The effect on implementation of the ELD by Member States (e.g., Poland and Italy) that have repealed overlapping national legislation and those that have not done so Impact of Article 16 (more stringent rules, see also question 10 National legislation allowing for compensation of the damage instead of its remediation Interaction with permitting legislation Relative facility of implementation of the permitting legislation See also question 11 on the coherence with the IED		Remediation standard resulting from handling of environmental damage occurrences under non-ELD environmental liability legislation in the different Member States Remediation standard resulting from handling of environmental damage occurrences under permitting legislation in the different Member States Remediation standard resulting from handling of environmental damage occurrences under civil liability rules being part of criminal proceedings in the different Member States	Legal comparative analysis between the ELD and the preexisting national liability regimes Legal comparative analysis between the ELD implementation in the different Mss and criminal proceedings/ rules on handling civil liability as accessory in criminal proceedings Legal comparative analysis between the ELD implementation in the different	• Case studies • Previous studies, notably on the Facilitating of the ELD enforcement • Public consultation • Targeted consultation: • Stakeholder interviews • Workshop

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Criminal proceedings as a reason to stay the ELD proceedings (impact on timing of the proceedings) Financial compensation under the criminal proceedings versus ELD obligation of remediation in kind - non bis im idem See also question 11 on the coherence with the (new) ECD Interaction of national ELD legislation with national spatial planning legislation and national waste legislation. Comparison of the outcome			MSs permitting legislation proceedings, including inspections Feedback from ELD competent authorities, operators, and insurers	
4. To what extent have stakeholders been engaged in the process of improving implementation of the ELD at national level				
4.1 The effectiveness of the ELD participatory mechanism *The 2016 ELD Evaluation, describes the mechanism on p. 7, 8. The evaluation commented that only a small number of requests for action was reported (p. 33).* **4.2 Other stakeholders' engagement in ELD implementation (IMPEL, Re-Insurance Industry, Member States)** *The 2016 ELD Evaluation discussed the stakeholder engagement with regard to specific actions, notably based on the Study 'Implementation challenges and obstacles of the Environmental Liability Directive (ELD)' (p. 67).* **4.3 Commission actions supporting the stakeholder engagement** *Not examined in the 2016 ELD Evaluation.*				
The effectiveness of the public participation in supporting the ELD implementation (6th ELD objective) ELD legal framework versus the Aarhus convention Experience of NGOs in using the participatory mechanism of the ELD	Previous studies on the ELD for the Commission Access to justice criteria and their implementation		EU caselaw analysis Examining the effect of ELD occurrences in Member States that have extended article 12 of the ELD to include comments/observations on an	• Desk research • Literature review • Public consultation • Position papers • Targeted consultations • Stakeholder interviews

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Link between the number of ELD occurrences and public participation under articles 12 and 13 of the ELD in Member States with publicly accessible records of ELD cases IMPEL projects supporting the implementation of the ELD (see also Section 3 on developments and Annex VII) Member States efforts supporting the ELD implementation (see also Annex VII) Re/insurance sector engagement supporting the development of financial security instruments and risk management approaches Stakeholder events and actions organised by the Commission		Feedback from environmental NGOs and industry and re/insurance stakeholders Feedback from environmental NGOs and other interested persons in Member States on: • the power to submit comments/observations to competent authorities on an imminent threat of environmental damage; and • timely responses to comments/observations on potential environmental damage occurrences submitted to a competent authority	imminent threat of environmental damage with Member States that have not done so Examining the number of ELD occurrences and public participation under articles 12 and 13 of the ELD in Member States with publicly accessible records of ELD cases Analysis of the varying views of ELD stakeholders	• Case studies • Workshop

2. Efficiency

The efficiency criterion analyses the relationship between the resources used by the ELD and its impacts (positive or negative). The implementation differences in Member States are also analysed to understand their influence on the impacts, and whether these differences reflect those same benefits that were achieved at less cost in one or more Member States (or greater benefits at the same cost). The efficiency analysis looks at costs and benefits of the ELD on different stakeholders. It covers the five evaluation questions defined in the Call for evidence.

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
5. To what extent have costs of the ELD been justified, overall and for different stakeholder groups, given any benefits that the ELD has delivered?				
5.1 What are the costs and benefits (monetary and non-monetary) associated with compliance with the ELD in Member States and in the EU in respect of remediation (and prevention) costs and administrative costs for public authorities been justified? *The 2004 ELD Proposal major impact would be to shift costs from society in general to persons that caused the damage in line with the polluter pays principle* *The 2016 ELD Evaluation reviewed the following three principal cost categories: (1) remediation costs; (2) administrative costs; and (3) financial security costs.* *The Evaluation commented that the available evidence showed an average cost of remedial action of EUR 42,000, with the remediation costs for large-scale losses due to major accidents, such as Kolontár, Hungary and Moerdijk, the Netherlands, of over EUR 50 million.* *The Evaluation further commented that the administrative costs for public authorities were available from only three Member States ranging from EUR 55,000 in the Flemish Region of Belgium to EUR 2 million in some of the autonomous communities in Spain. It was therefore, not possible to draw any sound conclusions on administrative costs.* *The Evaluation further commented that the costs of environmental damage for liable operators could be reduced through the use of financial security instruments.* *The Evaluation concluded that it was not possible to make a meaningful overall assessment of the efficiency of the ELD based on the available information and that more work was needed including the collection of additional data to overcome the shortcomings of the evaluation (pages 5-6).* *The 2016 ELD evaluation commented that the total costs of the 137 reported ELD cases was EUR 5,821,238 if the five major losses were excluded and EUR 173,711,841 if they were included. The 2016 ELD evaluation further noted costs to competent authorities in setting up their systems on the ELD (pages 43-44).* *In respect of remediation costs, the 2016 ELD evaluation referred to insurance costs, and commented that the overall costs by operators that had experience in the prevention or remediation of environmental damage were generally proportional to the societal benefits (page 44).* *In respect of administrative costs, the 2016 ELD evaluation commented that they were not only borne by liable operators but related to manpower, equipment, and other such continuous costs. Only a few Member States had provided information on such costs including the Flemish Region of Belgium (EUR 55,000/year gross of annual administrative costs), Bulgaria (EUR 135,613), and Spain (EUR 20,000/year in staff costs and between EUR 684,000 and EUR 2 million of administrative costs of the autonomous communities and cities in Spain) (pages 44-*				

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
45). **5.2 To what extent have the costs of the ELD been justified, given the changes/effects it has achieved?** *As indicated directly above, the 2016 ELD evaluation referred to insurance costs, and commented that the overall costs by operators that had experience in the prevention or remediation of environmental damage were generally proportional to the societal benefits (page 44).* **5.3 Taking account of the objectives and benefits of the ELD: is there evidence that it has caused unnecessary administrative burdens? Can any costs be identified that are out of proportion with the benefits achieved?** *The 2016 ELD evaluation stated that the Commission had no information or evidence of an 'unnecessary administrative burden' and could not identify any costs that were out of proportion to the benefits achieved. The 2016 ELD evaluation also noted that in order to avoid disproportionate costs, the ELD authorises competent authorities to decide that no further remedial measures should be taken if the cost of remedial measures to reach baseline conditions would be disproportionate to the environmental benefits (page 46).*				
Defining the different types of costs associated with the ELD Examining updated information on remediation /prevention costs, in each Member State and across the EU since 2016 incurred by the operators under the ELD Examining information on costs of non-prevented/remediated environmental damage in each Member State and across the EU since 2016 (lessened environment) Examining information on public funds used to prevent/remediate environmental damage in each Member State and across the EU since 2016 Examining updated information on enforcing the ELD in each Member State and across the EU since 2016		Member State ELD cases and non-ELD cases Remediation /prevention costs incurred by the operators under the ELD Costs of lessened environment due to environmental damage (in the scope of the ELD) Public funds used to prevent/remediate environmental damage (in the scope of the ELD) Costs of enforcement of the ELD Costs of financial security incurred by the operators	Analysis of prevention, and remediation costs Analysis of financial security and general prevention costs Analysis of the costs by competent authorities of determining whether environmental damage under the ELD exists and less detailed determinations of environmental damage under national liability legislation Costs and affordability for remediation and prevention activities compared with the	**Data collection methods**: • Desk research • Literature review • Public consultation • Review of prior ELD studies to assist in updating them • Case studies • Targeted consultation: • Surveys on costs and benefits for Members States • Surveys on costs and benefits for the Operators • Improving financial security study including the Member State reports • Feedback from competent authorities and members of the

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Factors influencing the costs of ELD enforcement by Member States Examining updated information on financial security costs (mandatory and voluntary) in each Member State and across the EU since 2016 Examining the general prevention costs incurred by the operators Calculation of (total) costs and quantification and monetisation of benefits - See Annex IV Analysing of the cost-effectiveness		Costs of general prevention incurred by the operators Costs proportionality for different stakeholders (administration, business, NGOs) Further research on implementation of the ELD in Member States	benefits they produce Examining any evidence that the ELD has caused unnecessary administrative burdens Examining the effect of a non-ELD competent authority determining that the threshold for environmental damage under national liability legislation had been reached and then determining whether the threshold for such environmental damage had been reached	ELD Government Experts Group
6. Are there significant differences between Member States in implementation and efficiency, and if so, what is causing them?				
6.1 Are there significant differences in the implementation and efficiency of the ELD between Member States, and if so, what are the underlying causes? *The 2016 ELD Evaluation provided information on average remediation costs for 12 Member States (Belgium, Bulgaria, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Romania, Spain, Sweden and the UK).* *It stated that no comparable figures existed for administrative costs, commenting that Belgium had not seen any additional administrative costs at federal State level, Hungary had no additional administrative costs, Greece had incurred costs in creating an authority at central level and 14 supporting committees, Ireland indicated running costs of one person per year, and the UK had an 'educated guess' of 15 full time equivalent staff years.* *The 2016 ELD evaluation concluded that there was some indication of administrative cost differences, but the information was neither symptomatic nor comparable and the causes for the differences were unclear, necessitating further research in order to draw reliable conclusions (page 45).*				

<table>
<tr><th>Questions and sub-questions</th><th>Assessment criteria</th><th>Indicators</th><th>Data analysis approach</th><th>Data collection methods</th></tr>
<tr><td colspan="5"> The 2016 ELD Evaluation remarked on the differences between the Member States but did not analyse the underlying causes, referring to the Legal analysis report.
6.2 How is the interaction between the ELD and non ELD liability related procedures organised?
Not examined in the 2016 ELD Evaluation.
6.3 What good practices in terms of cost-effective implementation of the ELD in Member States have been identified?
The 2016 ELD Evaluation commented that good practice in terms of cost-effective implementation of the ELD was always given when required preventive actions were taken prior to the threat of environmental damage becoming imminent but that knowledge was lacking for all relevant categories. The2016 ELD evaluation noted that awareness-raising, information, guidance and training were important, and that Spain had developed electronic tools but evidence of cost-effective implementation would require further examples (pages 46-47). </td></tr>
<tr><td colspan="2"> Examining differences in the way implementation of the ELD is organised in the different Member States
Examining whether the procedures to apply the ELD and the non-ELD liability rules are integrated?
Examining the procedures to determine whether to apply the ELD to an environmental damage occurrence and, if so, have they been efficient and easy to apply?
Examining national screening procedures, methodologies and tools supporting the ELD implementation
Examining the correlation between the mode of implementation and the effectiveness of handling ELD cases
Examining the use of risk assessment for operators in Member States that have mandatory financial security systems for ELD liabilities </td>
<td> Number of authorities implementing the ELD (centralised /decentralised mode of operation)
Integration of ELD competent authorities with other national environmental authorities (national liability rules, inspections, nature conservation, permitting, water bodies management, etc)
ELD being transposed as a separated law or integrated with national liability rules
Scope of ELD transposition (optional provisions, etc)
Existence of national screening procedures, methodologies and tools supporting the ELD implementation </td>
<td> Quantitative analysis of the impact of Member State actions on regulatory costs
Quantitative and qualitative discussion on costs and benefits across Member States based on logical analysis and input from stakeholders </td>
<td> Data collection methods:

Study on Facilitating the ELD enforcement
ELD Country Fiches and Country Reports
Desk research
Literature review
Public consultation
Targeted consultations
Stakeholder interviews
Surveys
Case studies
Cost-benefit analysis tools
Feedback from ELD competent authorities, operators, and insurers
</td></tr>
</table>

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
		Number of ELD cases being handled Factors and figures on the use of risk assessment compared to the number of ELD occurrences of environmental damage that could have been avoided in Member States that have financial security for ELD liabilities		
7. Is the current approach, where financial security for ELD liabilities is not mandatory, appropriate? *The 2016 ELD evaluation referred to its 2010 ELD report noting that some Member States had decided to establish mandatory financial security schemes at national level whilst other Member States preferred a voluntary approach. The 2016 ELD evaluation commented on the types of insurance cover (third-party general policies and environmental insurance policies) but stated that the Commission could not draw reliable conclusions on the need for a harmonised system of mandatory financial security and that it would re-examine the option before the planned 2014 evaluation review.* *The 2016 ELD evaluation also noted that the case for the introduction of a harmonised financial security (insurance) instrument at EU level was still weak and that tailor-made solutions at national level were the better option, whilst noting that some Member States had considered establishing mandatory financial security at national level, notably Hungary, Romania and Lithuania[154] (page 48). The 2016 ELD evaluation commented that full harmonisation of insurance and instruments for ELD liabilities did not appear feasible or even beneficial, but that some elements could be reached by better risk assessments by operators and the assessment by competent authorities of the financial viability of operators in the context of granting or updating permits, licences or authorisations (perhaps modelled on the Offshore Safety Directive (2013/30/EU) or following national examples such as that in Ireland.* *The 2016 ELD evaluation commented that such an approach could be complemented or even replaced by a self-executing obligation for operators to carry out better risk analysis on the basis of a set of agreed/compulsory basic elements.* *The 2016 ELD evaluation also commented that an alternative option would be to phase in mandatory financial security for the most risky activities under the Seveso III Directive (pages 48-49).*				

[154] As of March 2022, Hungary, Romania and Lithuania have not established mandatory financial security systems for ELD liabilities.

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
7.1 Has sufficient financial security for ELD liabilities been available for operators in annex III in all Member States? *The 2016 ELD evaluation commented that Insurance Europe had reported that cover was available for all ELD risks including complementary and compensatory remediation in most markets and that insurance pools existed in France, Spain and Italy but that demand for environmental insurance policies was low, with some markets being limited to domestic capacity.* *The 2016 ELD evaluation stated that reports submitted by Member States under then article 18(1) of the ELD indicated that obtaining financial security was still difficult for some operators whilst some Member States provided positive feedback on trends (pages 47-48).* **7.2 Has financial security for ELD liabilities been available and, if so, has it been available at a cost that is affordable, especially by SMEs and micro-enterprises?** **7.3 Have the different mandatory financial security systems for ELD liabilities introduced by the Czech Republic, Ireland, Portugal, Slovakia and Spain (and to a lesser extent the provisions introduced by Italy and Poland) proven to be efficient?** **7.4 Some Member States have introduced mandatory financial security for specified liabilities under the ELD such as waste management activities. Have these requirements proven to be efficient in respect of mandatory financial security for ELD liabilities?** The *2016 ELD evaluation commented that mandatory financial security could be phased in at EU level for the riskiest activities (page 49).* **7.5 Has the absence of an EU-wide mandatory financial security system for ELD liabilities affected the efficiency of the ELD across the EU?** *The 2016 ELD evaluation commented in respect of an ELD fund or an Industry Risk Sharing Facility that as a general rule, sufficient financial security to cover massive accidents would be available especially where permitting, inspection and enforcement systems worked well and financial security markets and instruments could develop but that this may not be the case in all circumstances.* *The 2016 ELD evaluation referred to the Commission's study on the feasibility of creating a fund to cover environmental liability and losses from industrial accidents, noting that there had been negative feedback from some industry and insurance stakeholders (pages 49-50).*				
Revising information on the different types of financial security, and the different types of insurance cover, for ELD liabilities and whether the situation has improved since May 2020 – or otherwise changed since that time Updating information on the availability of, and demand for,		Typology and coverage of the different financial security instruments Mandatory financial security in the Czech Republic where there are no ELD occurrences; The absence of financial security for	Analysis of the effects of different financial security systems compared with the number of ELD occurrences in Member States and whether there are any trends towards better implementation of	• Improving financial security study including the Member State reports • Research carried out in preparing the Improving financial security study

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
environmental insurance policies from the May 2020 Financial Security study Examining the effect of mandatory financial security in Member States that have mandatory financial security for ELD occurrences including: Examining the availability of environmental insurance and other financial security instruments (e.g., company pools, bank guarantees, bonds or funds) in each Member State and across the EU Examining whether mandatory financial security can be phased in, beginning perhaps with mandatory financial security for waste operations (which is in effect in a substantial number of Member States) Examining any trends towards more insurers offering environmental insurance policies in Member States and across the EU Examining the extent to which Member States require financial security for waste management and other risky activities Examining whether an EU-wide or Member State compensatory scheme should be established where there is inadequate coverage by available remedies given the extent of environmental damage		complementary and compensatory remediation in Spain where no ELD occurrences have included complementary or compensatory remediation; The hybrid system of mandatory financial security in Ireland (which includes mandatory financial security under the IED and other environmental permitting legislation) where ELD occurrences have been handled under national liability legislation; The effect of mandatory financial security for various limited activities in Poland; Exceptions to mandatory financial security for various operators (especially the Czech Republic, Slovakia, Spain); Application of mandatory financial security to a wide range of operators (e.g., Portugal) compared with a limited number of operators (e.g., Spain, Ireland); Phasing in mandatory financial security for ELD liabilities (e.g., Spain) versus its application to operators at one time (e.g., Portugal); and Whether Member States with mandatory financial security systems adequately ensure that operators have the appropriate financial security in place.	the ELD in such Member States Analysis of the effect of exceptions to financial security, the absence of financial security for complementary and compensatory remediation, the hybrid system of mandatory financial security versus 'pure' mandatory financial security systems, application of mandatory financial security to a limited group – or most – operators, and the adequacy of competent authority checks on the efficacy of operators' financial security Analysis of any trends to making environmental insurance policies and other financial security instruments for ELD liabilities available to more operators in more Member States from the position in May 2020 when the study on Improving financial security was issued by the Commission Analysis of any trends to requiring mandatory financial security for waste management and other risky activities and whether the situation	• European Parliament Resolution of 20 May 2021 (recommendations on mandatory financial security) • Court of Auditors special report on the polluter pays principle • IMPEL studies on 'Financial provision; Protecting the Environment and the Public Purse' • Fund study issued by the Commission and research carried out by members of the project team for that study • Literature review (including papers by Insurance Europe) • Public consultation • Position papers • Targeted consultation and bilateral exchanges with Re/insurers, Industry, Insurance brokers, Loss adjusters, Competent authorities • Workshop interventions and exchanges • Feedback from ELD competent authorities, operators, and insurers

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
			has changed since May 2020 Analysis whether an EU-wide or Member State compensatory scheme should be established where there is inadequate coverage by available remedies given the extent of environmental damage	
8. To what extent have actions undertaken by the Commission and Member States since 2016 (particularly in response to the REFIT Evaluation) made the ELD more efficient? *Not examined in the ELD 2016 Evaluation because this question refers to actions carried out after 2016*				
8.1 Commission's guidelines on environmental damage **8.2 Commission's continuation of the development and encouragement of training programmes on the ELD and Member States training actions as well as development of training tools and methodologies by IMPEL** **8.3 Commission's promotion of the availability and demand for insurance for ELD liabilities and relevant Member States actions** **8.4 Commission's encouragement of the compilation and publication of national registers of an imminent threat of, and actual, environmental damage occurrences and relevant Member States actions** **8.5 Revision of Article 18(1) of the ELD**				
Examining the effect of the Commission's guidelines on the definition of 'environmental damage' on the implementation and enforcement of the ELD and whether competent authorities are considering the guidelines in environmental damage occurrences Examining the ELD training projects handled by the different		Court and administrative decisions referring to the guidelines National methodologies and procedures referring to the guidelines Training actions by the Commission, Member	Analysis of the MARWP and action implemented in its context Qualitative analysis of the impact of the ELD guidelines Qualitative and comparative	• ELD Country Fiches and Facilitate study and research for the study carried out by a member of the project team • Country Reports (provide an overview on the implementation of the ELD in all Member States)

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
actors Examining the Commission horizontal screening action on the access to justice Examining the ELD methodologies (national and IMPEL) Examining the effect of training on the ELD in Member States that had such training, including Member States that no longer have such training due to the absence of ELD occurrences Examining the Commission, Member States and Insurers action supporting the development of the financial security instruments Examining the effect of digital tools in Member States that have such tools as part of mandatory financial security for ELD occurrences Examining reporting/monitoring plans and public data basis and proposals in the different Member State Examining of the impact of Article 18(1) revision Examining the effect of the EcoLex Life project, entitled 'Raising awareness on Environmental Liability Directive', which was carried out in Slovenia between 2018 and 2019 with financial contribution from the LIFE programme of the EU and which increased media coverage of environmental occurrences		States and IMPEL Life projects supporting the ELD implementation, Slovenia, Greece Outcome of the Commission horizontal screening action on the access to justice State of play regarding the uptake of the mandatory and voluntary financial security instruments (see Question 7 above) Indicators of the Environmental Implementation Review by the Commission Facts and figures on Member State environmental liability cases as reported by Member states in 2022	analysis of the impact of other actions supporting the ELD implementation Qualitative and comparative analysis of the impact of actions related to encouraging the use of the financial security instruments Analysis of information gap between the data provided under new Article 18(1) reports and information required to assess te performance of the ELD Analysis of any missed opportunities	• Improving financial security study including the Member State reports • IMPEL CAED training materials • Environmental Implementation Review of the Commission • Member States Article 18(1) reports • Enhanced summaries of Member States Article 18(1) reports • MARWP documents • Desk research • Literature review • Public consultation • Targeted consultation: • Stakeholder interviews • Case studies • Survey on trainings • case studies • Feedback from Member States and IMPEL

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
9. Could the efficiency of the ELD have been improved? *Not examined in the 2016 ELD Evaluation; potential issues include lack of requirement for Member States to report ELD cases after 30 April 2013 before new article 18(1) requirement; proposed revisions to IED not including consultation on the effect of the IED on implementation of the ELD* *The 2016 ELD Evaluation did not comment on this question.* *The 2016 ELD evaluation referred to the ELD Effectiveness study which had suggested that only a deletion would maintain the current patchwork situation concerning them. The 2016 ELD evaluation noted however that deletion of the defences was not a viable option due to the negative feedback from main stakeholders (page 51).The 2016 ELD evaluation then commented on the pros and cons of the defences (pages 50-51).*				
9.1 Can any unnecessary burdens on businesses be identified? *The 2016 ELD evaluation stated that the Commission had no information or evidence of an 'unnecessary administrative burden' and could not identify any costs that were out of proportion to the benefits achieved. The 2016 ELD evaluation also noted that in order to avoid disproportionate costs, the ELD authorises competent authorities to decide that no further remedial measures should be taken if the cost of remedial measures to reach baseline conditions would be disproportionate to the environmental benefits (page 46).* *The 2016 ELD evaluation commented that measures to reduce the administrative burden on businesses (including SMEs and micro-enterprises) could be identified when, for example, implementation of the ELD had received necessary support. The 2016 ELD evaluation noted that national guidance documents existed in nine Member States, some Member States had digital tools (Spain and France) and many Member States had promoted awareness, information and training at a national level, with records and registries of ELD cases.* *The 2016 ELD evaluation commented that environmental damage costs for liable operators could be prevented, reduced and better handled through financial security instruments (page 47).* **9.2 Can any measures to reduce unnecessary burdens on competent authorities be identified?** *The 2016 ELD evaluation stated that the Commission had no information or evidence of an 'unnecessary administrative burden' and could not identify any costs that were out of proportion to the benefits achieved. The 2016 ELD evaluation also noted that in order to avoid disproportionate costs, the ELD authorises competent authorities to decide that no further remedial measures should be taken if the cost of remedial measures to reach baseline conditions would be disproportionate to the environmental benefits (page 46).* **9.3 Can any measures to reduce burdens on NGOs and other interested persons be identified?** *The 2016 ELD evaluation stated that the Commission had no information or evidence of an 'unnecessary administrative burden' and could not identify any costs that were out of proportion to the benefits achieved. The 2016 ELD evaluation also noted that in order to avoid disproportionate costs, the ELD authorises competent authorities to decide that no further remedial*				

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
measures should be taken if the cost of remedial measures to reach baseline conditions would be disproportionate to the environmental benefits (page 46). **9.4 Can any further measures be identified to improve the efficiency of the ELD?**				
Examining any evidence that the ELD has caused unnecessary administrative burdens Examining of an impact on the ELD implementation of having separate (potentially overlapping) procedures for the implementation of the ELD and the national non ELD liability rules Examining the effect of the lack of screening procedures or national guidance documents on the implementation of the ELD in Member States that do not have such guidance Examining the effect of the restrictive national guidance documents on the implementation of the ELD in Member States that do have such guidance Examining the effect of a non-ELD competent authority determining that the threshold for environmental damage under national liability legislation had been reached and then determining whether the threshold for ELD environmental damage had been reached Examining of any possible measures to reduce unnecessary burdens on competent authorities Examining of any unnecessary burdens on NGOs		Guidance documents and screening procedures in Member States that have such guidance Training on the implementation of the ELD in Member States that have held such training Figures on ELD implementation in Member States which have no guidance, training or methodologies on the ELD implementation Costs for NGOs to use their participation and access to justice rights Conditions for NGOs to use their participation and access to justice rights Facts and figures on the NGOs participation and access to justice actions	Further research on implementation of the ELD in Member States Qualitative and comparative analysis of the impact of other actions supporting the ELD implementation Qualitative and comparative analysis of the difficulties encountered by NGOs in applying their access to justice and participation rights Feedback from competent authorities and members of the ELD Government Experts Group Analysis of the effect of guidance documents on the ELD, training programmes on its operation	• Study on the Facilitating of the enforcement of the ELD • European Parliament Resolution of 20 May 2021 (recommendations on mandatory financial security) • Court of Auditors special report on the polluter pays principle • Public consultation • Position papers • Case studies • Targeted consultations • Stakeholder interviews • Surveys on trainings and costs • Feedback from Member States and other stakeholders

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Examining of any possible measures to reduce unnecessary burdens on NGOs				

3. Coherence

This criterion is defined as: 'To what extent are the elements of the intervention logic complementary, mutually supportive and non-contradictory? To what extent do the objectives and activities support or contradict those of other public interventions?' That is, the assessment of coherence looks at how well different actions work together, and thus points to synergies as well as areas where there are potentially contradictory objectives or approaches that may cause inefficiency. The evaluation identified areas where there might be possible tensions or unclarities (potentially) causing inconsistencies in the ELD implementation.

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
10. To what extent is the ELD internally consistent and coherent? *The 2016 ELD evaluation commented that a binding extension of the scope to include purely national protected natural habitats and species may be legally difficult due to national competence concerning and a wide variance in national scopes between Member States and may not entail better harmonisation.* *The 2016 ELD evaluation further commented that some Member States consider that the ELD applies only to 'severe' biodiversity damage and others apply it to significant damage, with some Member States following the criteria in the Habitats Directive and other Member States taking a more limited approach.* *Further, the 2016 ELD evaluation commented that the definition of 'favourable conservation status' in respect of the territory of the EU, the territory of each Member State, and the natural range had resulted in difficulties in its practical implication but that the effective application of the ELD required a site-related approach.* *Still further, the 2016 ELD evaluation commented that the ELD was sometimes applied so that action to prevent biodiversity damage was taken only if significance of future damage was certain (page 53).*				
10.1 Article 16 of the ELD referring to 'more stringent' provisions **10.2 Definition of 'damage to protected species and natural habitats' in article 2(1)(a) of the ELD** **10.3. Definition of 'water damage' in article 2(1)(b) of the ELD** **10.4. Divisibility of environmental damage occurrence** **10.5. Temporal application of the ELD** **10.6. Scope of compensatory remediation obligation in cases where the competent authority considers that their costs are disproportionate** **10.7. Scope of obligation of cooperation between Member States under Article 15(3° of the ELD** **10.8. Meaning of the term 'public' as referred to in Article 2(13) of the ELD**				

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Identifying provisions having led to inconsistent or restrictive implementation of the ELD by Member states Checking on aspects such as ambiguities in the definitions of biodiversity damage and water damage, noting the Commission's Guidelines on environmental damage Systemic analysis of Article 16 of the ELD in comparison with Article 193 of TFEU How should a determination of whether the ELD is more stringent than national liability legislation be made? Which factors should be addressed in making the determination? Quid cases where the ELD is only partially more stringent? Examining the feasibility of applying national non-ELD legislation and national ELD legislation to the same environmental damage occurrence Further examining application of the ELD to preventive action to prevent biodiversity damage only if significance of future damage was certain (a view taken by competent authorities in several Member States)		ELD Country Fiches and Country Reports (provide an overview on the implementation of the ELD in all Member States) Previous Commission studies CJEU cases that apply the precautionary principle especially *Naturschutzbund Deutschland* (C-297/19) Commission's Guidelines on environmental damage	Analysis of unnecessary, unclear, or contradictory provisions of the ELD Analysis of the existence of overlaps, gaps and other inconsistencies in the ELD Caselaw and literature analysis concerning the Article 16 and Article 193 of TFEU	**Data collection methods:** • Desk research • Literature review • Public consultation • Targeted consultation: • Stakeholder interviews • Case studies • Caselaw analysis
11. To what extent is the ELD coherent with other EU environmental legislation and wider EU policies?				
The 2016 ELD evaluation commented that the ELD was satisfactorily integrated in the EU acquis, supplementing other environmental legislation, in particular the Environmental Impact Assessment Directive (2011/92/EU), the IED and legislation on waste (page 6). *The 2016 ELD evaluation noted that there were indications on the need for some possible further work (page 6), in particular (1) extending the scope of the ELD to cover all 'protected*				

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
species and natural habitats' in Member States, (2) more consistent application and better clarification of the criterion of 'significant damage', (3) the geographical reference of the 'favourable conservation status' in the ELD in respect of EU territory, national territory and natural range, and (4) measures preventing biodiversity damage from becoming significant being taken only if it is known that the damage will be significant (page 8). *The 2016 ELD evaluation commented that there were no relevant incoherences between the ELD and (1) the Environmental Impact Assessment Directive, (2) the IED, or (3) the waste management directives and other environmental Directives with the exception of the Habitats Directive and the Water Framework Directive (page 52).* Environmental instruments, policies and initiatives concerned - European Green Deal - EU Action Plan Towards a Zero Pollution for Air, Water and Soil - EU Biodiversity Strategy for 2030 - IED and its 2024 revision - Seveso III Directive - Environmental Crime Directive (2008/99/EC) and 2024 ECD - Environmental Impact Assessment Directive - Offshore Safety Directive - Birds Directive - Habitats Directive - Waste Framework Directive - Water Framework Directive (2000/60/EC) - Marine Strategy Framework Directive (2008/56/EC) - Nature Restoration Law - Regulation (EU) 2024/1991 - Directive on the Soil Monitoring and Resilience - Regulation on Plastic Pellets - Just Transition Fund - Initiative on harmonising certain aspects of substantive law on insolvency procedures - Directive (EU) 2024/1760 on corporate sustainability due diligence - Water Resilience Strategy				

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Examining of the coherence and overlaps between the ELD and the Industrial Emissions Directive including its 2024 revision and the Seveso III Directive Examining of the coherence between the ELD and the 2024 Environmental Crime Directive Examining of coherence and issues with joint implementation between the ELD and the Water Framework Directive Examining of the coherence and possible unclarities between the ELD and the Nature Restauration Law Examining of the coherence and possible unclarities between the ELD and the Water Resilience Strategy Examining of the coherence and possible unclarities between the ELD and the Soil Monitoring Law Examining of the coherence and possible unclarities between the ELD and the Proposal for a Regulation on Plastic Pellets Examining of the ELD coherence with the other environmental legal instruments: Waste Framework Directive, the Birds Directive, the Marine Strategy Framework Directive, the 2008 ECD, the 2024 ECD, the Environmental Impact Assessment Directive, the Invasive Species Regulation. Examining of the ELD coherence with the other EU environmental policies and wider EU policies the LIFE programme, the Technical Assistance Cohesion Fund, EU4Environment, and the Just Transition Fund., the Directive on corporate sustainability due diligence (CSDDD) and the (proposed) Directive harmonising certain aspects of insolvency		Study on facilitating the ELD enforcement and previous research for this study EU and national caselaw analysis Analysis of the newly revised instruments, IED, ECD, and the new instruments (proposed and adopted) SML, NRL, CSDDD, insolvency law Research carried out in the context of the issue Paper on the environmental ex post liability, carried out in the context of the Fitness check on the polluter pays principle LIFE programme for a project to review the implementation of the ELD in Slovenia	Legal Research, Comparative analysis Case studies analysis	• Study on Facilitating the ELD enforcement • Other studies • Desk research • Caselaw • Case studies • Literature review • Public consultation • Targeted consultation: • Stakeholder interviews

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
law.				

4. EU added value

The EU added value criterion brings together the findings from all other evaluation criteria and focusses on the benefits and changes resulting from the ELD that are additional to those that would have resulted from action at local, regional or national level otherwise. The key issue in answering these groups of questions is establishing what the counterfactual would have been, and what the impacts and results of this counterfactual would have been.

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data sources/Data collection methods
12. What is the EU added value of the ELD compared to what is likely to have been achieved by Member States in its absence?				
12.1 What has been the EU added value compared the state of play before the ELD adoption and to what is likely to have been achieved by Member States in its absence What is the practical significance of the ELD compared to (pre-) and (co-) existing national legislation? *The 2016 ELD Evaluation commented that there was EU added value in regard to setting a minimum level of environmental protection, especially for cross-border circumstances such as transboundary water pollution.* *The 2016 ELD evaluation commented that the main EU added value consisted of the preventative nature of the ELD, remediation of environmental damage through primary, complementary and compensatory remediation, the use of economic valuation methods, the inclusion of biodiversity damage in the scope of environmental damage, and public participation and access to justice. However that the above issues had been reached only to a varying degree especially complementary and compensatory remediation.* *The Evaluation further commented that the ELD had not achieved a better level playing field in the internal market and, whilst the ELD had increased the use of precautionary measures, for example, by increasing the availability of environmental insurance, a higher EU added value had not been achieved because, among other things, financial security was still a problem in respect of large-scale accidents and insolvency (pages 6-7).* **12.2 Has the ELD created a level playing field for all Member States and their operators? Has the ELD provided a minimum standard of protection?**				

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data sources/Data collection methods
The 2016 ELD evaluation commented (p. 38-39) commented that the ELD had contributed to achieving a level playing field, by at least partially aligning the framework on environmental damage across the EU, while there still remains "a patchwork of environmental remediation" in the EU. **12.3 What is the EU added value of the ELD in respect of the EU's international obligations?** *The 2016 ELD evaluation commented that there would be an unwanted effect with regard to the EU's obligations under the Nagoya-Kuala Lumpur Supplementary Protocol and a new implementing instrument would need to be developed and adopted at EU level to fulfil the EU's obligations (page 58).*				
Added value of the ELD liability standard, notably its remedial measures and the recognition of biodiversity damage Added value with regard to cases of cross-border environmental damage Extent of achieving of the level playing field as regards liability for environmental damage throughout the EU Is there any change as regards the EU added value of the ELD in respect of the EU's international obligations?	Compliance with the subsidiarity principle Proportionality of the intervention Added value of the proposed standard Competitiveness of operators in the different Member States (level playing field, single market relevance)		Qualitative discussion of the ELD approach and mechanism Comparative analysis between the ELD and national liability standards Comparative legal analysis between the non-ELD national liability rules across the EU Analysis of the views of ELD stakeholders	• Study on Facilitating the ED enforcement and research for that study • ELD Country Fiches and Country Reports (offering an overview on the non ELD national liability rules in the EU) • Desk research • Literature review • Public consultation • Targeted consultation: • Stakeholder interviews • Case studies, especially the case study on the cross-border environmental damage caused by TEREOS in France to water damage in France, the Walloon Region and the Flemish Region

5. Relevance

The relevance criterion analyses the relationship between the needs and problems in society and the objectives of the ELD. Relevance analysis also requires a consideration of how the objectives of the ELD correspond to wider EU policy goals and priorities (Circular Economy, Green Deal, etc.). It identifies if there is any mismatch between the objectives of the ELD and the (current) needs

<table>
<tr><th>Questions and sub-questions</th><th>Assessment criteria</th><th>Indicators</th><th>Data analysis approach</th><th>Data collection methods</th></tr>
<tr><td colspan="5">13. Does the ELD still correspond to the current needs of the EU?
The 2016 ELD evaluation commented that the objectives of the ELD were still relevant and matched the needs at that time (pages 35-36)</td></tr>
<tr><td colspan="5">How relevant is the ELD to achieving a high level of environmental protection and preventing/remedying environmental damage in the EU and how well do the (original) objectives of the ELD from 2004 still correspond to the needs within the EU?
The 2016 ELD evaluation commented that the ELD contributed to achieving a high level of environmental protection and preventing/remediating environmental damage but that it was being hampered by under-developed capacities and expertise, insufficient communication between the main stakeholders (operators, competent authorities, insurers, environmental NGOs), the lack of clarity in key concepts (the significance criteria, preventive action, favourable conservation status), lack of registers of ELD cases, and similar practical measures and tools (page 36)</td></tr>
<tr><td colspan="2">Examining the extent to which the EU still needs to halt the loss of biodiversity, reduce the number of contaminated sites and protect environmental quality of ground and surface waters.

Examining the extent to which the EU still needs preventing/remedying environmental damage in each Member State and across the EU in line with the polluter pays principle and the ELD prevention/remediation standard

How relevant is the ELD in the light of recent EU strategic goals set up in the Green Deal, the ZPAP and the 2030 Biodiversity</td><td>EU strategic goals and needs defined in the Green Deal, the ZPAP and the 2030 Biodiversity Strategy, Political Priorities of the 2024 Commission, Water Resilience Strategy</td><td>Qualitative discussion of the EU needs and their comparison with the ELD objectives and approach</td><td>Data collection methods:
• Desk research
• Literature review
• Public consultation
• Targeted consultation:
• Stakeholder interviews</td></tr>
</table>

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Strategy? How relevant is the ELD in the light of the political priorities of the 2024 Commission (implementation, compliance assurance, simplification)?				

14. Is the scope of the ELD still appropriate?

The 2016 ELD Evaluation commented, in respect of the relevance of the ELD, that the evaluation confirmed that the ELD was sufficient to cover damage to the most important natural resources, that the scope of strict liability for hazardous activities in annex III appeared to be up-to-date with the possible exception of off-site pipeline transport of dangerous substances, but that stakeholders had indicated issues with third-party liability in that regard (page 5).

The European Parliament in its Resolution of 20 May 2021 queried whether the scope of the ELD was still appropriate (Recommendation 11).

As regards the exceptions and defences: the 2016 ELD evaluation commented that some key business stakeholders considered that maintenance of the optional defences was politically indispensable for the co-operation of industry, noting that 12 Member States had incorporated both defences, two had incorporated them in modified form, five had incorporated one of them, and seven had not incorporated them in their national legislation.

The 2016 ELD Evaluation further commented that the empirical assessment concerning the impact of the optional defences was not very conclusive, noting that some Member States with the highest number of cases had not adopted them whilst other Member States with a higher number of cases had adopted them, whilst yet other Member States that did not allow either defence had no or a small number of cases.

The 2016 ELD Evaluation referred to the ELD Effectiveness study which had suggested that only a deletion would mainstream the current patchwork situation concerning them. The 2016 ELD evaluation noted however that deletion of the defences was not a viable option due to the negative feedback from main stakeholders (page 51).The 2016 ELD evaluation then commented on the pros and cons of the defences (pages 50-51).

14.1 Differentiated liability of the different actors / differentiation between strict and fault-based liability

14.2 Scope of environmental damage addressed by the ELD

14.3 Exclusion of the civil liability

14.4 Implementation model

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Is the ELD scope still relevant as regards: • Double liability regime with strict liability or fault based liability depending on the type of activity being carried out • Relevance of the current scope of Annex III • Relevance of Annex III approach, based on rigidly linked to specific other EU legal instruments, without autonomous criteria • Examining whether the ELD is sufficient to cover damage to the most important natural resources. • Exclusion of liability for land and water damage of the non-Annex III operators • Limitations in the definition of land damage (only if it affects human health) especially in the light of the SML proposal • Limitations in the definition of biodiversity damage (only sites and species protected under the EU law) • Splitting of damage occurrences • Restrictive interpretations and ambiguities in definitions (discussed under questions 2 and 10 respectively) • Exclusion of damage to air, especially in view of the AAQD proposal, the climate dimension, and companies being held liable for contributing to climate change (e.g., *Milieudefensie v*		Optimal liability standard Scope of environmental damage covered by the ELD Scope of environmental damage outside the scope of the ELD EU paradigm as regards the civil liability Optimal remedial approach	Analysis of the scope of liability under the ELD and whether it is still appropriate Comparison with national liability regimes when covering larger scope of land or biodiversity damage, based on strict liability standard, without exclusions	• Study on facilitating the ELD enforcement • Desk research • Literature review • Public consultation • Targeted consultations • Stakeholder interviews • Case studies • Court of Auditors special report on the polluter pays principle • European Parliament resolution of 20 May 2021 • Milieudefensie v Royal Dutch Shell plc

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Royal Dutch Shell plc) • Permit and state-of-the-art defences • Exclusion of cases covered by maritime and nuclear conventions • Exclusion of civil liability for claims for bodily injury and property damage (especially in the light of IED revision) • Remediation and preventive action entrusted to liable operators • Exclusively in-kind remediation model				
15. Has the ELD been able to respond to new and/or emerging issues? *Not addressed in the 2016 ELD evaluation*				
15.1 Recent Environmental Policies **15.2 Climate change** **15.3 New and revised EU legislative instruments and legislative revisions** **15.4 Environmental damage resulting from activities which are not covered by Annex III of the ELD**				
How relevant is the ELD to Green Deal, Zero Pollution Action Plan, Biodiversity Strategy given its limited scope and effectiveness How relevant is the ELD to address climate change		ELD Country Fiches and Country Reports (provide an overview on the implementation of the ELD in all Member States)	Qualitative discussion of relevance consequences of earlier findings regarding the effectiveness and scope limitations	**Data collection methods:** • Desk research • Literature review • Study on facilitating the ELD enforcement

Questions and sub-questions	Assessment criteria	Indicators	Data analysis approach	Data collection methods
Relevance as regards NRL Relevance as regards Water Resilience Strategy Relevance as regards SML Relevance as regards AAQD Limitation to the relevance as regards plastic pellets, microplastics, PFAS, NRL, Water Resilience Strategy, diffuse pollution, historic pollution		Specific objectives of Green Deal, ZPAP, Biodiversity Strategy, NRL, SML, AAQD, Water Resilience Strategy, etc Specific threats of plastic pellets, microplastics, PFAS, diffuse pollution, historic pollution Comparison with the objectives of NRL and WRS European Parliament Resolution of 20 May 2021 and background papers European Court of Auditors special report on the polluter pays principle	Comparative legal analysis between the eld and the new and proposed legal acts Analysis of the issues raised by the European Parliament and the European Court of Auditors	• Public consultation • Targeted consultation: • Stakeholder (expert) questionnaire • Stakeholder interviews • Case studies

ANNEX IV. OVERVIEW OF BENEFITS AND COSTS

1 Introduction

When the European Commission proposed the directive that became the ELD, it adopted the concept of 'financial expenditures' rather than 'costs'.[155] This was because the Commission considered that the major impact of the ELD would be to shift costs for preventing and remedying environmental damage from society in general to persons that caused the damage[156] and, as a result, potentially lower the overall costs.[157] The Commission estimated the amount of financial expenditures based on experiences in the US with similar schemes. The Commission thus estimated that expenditures by liable persons and competent authorities would be EUR 1.5 billion per year, which was less than 1.5% of annual expenditures associated with environmental protection in the EU.

The Commission commented that its estimate was based on conservative assumptions, stating that the final version of the ELD no longer required Member States to remedy environmental damage if liable polluters did not do so.[158] The Commission thus stated that actual expenditures were 'likely to be less than EUR1.5 billion per year'.[159]

2 Categories of costs under the ELD

In line with application of the polluter pays principle, article 8(1) of the ELD states that '[t]he operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive'. Article 8(2) states that a competent authority 'may decide not to recover the full costs where the expenditure required to do so would be greater than the recoverable sum or where the operator cannot be identified'.

Article 2(16) of the ELD defines the term 'costs' as:

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[155] European Commission, Proposal for a Directive on environmental liability with regard to the prevention and remedying of environmental damage (COM(2002) 17 final, 23 January 2002), explanatory memorandum Section 4, 6; https://www.eumonitor.eu/9353000/1/j4nvhdfdk3hydzq_j9vvik7m1c3gyxp/vi8rm2z4r6zk

[156] European Commission, Questions and Answers Environmental Liability Directive (MEMO/07/157, 27 April 2007), 7; https://ec.europa.eu/commission/presscorner/api/files/document/print/en/memo_07_157/MEMO_07_157_EN.pdf

[157] European Commission, Proposal for a Directive on environmental liability with regard to the prevention and remedying of environmental damage (COM(2002) 17 final, 23 January 2002), explanatory memorandum Section 4, 6; ; https://www.eumonitor.eu/9353000/1/j4nvhdfdk3hydzq_j9vvik7m1c3gyxp/vi8rm2z4r6zk; European Commission, Questions and Answers Environmental Liability Directive (MEMO/07/157, 27 April 2007), 7; https://ec.europa.eu/commission/presscorner/api/files/document/print/en/memo_07_157/MEMO_07_157_EN.pdf

[158] European Commission, Questions and Answers Environmental Liability Directive (MEMO/07/157, 27 April 2007), 7; https://ec.europa.eu/commission/presscorner/api/files/document/print/en/memo_07_157/MEMO_07_157_EN.pdf

[159] Ibid

> costs which are justified by the need to ensure the proper and effective implementation of this Directive including the costs of assessing environmental damage, an imminent threat of such damage, alternatives for action as well as the administrative, legal, and enforcement costs, the costs of data collection and other general costs, monitoring and supervision costs.

The costs may therefore be categorised as follows:

- costs of assessing environmental damage, an imminent threat of such damage and alternatives for action;
- costs of carrying out preventive and remedial measures;
- administrative, legal and enforcement costs;
- costs of data collection; and
- other general costs including monitoring and supervision costs.

Costs of assessing environmental damage, an imminent threat of such damage and alternatives for action

The costs of assessing an imminent threat of, or actual, environmental damage and alternatives for action are necessarily incurred by both a competent authority and a liable operator. Article 7(1) of the ELD requires liable operators to identify potential remedial measures and submit them to the competent authority for its approval. Article 7(2) directs a competent authority to decide which remedial measures shall be implemented, with the co-operation of the liable operator, as required.

In addition, article 11(2) states that:

> The duty to establish which operator has caused the damage or the imminent threat of damage, to assess the significance of the damage and to determine which remedial measures should be taken with reference to Annex II shall rest with the competent authority. To that effect, the competent authority shall be entitled to require the relevant operator to carry out his own assessment and to supply any information and data necessary.

Costs of carrying out preventive and remedial measures

The ELD requires liable operators to carry out preventive and remedial measures. Article 8(1) states that the operator shall bear the costs of preventive and remedial actions taken pursuant to the ELD.

If the competent authority cannot identify the liable operator, the operator is not required to bear the costs, or the operator fails to comply with an order to carry out remedial measures, the competent authority may carry out the measures itself (article 6(2)(e)), with the caveat that the authority may carry out the measures only ‘as a means of last resort’ (article 6(3)).

Administrative, legal and enforcement costs

Administrative, legal and enforcement costs in the context of the definition of 'costs' under the ELD are necessarily incurred only by a competent authority.

Administrative costs could include a competent authority's costs in evaluating financial security instruments and related costs in addition to costs directly concerned with implementation and enforcement of the ELD itself.

Operators may incur legal costs in identifying potential remedial measures and submitting them to the competent authority (see article 7(1)), providing supplementary information on environmental damage (see article 6(2)(a); see also section 1.2.4 below), or otherwise responding to a competent authority's requests or orders. Further, operators would incur legal costs if they administratively or judicially challenge orders by a competent authority, including orders to carry out preventive and/or remedial measures.

These costs however are not incurred 'to ensure the proper and effective implementation of [the ELD]'. Further, no data was available on such costs.

Costs of data collection

Competent authorities and operators may both incur the costs of data collection. Article 6(2)(a) states that a competent authority may 'require the operator to provide supplementary information on any damage that has occurred'.

Other general costs including monitoring and supervision costs

Other general costs, as well as monitoring and supervision costs, are necessarily incurred by competent authorities. The term 'monitoring' in this respect does not appear to include monitoring remedial measures (such as collecting and analysing soil and/or groundwater samples) to determine progress and/or effects of the measures.

Due to the generality of the term, 'other general costs', it appears that the term is a catch-all for any other costs that may be incurred by competent authorities or operators.

It is not clear however whether the term 'other general costs, monitoring and supervision costs' includes indirect costs, that is costs that cannot be allocated to a specific ELD occurrence, or whether it includes only direct costs. Costs to monitor or supervise the prevention or remediation of environmental damage are necessarily limited to a specific ELD occurrence, whilst inclusion of the term 'general costs' is not so limited.

Other costs

The definition of 'costs' in the ELD does not appear to include costs of measures carried out by operators to avoid or mitigate environmental damage from their activities such as adopting environmental management systems, qualifying for registration under EMAS[160] or certification by ISO 14001,[161] upgrading pollution control equipment, etc.

The definition also does not appear to include the payment of premiums for environmental insurance, or the costs of carrying out risk assessments required by mandatory financial security systems for ELD liabilities.

The above costs are not strictly ELD costs because they are not needed 'to ensure the proper and effective implementation of [the ELD]'. Further, no data was available on such costs.

3 Categories of costs to be reported by Member States to the Commission

Article 18(1) requires Member States to report information 'gained in the application of [the ELD]' to the Commission, including 'information and data set out in Annex VI'. There are two versions of annex VI, one which applied to information to be provided to the Commission up to 30 April 2013, and one which applies to information to be provided to the Commission from 26 June 2019 (when it entered into effect) to 30 April 2022 and every five years after that date.

The original version of annex VI included the following information on costs that Member States 'may include' in their article 18(1) reports in respect of remediation and preventive measures:

> Costs incurred with remediation and prevention measures, as defined in this Directive:
>
> - paid for directly by liable parties, when this information is available;
>
> - recovered ex post facto from liable parties;
>
> - unrecovered from liable parties. (Reasons for non-recovery should be specified.)

Annex VI also set out the following costs, again that Member States may – but were not required to – report:

> an assessment of the additional administrative costs incurred annually by the public administration in setting up and operating the administrative structures needed to implement and enforce this Directive.

160 Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) [2009] OJ L342/1 (consolidated version); https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009R1221-20190109

161 International Standards Office, ISO 14001 and related standards; Environmental management; https://www.iso.org/iso-14001-environmental-management.html

There was thus no requirement for Member States to report any information on costs to the Commission. Further, information that Member States 'may include' was markedly different from costs defined by the ELD.

4 Costs reported by Member States up to 30 April 2013

The 2016 ELD Evaluation stated as follows concerning costs:

> 'One of the significant information shortcomings concern data on costs, in particular on administrative costs. Only a few MS have provided seemingly reliable data in this respect, some more have provided at least illustrative information but the majority nothing. (…)'
>
> 'The robustness of the findings may be challenged in some respects: First, despite the common interpretative guidance on the reporting, MS may have had a different understanding of some terms, or use from the outset different systems e.g. for the calculation of costs. While for example Hungary provided that the Directive did not cause additional administrative costs for their total 573 ELD cases (...) [m]ost of the MS remained quiet in this respect.'[162]

Based on the information available, the 2016 ELD Evaluation summarised information on costs that was reported by Member States under the following three categories: administrative costs; internalisation costs (that is, costs to apply the polluter pays principle); and costs to prevent or remediate an imminent threat of, or actual, environmental damage.

Due to Member States being the only entities that could (or can) provide information on costs incurred in implementing and enforcing the ELD, no information was (or still is) available for the following costs: costs of assessing environmental damage, an imminent threat of such damage and alternatives for action; costs of data collection; or most general costs including monitoring and supervision costs.

Administrative costs

The 2016 ELD Evaluation stated that administrative costs included the one-off costs to establish the national ELD system, maintenance of the system, training officials, developing and providing guidance and/or supportive and capacity building tools for operators and officials such as risk analysis tools, damage cost estimation tools, etc. The 2016 ELD Evaluation further stated that only three Member States had provided precise information on administrative costs.[163]

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162 Commission Staff Working Document, REFIT Evaluation of the Environmental Liability Directive, 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 (COM(2016) 204 final) (2016 ELD Evaluation) 17; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD:2016:121:FIN

163 Ibid 43

The three Member States that provided information on administrative costs reported them as follows: Belgium (Flemish Region) – EUR 55,000 (annual gross); Bulgaria – 265,975 Bulgarian Lev (EUR 135,962) (annual); and Spain – overall EUR 20,000 staff costs, between EUR 684,000 and EUR 2,000,000 administrative costs for all the autonomous regions and cities.[164]

The article 18(1) reports indicated the following further details on administrative costs and activities:

- **Bulgaria**: administrative costs included wages and mission costs (incurred for on-the-spot checks and participation in working groups on application of national ELD legislation);
- **Finland**: the report stated that it could not assess any additional administrative costs incurred annually by the public administration in setting up and operating the administrative procedures needed to implement and enforce the ELD '[d]ue to the paucity of experience gained in the application of the [ELD]';
- **France**: an estimated EUR 120,000 for the development of a software tool by the University of Montpellier III in collaboration with the CEFE (Center for Functional and Evolutionary Ecology) in Montpellier; the tool, which was subsequently made available free of charge, calculates losses from environmental damage and benefits from a project to restore the damage environment;
- **Greece**: establishing a newly created central authority and 14 supporting committees;
- **Hungary**: no additional administrative costs because it was not necessary to set up and operate separate administrative structures to implement and enforce the ELD;
- **Ireland**: operational costs of one person per year to administer national ELD legislation in the governmental authority and one person per year in the competent authority, with other ancillary costs such as EUR 2,000 for a river quality assessment;
- **Italy**: a 'high amount of necessary human and technical resources'; and
- **Spain**: EUR 5 million in service contracts to develop technical tools for the four-year period up to 2013; an estimated EUR 20,000 per year for staff costs by central governmental authorities; and between EUR 684,000 and EUR 1,995,000 per year for the creation and operation of administrative structures to apply national ELD legislation in the Autonomous Communities and Autonomous Cities.

No information was provided by any Member States on legal and enforcement costs.

Internalisation costs

The 2016 ELD Evaluation described internalisation costs by operators to include precautionary measures taken by them to prevent the risk of any future environmental damage, especially financial security.

[164] Ibid 45

The 2016 ELD Evaluation stated however that information on compliance costs was only fragmentary.

Preventive and remediation costs

The 2016 ELD Evaluation stated that 12 Member States reported costs of preventive and remediation measures to the Commission up to 30 April 2013, for a total of 142 cases, of which 98 cases were reported by Hungary. The total costs for the 142 cases were EUR 179,533,079, with average costs for each case of EUR 1,264,317.[165]

If the large-scale environmental damage cases of Moerdijk/ChemiePack, the Netherlands and Kolontár, Hungary were excluded, the total costs for the remaining 140 cases were EUR 49,533,079, with an average cost of remedial actions for each case of EUR 353,807.

If three other cases (Greece, Spain, Sweden) in which remediation costs exceeded EUR 1 million were excluded, the total costs for the remaining 137 cases were EUR 5,821,238, with average costs for each case of EUR 41,490.[166]

The five major losses totalled EUR 173,711,841.[167]

The five major losses, which totalled more than EUR 1 million each, were:

- Hungary (Kolontár; approximately EUR 65 million);
- the Netherlands (Moerdijk/ChemiePack; approximately EUR 65 million);
- Greece (large fire at a recycling facility; EUR 5 million);[168]
- Spain (vandalism of a pipeline; EUR 80,000 preventive measures; estimated EUR 2 million remediation measures); and
- Sweden (leakage of large amounts of tall oil (liquid rosin) into the Baltic archipelago of Söderhamn; over 10,000,000 SEK; over EUR 1,149,000 (using average exchange rate of EUR 1 = 0.1149 SEK in 2012).

The 2016 ELD Evaluation reported the following average remediation costs in Euros.

- Belgium: 111,052
- Bulgaria: 20,958
- Estonia: 11,922
- Greece: 60,000 (approximately)
- Hungary: 3,559
- Latvia: 37,919

[165] This Annex uses the terms 'case' and 'occurrence' interchangeably to mean the same thing.
[166] 2016 ELD Evaluation, p 34-35,43, 61
[167] Ibid p. 43
[168] The fire occurred in 2015.

- Lithuania: 369,375
- Malta: 42,000
- Romania: 295,171
- Spain: 615,250
- Sweden: 1,070,341[169]

The article 18(1) provided details of the following amounts for remediation costs for individual cases.

Bulgaria: BGN 1,585,113.84 (EUR 810,131) consisting of four imminent threats caused by operators with integrated permits, two of which had been declared insolvent (BGN 4,963.60 (EUR 2,537), BGN 109,942.80 (EUR 56,190), BGN 4,599.44 (EUR 2,352), and BGN 1,465,608 (EUR 749,354) (not including future preventive measures)

Estonia: consisting of two environmental damage cases (EUR 20.895.87 and EUR 2,950 paid by liable operators) and two imminent threat cases (no information available)

Latvia: reported costs for the following eight cases, all of which were for monetary compensation to the State:

- LVL 6,400 (EUR 9,107) for damage to the black stork (*Ciconia nigra*) for which restoration measures were not possible;
- LVL 15,000 (EUR 21,343) for damage to European mistletoe (*Viscum album L.*), for which a fine was paid;
- LVL 36,900 (EUR 52,504) for damage to a specially protected meadow (calcareous ferns with rusty bogrush, blue moor-grass meadows and purpose moor-grass meadow), for which restoration measures were not possible;
- LVL 39,600 (EUR 56,346) for damage to a specially protected nature area (felling of large-leaved limes (*Tilia platphyllos*)) for which restoration was not possible;
- LVL 1,035.20 (EUR 1,4723) for damage to fish and the ecological potential of waters;
- LVL 7,440 (EUR 10,586) for damage to fish (water damage);
- LVL 3,880 (EUR 5,521) for damage to fish and the chemical status of waters; and
- LVL 457.60 (EUR 651) for damage to fish and the chemical status of waters.

Lithuania: reported costs for the following three cases:

- EUR 173,500 for the removal of polluted water and contaminated land/soil;
- EUR 845,700 preliminary costs for the treatment and removal of soil; and
- EUR 25,000 for preliminary costs for the collection and removal of oil from soil and

[169] 2016 ELD Evaluation, p 45

groundwater.

Malta: reported costs for the following case:

- EUR 42,000 for the removal of sludge that caused damage to protected species and natural habitats followed by natural regeneration.

Romania: reported costs for the following four cases:

- EUR 469,786 approximately for remediating pollution paid by the operator;
- EUR 3,822 approximately for remediating oil pollution paid by the operator;
- EUR 14,000 for remediating nitric acid pollution paid by the operator and its insurer; and
- EUR 285,162 for relocating non-hazardous and hazardous waste on land to prevent soil and groundwater pollution paid by the competent authority that then brought a civil claim in criminal proceedings against the operator.

Spain: reported costs for six cases:

- between EUR 12,000 and EUR 250,000 to prevent and remediate pollution in each of three cases;
- EUR 80,000 for preventive measures plus an estimated EUR 2,000,000 for remediation measures in a further case; and
- EUR 250,000 for remediation measures in a further case.

5 Costs reported by Member States after 30 April 2013

Despite the 2016 ELD Evaluation noting the absence of information, especially on costs, the current version of annex VI of the ELD does not mention costs. Instead, it states that 'Member States shall include any other relevant information on the experience gained from the implementation of this Directive'.

Whereas information on costs in implementing and enforcing the ELD was limited up to 30 April 2013, it is even more limited – indeed sparse – after that date.

The following information on the categories of costs has been drawn from reports submitted by Member States under the current version of article 18(1) and annex VI and from a study entitled 'Improving the implementation of the ELD and the evidence base', by COWI, Prospect, and Justice and Environment, prepared for the Commission, issued in 2021.

Administrative costs (including reporting costs)

No information was available on administrative costs in general.

A dedicated Commission survey on costs and benefits addressed to competent authorities (from 15 December 2022 to 15 February 2023)[170] received only four valid responses (from Ireland, Denmark, Spain, and Sweden). The respondents stated that numbers of full-time equivalents (FTEs) in competent authorities in their Member States varied from ¼ FTE to 10 FTE's but did not provide amounts.

As regards costs incurred by Member States for their reporting to the Commission, an estimation can be made based on the available data:

- 599 ELD occurrences have been reported for the second reporting period of 9 years, between 1 May 2013 and 30 April 2022; however Hungary and Germany only provided data as of 2019, i.e. for 3 years only.
- Each Member State thus reported on average less than 3 ELD occurrences per year.
- Presumption is being made that the reporting of 1 ELD occurrence takes 1 hour and that 1 hour of work for a 'professional' costs on average 32 EUR[171],
- The average annual costs of ELD reporting per Member State amounts to EUR 96.

Internalisation costs

No information was available on internalisation costs.

Preventive and remediation costs

Some Member States provided information on preventive and remediation costs in their article 18(1) reports. The following sets out the information together with information from the 2021 report.

Austria: estimated costs reported for an ELD case in which a farmer destroyed three trees containing hermit beetles (*juchtenkäfer; osmoderma eremita*) listed in annex II and IV of the Habitats Directive as well as national conservation legislation: EUR 11,800 in emergency costs (planting replacement trees, procuring hermit beetle larvae, and inoculating the trees with the larvae); EUR 8,500 in primary remediation costs (further stocking of trees with the larvae) and EUR 3,000 (monitoring the remediation measures for four years)[172].

Austria: EUR 11.3 million paid by an operator to remediate damage to a groundwater body polluted by it; EUR 3,979.50 costs ordered by a court against an NGO that brought an action against an operator that polluted a groundwater body for non-official expert's fees; with the

[170] Support Study, Annex G(2)

[171] Eurostat, hourly labour costs, 2023 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Hourly_labour_costs#Labour_costs_per_hour_lowest_in_the_construction_sector

[172] Support Study, Annex I, Section 1, Austria (ELD occurrence)

caveat that the competent authority and court determined that the case was not an ELD case[173].

Belgium: information is available for two ELD cases, the first of which was handled under national ELD legislation, with the second handled under national non-ELD legislation:

- estimated EUR 1.5 million consisting of an estimated EUR 500,000 in primary remediation costs paid by a farmer that polluted a river and other watercourses with herbicide (excavating soil and installing water collection and filtration equipment, plus sampling and monitoring a watercourse and its catchment area) plus EUR 198,723 (growing and re-introducing freshwater pearl mussels (*Margaritifera margaritifera*), listed in annexes II and V of the Habitats Directive, and thick shelled mussels (*Unio crassus*), listed in annex II of the Habitats Directive, into the river over a period of eight to ten years with a possible extension of two years); EUR 49,164 for post-reintroduction monitoring; estimated EUR 20,000 for complementary remediation creating a footbridge to prevent fine particles entering the river where the pearl mussels were being re-introduced) and creation of a forest ford); and EUR 16,250 for compensatory remediation (planting a 500 metres long strip of river cords with a width of five metres each year over a period of 15 years) (see Support Study, annex I, Belgium (ELD occurrence)); and
- over EUR 4,000,000 paid by Infrabel, the railway infrastructure company in the Flemish Region to remediate acrylonitrile that leaked from train wagons at Wetteren, near Ghent, causing an explosion and fire, resulting in one death, 49 persons injured and the evacuation of people living nearby. The acrylonitrile entered into a ditch and spread towards a small stream which flows into the River Scheldt, and towards the sewerage system of Wetteren, which terminated in a water treatment plant that discharged treated water into the River Scheld, as well as polluting subsoil and groundwater; the case was recognised as an ELD case but handled under non-ELD legislation (see Support Study, annex J, Belgium).

Bulgaria: information is available on two ELD cases as follows:

- BGN 2,299,000 (EUR 1,175,040) incurred by the State for measures to prevent the release of waste trichloroethane from a tank operated by an insolvent operator including additional works (see annex I, Bulgaria (ELD occurrence); and
- BGN 106,975.75 (EUR 54,676) paid by an operator to remediate land/soil and water damage following the rupture of a slag dump dyke and a leak of polluted water from it that entered a football pitch near the dyke and then entered the River Struma via a concrete ditch (see annex J, Bulgaria).

Finland: information is available on the following costs of four incidents concerning insolvent operators:

- an estimated EUR 100 million paid by the State for measures to prevent damage to

173 Support Study, Annex I, Austria (non-ELD occurrence)

lakes near the Talvivaara nickel and zinc mine in Sotkamo in the Kainuu Region in Eastern Finland; a holding company of the State owned approximately 8.9% of the stock of the operator;

- EUR 21,000,000 paid by the State to prevent an imminent threat of environmental damage to groundwater and a river caused by a mining company in Nivala;
- EUR 4,600,000 paid by the State to remediate a site with an explosive sulphur coal inventory and other non-hazardous assets; and
- EUR 2,000,000 paid by the State to remediate 1,600 tonnes of hazardous waste stored by a chemical waste processing company that had not complied with its environmental permit, leading to risks of pollution from chemical spills, a major accident, and a threat to the public sewage network (see annex J, Finland and 'Facilitating enforcement of the Environmental Liability Directive, report for Finland).

France: civil claims for compensation in criminal proceedings; the claims arose from water pollution in France and Belgium (Walloon Region) caused by the ruptured dyke of a settling pond at a sugar refinery in France in civil proceedings and included the following:

- Walloon Region: EUR 9,044,203.27, consisting of EUR 8,864,515 for ecological damage, EUR 129,688.27 for material damage, EUR 50,000 for moral damage, and EUR 10,000 for irrecoverable costs (the Walloon Region had claimed EUR 16,810,998 for ecological damage, EUR 285,948.42 for material damage, and EUR 100,000 for moral damage, and EUR 10,000 for irrecoverable costs) (the court reduced the area for which the Walloon Region claimed ecological damage by 50%);
- Northern Federation for Fishing and the Protection of the Aquatic Environment (*Fédération du Nord pour la Pêche et la Protection du Milieu Aquatique*): EUR 233,157, consisting of EUR 115,650 for ecological damage, EUR 60,000 for moral damage, EUR 57,507 for material damage, EUR 133,274.50 plus EUR 5,000 for irrecoverable costs; and
- League for the Protection of Birds (*Ligue pour la Protection des Oiseaux*), EUR 20,000 for ecological damage, especially based on damage to the food chain and EUR 10,000 for damage to a Natura 2000 site[174]

Germany: the German Insurance Association stated that most claims under its model environmental extension for ELD liabilities in general liability policies averaged EUR 3,300 per claim; for the period of 2010 to 2020, there was an average of 297 claims per year under the extension including 34 claims of over EUR 50,000, ranging between EUR 125,000 and EUR 1,200,000, for a total expenditure of EUR 14,000,000[175]

Greece: costs for the following ELD occurrences were reported:

- EUR 2,044,000 for 82 prevention and remediation projects that were implemented or planned by the competent authority during the period of 1 May 2013 to 31 December

[174] Support Study, Annex I, France (non-ELD occurrence).
[175] Support Study, Annex J, Germany, and Annex N, Section 13.1

2021;

- EUR 2,500,000 from the State to remediate heavy metals and asbestos in two areas in Mati and Kinetta Attica that were affected by fires in July 2018;
- EUR 5,000,000 from the Greek Green Fund to remediate environmental damage in Aspropyrgos, Attica Region, caused by the fire that took place in June 2015; the State has ordered reimbursement by the operator;
- EUR 99,000 from the State for measures to remediate a landfill in a cave in the municipality of Agia Anna;
- EUR 880,000 paid by the operator to remediate the premises of a former radio station near the Nestos wetland, part of a Natura 2000 area, following a complaint about waste and equipment remaining at the site; and
- EUR 6,443 paid by the State to deal with an imminent threat of, and actual, environmental damage caused by the uncontrolled dumping of hazardous waste at Nea Artakis in the municipality of Chalkideon Evia; the State has sought recovery of the costs from the operators (see Support Study annex J, Greece).

Ireland: a criminal court awarded the competent authority EUR 18,915 for the authority's costs in a prosecution against an operator for breaching licence conditions and causing damage to a river[176].

Lithuania: costs for the following five ELD cases were reported by Lithuania (Cases Nos 1 and 2) or indicated in the report on Improving the implementation of the ELD and the evidence base (2021) (Cases Nos 3, 4, 5 (pages 191, 389)):

Case No 1: the total environmental damage from a large fire at a tyre recycling facility totalled EUR 14,678,705.60, consisting of the following payable in compensation to the State:

- damage to water: EUR 599,691.43 – caused by the discharge of 62,656.05 cubic metres of contaminated fire-fighting water into surface water bodies;
- damage to air: EUR 14,078,671.39 – caused by pollutants entering the ambient air from the fire; and
- damage to wildlife: EUR 342.78 – caused by the death of a hare by smoke inhalation.

In addition, the following costs were required to be reimbursed:

- EUR 1,240,000 from the State Reserve for costs incurred in dealing with the aftermath of the fire;
- EUR 1,500,000 to a waste disposal company for removing and disposing of hazardous waste from the facility;
- EUR 140,000 to the Ministry of the Interior, including EUR 112,100 for expert

[176] Support Study annex I, Ireland (ELD or non-ELD occurrence)

consultations involving the effect of heavy metals, dioxins and other toxic substances on firefighters and rescuers; and EUR 20,400 for tests and expert advice;

- EUR 20,200 to reimburse costs incurred in taking, preparing and sending samples to laboratories;
- EUR 7,500 for salaries of employees of the Ministry of Health Medical Centre for overtime;
- EUR 7,500 for the purchase of equipment;
- EUR 81,000 to the municipality of Alytus as State support to compensate losses caused by the fire, including EUR 65,600 for expenses incurred by farmers in destroying livestock, milk and eggs; and nearly EUR 3,000 for the destruction of livestock, milk and eggs; and
- Over EUR 5,000,000 to the State for costs incurred in extinguishing the fire.

The following amounts were required to be reimbursed to the municipality of Alytus:

- EUR 3,200 to a company to cover the costs of slaughtering beef cattle purchased by it;
- EUR 9,200 for laboratory tests carried out by the administration;
- EUR 874 for milk disposal costs incurred by farmers, and the costs of laboratory tests; EUR 2,686 to the Fire Service for fuel, fire contractors and filters; and
- EUR 3,246 to the municipality of Alytus for street cleaning and other costs.

Case No 2: EUR 48,257,676.57 for preventing and remediating the imminent threat of, and actual, environmental damage from untreated wastewater from an operator that recycled raw materials (wastepaper, paper and cardboard packaging) as well as manufacturing new cardboard and raw material for corrugated cardboard boxes; the untreated wastewater had bypassed the biological treatment plant and had been unlawfully discharged into a wastewater channel and into the Curonian Lagoon

Case No 3: estimated EUR 629,000 for remediating environmental damage near the construction of an office building in Vilnius following the rupture of two main sewerage pipes that caused approximately 200,000 m^3 of untreated wastewater to flow into the Neris River; a settlement in the lawsuit committed the operators to pay EUR 315,000 compensation to the State for environmental damage

Case No 4: EUR 40,000 for compensation to the State for environmental damage by illegal treatment of fish processing waste that was disposed into the environment

Case No 5: EUR 166,397.07 paid by the State for removing and treating 353,101 tonnes of hydrochloric acid waste that was illegally stored in a warehouse; the Lithuanian Court of Appeal awarded reimbursement to the State[177].

Romania: RON 21,346 (EUR 4,320) paid by the operator to remediate the unauthorised excavation of andesite plates in a 2.5-hectare area in the Giurge Mountains and Depression (*Depresiunea și Munții Giurgeului*) Natura 2000 site outside the urban area of the Joseni Commune; the remedial measures were levelling the excavated area; planting native trees and shrubs; planting native groundcover; and creating five snow and rainwater lakes that contain populations of the Carpathian newt (*Triturus montandoni*) and the yellow-bellied toad (*Bombina variegata*), both listed under annexes II and IV of the Habitats Directive[178]

Slovakia: costs were reported for the following two ELD cases:

- EUR 88,662 paid by the operator for measures to prevent an imminent threat of land/soil and groundwater damage caused by the transport of dangerous or polluting goods by road; and
- EUR 785 paid by the operator to prevent an imminent threat of surface water damage caused by a discharge of wastewater[179]

Slovenia: costs in the Kemis case (see Improving the implementation of the ELD and the evidence base 2021 (page 193)), included the following: the national laboratory for health, environment and food paid EUR 89,703 for monitoring and sampling costs, EUR 5,351 for an appointed external expert; and EUR 347 for the costs of an administrative court procedure[180].

6 Benefits

The 2016 ELD Evaluation stated that the environmental benefits, according to the applicable economic valuing and equivalency analysis, should correspond to preventive and remedial costs. These benefits included prevention of environmental damage, restoration of damaged natural resources to their condition before the damage, and internalisation of costs by liable operators.[181]

No cost-based evidence of benefits was available.

The Commission distributed a survey for operators on costs and benefits from 15 December 2022 to 15 February 2023, focusing on environmental insurance. The survey received six responses; four from Germany, one from Spain and one from France. Three companies were global, covering both EU and non-EU countries, and three covered a single EU Member

[177] Support Study, Annex J, Lithuania (for the 5 above cases)
[178] Support Study, Annex J, Romania
[179] Support Study, Annex J, Slovakia
[180] Support Study, Annex J, Slovenia.
[181] 2016 ELD evaluation, p. 45

State. Two companies had more than 5,000 employees, two companies had between 1,001 and 5,000, one had between 501 and 1,000, and one had up to 100 employees. The companies were engaged in water treatment and supply, chemicals, manufacturing of fibres, forest management and life sciences[182].

Two companies considered that costs of implementing the ELD were not justified in view of ELD benefits, whereas another two thought the opposite. Two companies did not reply. One of the respondents said that the costs were necessary as their commitment to public service of general interest.

Respondents to the Commission survey to Member States on costs and benefits indicated above considered that the costs, as well as costs for operators covering preventive and remedial measures, were justified in view of ELD benefits.

7 Overview of costs and benefits identified in the evaluation

The table below sets out an overview of costs and benefits identified in the evaluation.

[182] Support Study, Annex G(1)

		Citizens/Consumers		Businesses		Administrations	
		Quantitative	Comment	Quantitative	Comment	Quantitative	Comment
Direct and indirect compliance costs (costs of assessing environmental damage, an imminent threat of such damage and alternatives for action; costs of carrying out preventive and remedial measures; administrative, legal and enforcement costs)	**Type: recurrent**	-	-	Quantification is not possible	Costs for businesses depend on a number of variables with a range of possible values, e.g.: • Number of incidents • Type of economic activity; • Number, size and location of sites where occupational activities occur (e.g. proximity to a protected area) • Occurrence or imminent threat of environmental damage	Quantification is not possible for overall compliance costs, The average annual costs of ELD reporting per Member State amounts to EUR 96.	Information on administrative costs reported by Member States is scarce and not sufficient to attempt the estimation of a range of values representative for all Member States. In addition to the paucity of data, Member States have chosen to implement the ELD in many different ways, with some opting for a more centralised implementation while others have set a wide network of local competent authorities

		Citizens/Consumers		Businesses		Administrations	
		Quantitative	Comment	Quantitative	Comment	Quantitative	Comment
					Therefore, it is not possible to provide an estimate of the overall costs, or the costs per incident		
Enforcement costs: (costs associated with activities linked to the implementation of an initiative such as monitoring, inspections and adjudication/litigation)	**Type: recurrent**	-	-	-	-	Quantification is not possible	No information was provided by any Member State on enforcement costs
Benefits: **Direct and indirect benefits** (such as improved well being — changes in pollution levels, safety, health, employment; market efficiency — wider economic benefits, macroeconomic benefits, social impacts, environmental impacts)	**Type: recurrent**	Quantification is not possible	Benefits, which should correspond to preventive and remedial costs incurred by businesses, include prevention of environmental damage, restoration of damaged natural resources to their condition before	-	-	Quantification is not possible	Benefits, which should correspond to preventive and remedial costs incurred by businesses, include prevention of environmental damage, restoration of damaged natural resources to their condition before

		Citizens/Consumers		Businesses		Administrations	
		Quantitative	Comment	Quantitative	Comment	Quantitative	Comment
			the damage, and internalisation of costs by liable operators				the damage, and internalisation of costs by liable operators

ANNEX V. STAKEHOLDERS CONSULTATION - SYNOPSIS REPORT

1 INTRODUCTION

This Synopsis Report provides an overview of the different consultation activities by the European Commission since it published a call for evidence on 29 November 2021. This report also covers a Public Consultation (PC) which ran for twelve weeks, from 12 May 2022 to 4 August 2022, targeted consultations and ELD stakeholder workshop held on 22 November 2022. The aim of this process is to inform work on evaluation of Environmental Liability Directive (ELD)[183].

The purpose of this report is to summarise the results of all the consultation activities briefly outlined above, and to provide an analytical overview of these results. The contributions received in the context of the consultation activities cannot be regarded as indicating the official position of the Commission nor are they binding on the Commission. Additionally, these contributions do not reflect a representative sample of the EU population.

2 CONSULTATION

2.1. Consultation objectives

The aim of the consultation activities was to gather stakeholder opinions on the evaluation of the ELD, and to ensure that stakeholders' views, practical experience and data were considered in the policy development process, ensuring higher quality and balanced analysis of arguments from different sources, and greater transparency for the policy development process. Information was sought in relation to five key evaluation criteria:

- Effectiveness;
- Efficiency;
- Relevance;
- Coherence;
- EU added value.

The aim was to collect opinions and views on each of these criteria, to gather evidence as well as any recommendations on how the ELD could be improved in relation to each of the criterion.

The table below summarises the consultation tools and strategies applied by stakeholder group.

Table 1: Consultation tools and strategies applied for by stakeholder groups

[183] EUR-Lex - 02004L0035-20190626 - EN - EUR-Lex (europa.eu)

Stakeholder group	Consultation tools and strategies applied
General public	PC
Relevant Member State authorities	PC, targeted consultation, workshop, follow-up emails and interviews
Representatives of EU trade associations	PC, targeted consultation, workshop, follow-up emails and interviews
Operators	PC, targeted consultation, workshop, interviews
Organisations in the re/insurance industry	PC, targeted consultation, workshop, follow-up emails and interviews
Interested NGOs/environmental charities, academics/experts	PC, targeted consultation, workshop, follow-up emails and interviews

2.2. Consultation activities

When performing the consultation activities, the Commission was supported by the contractor, which issued a separate study on the evaluation of the ELD[184] (hereafter the 'Support Study').

The **call for evidence**[185] ran from 29 November 2021 to 27 December 2021. Feedback was provided by 16 participants.

The **PC** ran for twelve weeks, from 12 May 2022 to 4 August 2022. The aim of the PC was to allow all citizens and stakeholders to provide their views on the experience gained in applying the ELD, notably as regards its effectiveness, efficiency, relevance, coherence, and EU added value, and thus inform the evaluation process. The questionnaire was made available in all official EU languages and uploaded to the European Commission's 'Have your say' portal. The PC was open to anyone interested in the ELD. Participants were able to respond to the questionnaire on behalf of an organisation or as an individual. They were also able to supplement their response with a position paper and additional documents. The questionnaire was split into three sections: introductory questions on the respondent, Part I – General questions, and Part II – Technical questions. Part I contained questions of a more general nature, whereas Part II sought to gather information on the experience of stakeholders with more expert knowledge of the ELD and its implementation.

The **Targeted Stakeholder Survey (TSS)** ran from 28 June 2022 to 31 July 2022. The targeted consultation questionnaire was distributed via email to 420 stakeholders and received only 27 responses.

Two additional **online surveys** focusing on the costs and benefits of the ELD — one targeted to operators and one to the EU Member States authorities — ran from 15 December 2022 to 15 February 2023. Furthermore, an additional survey for the EU

[184] Valerie Fogleman, Stevens & Bolton LLP, Cardiff University School of Law and Politics, supported by RPA Europe and RPA Europe consortium, Study in support of the evaluation of the Environmental Liability Directive and its implementation, https://data.europa.eu/doi/10.2779/034934

[185] European Commission, Call for evidence, Environmental Liability Directive (evaluation); https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13251-Environmental-Liability-Directive-evaluation-_en

Member States on the ELD training was ran in May 2022.

The aim of the **ELD stakeholder workshop** held on the 22 November 2022 in Brussels was to share draft Support Study findings with ELD stakeholders and to gather their feedback. The workshop was attended by 82 participants, including the speakers, the Contractor, and representatives from the European Commission.

In addition, the Contractor carried out *ad-hoc* consultations via emails and phone throughout the duration of the project, exchanging over 4,000 emails and holding several phone interviews.

2.3. Methodologies and tools to process data

The PC and additional surveys were designed and launched via the EUSurvey which is the European Commission's multilingual online survey management system built for the creation and publication of surveys and public consultations. The TSS was distributed as a word document by email.

The analysis was undertaken using MS Excel. When this Synopsis report refers to the results of the Public Consultation, namely reporting the ratios between the different positions expressed in response to questions covered by Part I of the public consultation entitled 'General questions', there are certain discrepancies with the corresponding figures provided in the Public Consultation factual summary, as published on the European Commission's 'Have your say' portal[186]. This is because, while all the questions in the Part I of the questionnaire were mandatory, the participants could always choose to answer 'don't know/have no opinion'. In this document, when presenting the results, the responses including only those respondents, who expressed an opinion (which includes respondents whose response was 'neutral') are analysed. However, the respondents who chose the response 'I do not know/No opinion' are excluded from the statistics. The statistical summaries were anonymised and aggregated per stakeholder group. The detailed statistics of the responses to PC are available in Annex E 'Public Consultation questionnaire and in-depth analysis' of the Support Study.

All data were checked for **campaigns** prior to analysis to prevent the overall results being skewed to a particular interest group. Due to a low number of participants in the survey, all responses were reviewed manually to identify any duplicates or potential campaigns. There was no evidence of campaigns. Therefore, all contributions were included in the analysis.

All **position papers** received during the PC and responses submitted to the Call for Evidence were read and processed without the aid of any text analysis software. In needs to be noted that only two position papers were received during the TSS, and both of them were already received in the PC. The analysis of position papers followed a thematic approach. However, a thematic map was not developed due to a low number of position papers submitted for this PC. All position papers were explored, and relevant data extracted according to the appropriate thematic and subject areas. Important findings,

[186] European Commission, Environmental Liability Directive (evaluation), Factual summary report of the public consultation in support of the evaluation of the Environmental Liability Directive and its implementation (Ref. Ares(2023)3135529, 4 May 2023); available at https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13251-Environmental-Liability-Directive-evaluation-/public-consultation_en

such as problems, suggestions, and recommendations were extracted into the relevant areas.

2.4. Number of respondents and respondent profiles

The overall analysis of the consultation results needs to be read with caution, taking into consideration low number of responses from each stakeholder group, which, in most cases, is provided in the analysis.

2.4.1. Call for evidence

The call for evidence received 16 responses. The respondents included four NGOs, four EU citizens, six business associations, one company, and one group of legal researchers. Summary of the responses to Call for evidence is provided in Annex D 'Call for Evidence and summary of responses' of the Support Study. It is important to note that some of the comments provided in the responses were not relevant to the ELD.

2.4.2. Public consultation

To ensure a correct understanding of the results, stakeholder types were grouped under the following combinations:

- Operators and trade associations – company or business associations;
- EU and non-EU citizens;
- NGOs and academia – NGOs and academia/research institutions;
- Public authorities – competent authorities involved in the implementation of the ELD and another governmental authorities;
- Re/insurance industry and trade associations – organisations in the re/insurance industry.

A total of **111 responses** were received in response to the PC. The largest number of responses came from operators and business associations (36%), followed by EU and non-EU citizens (28%) (Figure 1).

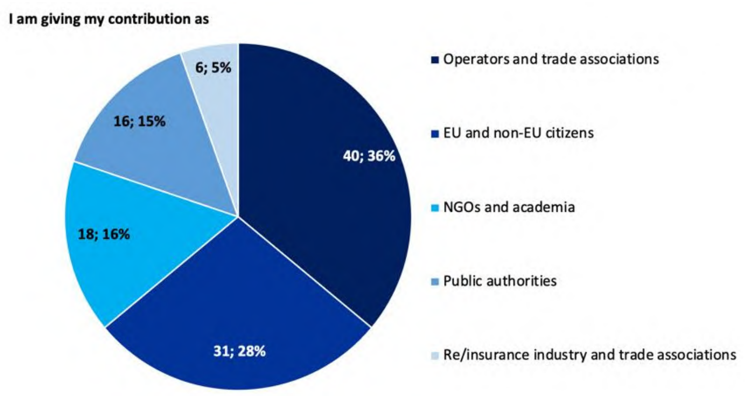

Figure 1: PC respondent profile by stakeholder group. (N=111)

The low response rate to the PC meant that some of the stakeholder groups had a very few responses from which meaningful and statistically sound conclusions on the group's opinions could not be made. Furthermore, where answering the question was not mandatory (all Part II technical questions of PC), the response rate for some stakeholder groups was even lower.

Most participants (96%, or 107 out of 111) were based in the EU. Most responses came from Belgium (18%, or 20 out of 111), Germany (17%, or 19 out of 111), France (15%, or 17 out of 111) and Spain (11%, or 12 out of 111). Non-EU respondents were based in Guatemala (2 respondents) and Norway (2 respondents).

Two-thirds of respondents (68%) indicated that they had more than five years of experience on issues concerning damage to land, water and air (Figure 2).

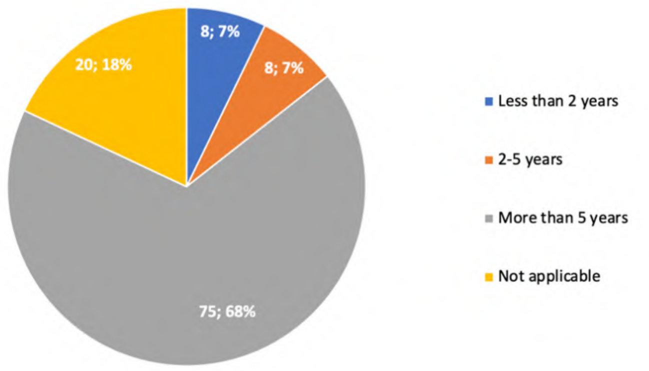

Figure 2: PC respondent profile by experience related to issues concerning damage to land, water and biodiversity. (N=111)

Position papers

A total of 14 position papers were uploaded in response to the PC. There was one duplicate submission of a position paper, which was removed from further analysis. Therefore, a total of **thirteen documents were taken forward for analysis**, manually read and analysed for key information. These thirteen documents were submitted by **five 'operators and trade associations', four 're/insurance industry and trade associations', three 'NGOs and academia' and one 'public authority' stakeholder.** The detailed analysis of position papers is provided in the Annex E 'Public Consultation questionnaire and in-depth analysis' of the Support Study.

2.4.3. Targeted stakeholder surveys

To ensure a correct understanding of the results, stakeholder types were grouped in meaningful combinations:

- Public authorities – competent authorities and governmental authorities;
- Re/insurance industry;
- Trade associations;
- NGOs and academia – academics and NGOs.

A total of **27 responses** were received in response to the TSS. The largest number of responses came from public authorities (63%), followed by the re/insurance industry (26%) (Figure 3).

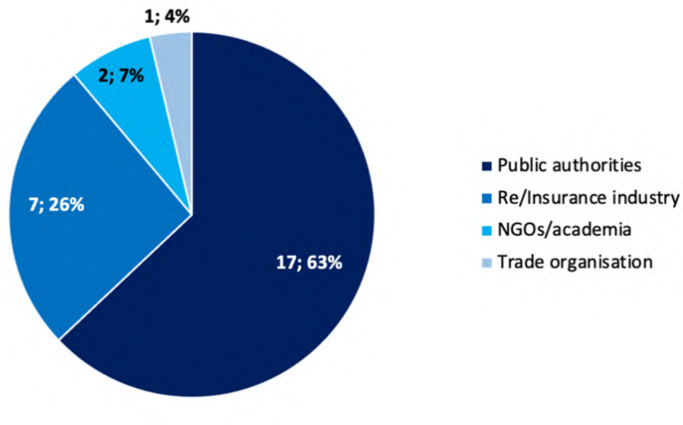

Figure 3: TSS respondent profile by stakeholder group. (N=27)

The low response rate to the TSS meant that a meaningful and statistically sound conclusions on the stakeholder groups' opinions could not be made. The results are highly skewed towards the two major groups of respondents, namely the public authorities and the re/insurance industry.

Most participants (26; 94%) were based in the EU. Most responses came from Italy (19%), Romania (11%), and Spain (11%). There were three participants (11%) who commented on the EU-wide basis.

Position papers

Two position papers were submitted to the TSS. However, these papers were also submitted in the PC and were analysed together with other PC position papers.

2.4.4. Additional surveys for operators and MS competent authorities

Two additional surveys for operators and competent authorities ran from 15 December 2022 to 15 February 2023 and received the total of 11 responses – six from operators and five from competent authorities. Operators that responded to the survey were mainly from Germany (4), one from Spain and one from France. Regarding MS competent authorities, two respondents were from Ireland, one from Denmark, one from Spain and one from Sweden. A statistically sound analysis of the results could not be completed for these two surveys due to a very low number of responses.

The survey on the ELD training, which ran in May 2022, received 19 responses including 18 from Member States and one from Iceland.

The detailed overview of the results of all three surveys can be found in Annex G 'Surveys' of the Support Study.

3 RESPONSES

3.1. General public view of the 'polluter pays' principle

The introductory questions of the PC inquired about the necessity of a dedicated legislation to implement the 'polluter pays' principle as well as legislation requiring companies to prevent and remedy environmental damage. The view of the *operators* and related *trade associations* was slightly different from the rest of the respondents' groups and show a preference for less restrictive regulation.

In general, the large majority of PC respondents from *NGOs and academia (*all 18 respondents), *public authorities* (94%, or 15 out of 16), *re/insurance industry* and related *trade associations* (all 5), as well as *EU and non-EU citizens* (93%, or 28 out of 30) agreed or strongly agreed that it was **necessary to have a dedicated legislation to implement the 'polluter pays' principle.** Two-thirds (64%, or 25 out of 39) of *operators* and related *trade associations* shared the same views.

Similarly, almost all PC respondents from *NGOs and academia* (94%, or 17 out of 18), *public authorities* (all 16 respondents), *re/insurance industry* (all 5), and *EU and non-EU citizens* (93%, or 28 out of 30) agreed or strongly agreed that it was **necessary to have legislation that required companies to prevent environmental damage in case of an imminent threat and to remedy the damage when the prevention measures failed**. Two thirds (62%, or 24 out of 15) of *operators* and related *trade associations* shared the same views.

3.2. Effectiveness

To what extent have the objectives of the ELD been achieved?

PC participants were asked to express their opinion about **the benefits of the ELD**. The responses varied between all stakeholder groups, and there was no uniform agreement about most of the benefits listed in the questionnaire.

What the PC respondents agreed on the most was that **the ELD had assisted in raising awareness of environmental issues:** *NGOs/academia* – 61%, or 11 out of 18; *public authorities* – 75%, or 12 out of 16; *re/insurance industry* and *trade associations* – 66%, or 4 out of 6; *EU and non-EU citizens* – 52%, or 14 out of 27; and *operators* and *trade organisations* – 62%, or 21 out of 34.

Concerning the other possible benefits of ELD, over 60% of PC respondents from *operators* and *public authorities*, who expressed their opinion on this question, agreed or strongly agreed that the ELD assisted in **preventing and remediating damage to biodiversity** (61%, or 19 out of 31, and 64%, or 9 out of 14, respectively), **land** (63%, or 19 out of 30; and 80%, or 12 out of 15, respectively) and **surface, ground, transitional and coastal waters** (61%, or 20 out of 33, and 77%, or 10 out of 13, respectively) in the EU.

Over 60% of PC respondents from *operators* and *public authorities* agreed or strongly agreed as well that the ELD assisted in **application of the 'polluter pays' principle with costs to prevent and remediate environmental damage paid by liable operators** (68%, or 23 out of 34, and 80%, or 12 out of 15, respectively), **ensuring that liable operators carry out preventive and remedial measures as applicable** (71%, or 24 out of 34, and 86%, or 12 out of 14, respectively), and **allowing interested persons to** request **competent authorities to take action in case of environmental damage occurrences** (66%, or 19 out of 29, and 88%, or 14 out of 16, respectively) or **in case of imminent threat of environmental damage occurrences** (60%, or 18 out of 30, and 93%, or 13 out of 14, respectively). However, except for the last two benefits (allowing interested persons to request competent authorities to take action in case of environmental damage occurrences and in case of imminent threat of environmental damage occurrences), less than 50% of *citizens* and *NGOs/academia* PC respondents shared the same views.

Most PC respondents from *citizens* (79%, or 22 out of 28), *NGOs/academia* (88%, or 14 out of 16) and *public authorities* (69%, or 9 out of 13) thought that **the absence of mandatory financial security for ELD liabilities at EU level had limited the**

effectiveness of the ELD. On the contrary, only some of PC respondents from *re-insurance industry* (1 out of 6) and *operators* (26%, or 8 out of 31) thought this was the case.

Have any factors limited the effectiveness of the ELD?

PC respondents were also asked to express their opinion about **factors that decreased the effectiveness of the ELD.** There was no uniform opinion on this matter amongst all stakeholder groups, which replied to this question.

A large proportion (over 70%) of PC respondents from *NGOs/academia* and *EU and non-EU citizens* agreed or strongly agreed that the following factors decreased the effectiveness of the ELD: **difficulties in establishing whether an environmental damage occurrence meets the significance criteria for land, water and/or biodiversity damage** (79%, or 11 out of 14, and 81%, or 17 out of 21, respectively), **an insufficient access for interested persons to request action/submit comments on an imminent threat of environmental damage under the public participation mechanism of the ELD** (92%, or 11 out of 12, and 90%, or 18 out of 20, respectively), **lack of awareness of the ELD** (77%, or 10 out of 13, and 88%, or 21 out of 24, respectively), **insufficient reporting and lack of publicly accessible records of ELD occurrences and cases** (79%, or 11 out of 14, and 91%, or 21 out of 23, respectively), and **absence of EU legislation on environmental inspections to detect a company misconduct** (93%, or 14 out of 15, and 74% or 17 out of 23, respectively).

Concerning other **factors that decreased the effectiveness of the ELD** most PC respondents from *public authorities* (over 70%) agreed or strongly agreed that the following factors had a negative impact on the effectiveness of the ELD: **impossibility to identify liable operators in some cases** (86%, or 12 out of 14) and **insolvency of liable operators in some cases** (92%, or 12 out of 13).

The group of PC respondents from *operators* and *re/insurance industry stakeholders* shared similar views and for almost all factors, they more disagreed, strongly disagreed or stayed neutral, which, in most cases, were opposite from the views of NGOs/academia and citizens. *The operators* and *re/insurance industry* PC respondents mostly disagreed or strongly disagreed that **the 'permit defence'** (63%, or 20 out of 32, and 80%, or 4 out of 5, respectively) and **the 'state-of-the-art defence'** (63%, or 20 out of 32, and 80%, or 4 out of 5, respectively) decreased the effectiveness of the ELD.

PC participants had an option to name factors that, in their opinion, **prevented the ELD from meeting its objectives**. The views were very diverse amongst all respondents as well as amongst respondents from different stakeholder groups. The commonly shared factor amongst all stakeholder groups was the **lack of enforcement and enforcement capacity, lack of awareness about the ELD, scope of the ELD being too narrow**, and **restrictive definition of 'environmental damage'**. **Inactivity and inability by competent authorities** was a commonly shared factor by *citizens* and *NGOs/academia*. Regarding the scope of the ELD, PC respondents thought that oil and gas companies should be covered more adequately, and agricultural activities as well as activities that take place outside the EU should be included in the ELD. Overall, *EU and non-EU citizens*, *NGOs/academia* and *representatives of the re/insurance industry* shared the highest number of factors that might have prevented the ELD from meeting its objectives. However, factors shared by *re/insurance industry respondents* were quite different from those shared by *citizens* and *NGOs/academia.*

Furthermore, PC respondents from *NGOs/academia* (92%, or 11 out of 12) and *public* *authorities* (90%, or 9 out of 10) as well as *citizens* (89%, or 16 out of 18) agreed that **the issues pointed out in the recent recommendations by the European Parliament and the European Court of Auditors** (such as considerable variability between Member States with regard to ELD enforcement, lack of a secondary civil liability regime including parent company and chain liability, corporate board liability, and a financial compensation scheme) have hindered the effectiveness of the ELD. Only one respondent from *re/insurance industry* (1 out of 6) and a third of *operators* (32%, or 7 out of 22) shared the same views.

The opinion by *NGOs* expressed in the position papers **was that the ELD has not yet achieved its intended effect** of preventing and remediating environmental damage by implementing 'polluter pays' principle and holding operators responsible. On the other hand, *re/insurance industry associations* in the position papers **stated that the ELD in its current form was effective**. However, consistent and uniform application of the ELD across all Member States was necessary and could be achieved by focusing on effective enforcement and promoting a common understanding of the ELD. For instance, the update of the guidelines with the objective of clarity and uniformity for the definition of a 'significant adverse effect'. The importance of defining 'significant adverse effect' was also shared by an *NGO* as well as the importance of the improvement of criteria for defining the 'environmental damage' to which the ELD should apply. On the other hand, one of the *trade associations* in the position paper claimed that the current definition of 'environmental damage' under the ELD appeared to be adequate and working effectively.

The *re/insurance industry* also stated in the position papers that to achieve an effective enforcement of compliance with existing environmental legislation, competent authorities need to be appropriately funded and supported.

The majority of respondents to the targeted stakeholder survey from *public authorities* agreed or strongly agreed that **the following issues hindered the effectiveness of the ELD**: lack of a secondary liability regime that would require a parent company to be liable for any damage to human health and the environment caused by companies in its supply chain (71%, or 12 out of 17), lack of a secondary liability regime that would require a parent company to be liable for any damage to human health and the environment caused by its EU and non-EU subsidiaries (71%, or 12 out of 17), lack of a requirement for an operator relying on the permit and/or state-of-the-art defences to prove that it could not have known about the danger of its activity (69%, or 11 out of 16), and the absence of a financial compensation scheme for victims of environmental damage at EU or national level (69%, or 11 out of 16). Just over half of TSS respondents from *public authorities* (54%, or 7 out of 13) agreed or strongly agreed that directors and officers of a company that caused environmental damage not being (or not being sufficiently) subject to liability for remediating the damage in their personal capacity hindered the effectiveness of the ELD. Finally, almost all respondents from *public authorities* (94%, or 16 out of 17) agreed or strongly agreed that the absence of criteria on assessing damage to land and water in the ELD in a similar manner to annex I of the ELD that sets out criteria on assessing biodiversity damage hindered the effectiveness of the ELD. There were no sufficient number of responses from other stakeholder groups to draw any conclusions on their views.

In addition, respondents to the targeted stakeholder survey from *public authorities* indicated that the lack of compulsory insurance for the activities in Annex III of the ELD and insufficient harmonisation of the ELD in Member States also hindered the effectiveness of the ELD. Few respondents from this stakeholder group suggested to take into account cases where a company entered for an insolvency.

Many respondents to the TSS from *public authorities* thought that **the criteria for identifying environmental damage should be further specified and the methodology for assessing/evaluating the damage and IT tools should be developed**. In addition, training on existing guidance was mentioned by few respondents from this stakeholder group. The TSS respondent from the *re/insurance industry* said that **the ELD needed to be applied uniformly and consistently across all Member States**, and any guidance on ELD terms and concepts as well as the provision of instruments to better apply the ELD would be welcomed. The *NGOs/academia* TSS respondent thought that there was no need for further guidance, but rather the political will was necessary.

Respondents to the TSS from *public authorities* indicated that the **training programmes for ELD liabilities should** mostly target authorities in charge of implementation of the ELD, operators, governmental environmental inspectors, judges and prosecutors in national courts and experts/practitioners on the national and European legislation interlinked with the ELD. *Re/insurance industry respondents* mostly thought that authorities, operators, and judges/prosecutors should be trained.

How has interaction of the ELD with national environmental legislation affected implementation of the ELD?

Most PC respondents from *NGOs* and *academia* (75%, or 6 out of 8) as well as *EU and non-EU citizens* (75%, or 12 out of 16) considered that **handling environmental damage occurrences under non-ELD legislation had provided a lower level of protection for the environment than if it was handled by the ELD**. *Public authorities* (73%, or 8 out of 11) and *operators* (83%, or 15 out of 18) mostly thought that the same or higher level of protection was achieved. Only one respondent from the *re/insurance industry* expressed an opinion indicating that the level of protection was higher when handling environmental damage occurrences under non-ELD legislation.

To what extent have stakeholders been engaged in the process of improving implementation of the ELD at national level?

The ELD establishes **public participation mechanisms** that allows interested persons to request competent authorities to act in case of an imminent threat of, or actual, environmental damage, and to provide comments and to have access to justice. Most PC respondents from *NGOs/academia* (89%, or 16 out of 18), *public authorities* (88%, or 14 out of 16), *re/insurance industry* (all 6 respondents) as well as *operators* (78%, or 31 out of 40) were aware of **this public participation mechanisms of the ELD**. However, only 39% (12 out of 31) of *citizens* were aware of such mechanisms. Most of PC respondents that were aware of these mechanisms have not used them, except for *NGOs and academia*, where a third of respondents (33%, or 6 out of 18) said they had used it. Of those that used public participation mechanisms, all respondents from *NGOs/academia* (6 respondents), *citizens* (1 respondent) and *operators* (1 respondent) had negative experiences, whereas the experience by both *public authorities* was positive (2 respondents).

The ELD established the reporting obligation for the EU Member States. These reports should outline the experience gained by applying the ELD and contain information about the environmental damage. In addition, the Commission has encouraged Member States to develop and publish national registers of ELD occurrences following the REFIT Evaluation. Over 80% of PC respondents from *NGOs and academia* (83%, or 15 out of 18), approximately two-thirds of respondents from *public authorities* (69%, or 11 out of

16), *re/insurance industry* (67%, or 4 out of 6), and *operators* (63%, or 25 out of 40) and around half of *citizens* (52%, or 16 out of 31) were aware of **the existence of information on the ELD and registers of ELD occurrences**. Such information was most accessed by *public authorities* (44%, or 7 out of 16). A third of respondents from *NGOs and academia* (33%, or 6 out of 18) as well as *re/insurance industry* (33%; 2 out of 6) indicated that they had experienced difficulties accessing such information.

3.3. Efficiency

To what extent have costs of the ELD been justified, overall and for different stakeholder groups, given benefits that the ELD has delivered?

When asked if **overall costs for operators and competent authorities** were justified, almost all (95-100%) PC respondents from all stakeholder groups thought that costs were fully or partially justified. PC participants were also asked about the costs for different stakeholder groups. Most PC respondents in all stakeholder groups (89-100%) agreed that **costs for liable operators for preventing and remediating environmental damage** and **costs of insurance for ELD liabilities** were fully or partially justified. The large proportion of PC respondents (88-100%) from all stakeholder groups, apart from citizens, thought that **costs for competent authorities to prevent and remediate environmental damage** as well as **administrative costs** were also fully or partially justified. Finally, all PC respondents from *public authorities* (8 out of 8) and *re/insurance industry* (3 out of 3) said that **costs for environmental NGOs and others for presenting comments, requesting for action or participating in court cases** were partially or fully justified. Around 70% of *citizens* (71%; 12 out of 15) and PC respondents from *NGOs/academia* (73%; 8 out of 11) and 80% of *operators* (12 out of 15) shared the same views. It needs to be noted that between 43% and 51% of PC participants did not know the answer or did not provide an opinion to questions on the costs.

Additional survey was launched for *operators* on **costs and benefits of the ELD and related issues.** However, only six companies responded to the survey. Three companies were global, covering both EU and non-EU countries, and three were covering a single EU Member State. Five out of these six companies were insured for environmental liabilities including ELD liabilities: three through an environmental extension to a general liability policy, one through an environmental insurance policy and the last one through another type of insurance. However, there is not enough data to present any statistics. Two companies considered that costs of implementing the ELD were not justified in view of ELD benefits, whereas another two thought the opposite. Two companies did not reply. One of the respondents said that the costs were necessary as their commitment to public service of general interest. **Additional survey on costs and benefits of the ELD and related** issues was also launched for *Member States competent authorities*. There were only five responses. And only one respondent agreed that the annual costs of implementing and enforcing the ELD are justified, as well as the costs for operators. Due to the low rate of responses no meaningful statistics could be drawn from this survey.

Are there significant differences between Member States in implementation of the ELD and its efficiency, and if so, what is causing them?

PC participants were asked to share their opinion on the measures that had helped to improve the efficiency of the ELD framework in Member States. Participants were able to select multiple measures. **Mandatory financial security** was most selected measure by *NGOs and academia* respondents and one of the most selected measures by *public authorities* and *citizens*, whereas it was one of the least selected measures by *operators* and not selected by *re/insurance industry respondents* at all (Figure 4). *Public authorities'* respondents also selected **national guidance on the ELD**, **a fund to provide money to remediate and prevent further environmental damage** when the liable operator has insufficient funds to do so, and **awareness-raising activities** as important factors. For *re/insurance industry* PC respondents and *operators*, awareness raising activities and the national guidance on the ELD were the most important measures. For citizens, raising awareness programmes about the ELD was the most selected measure.

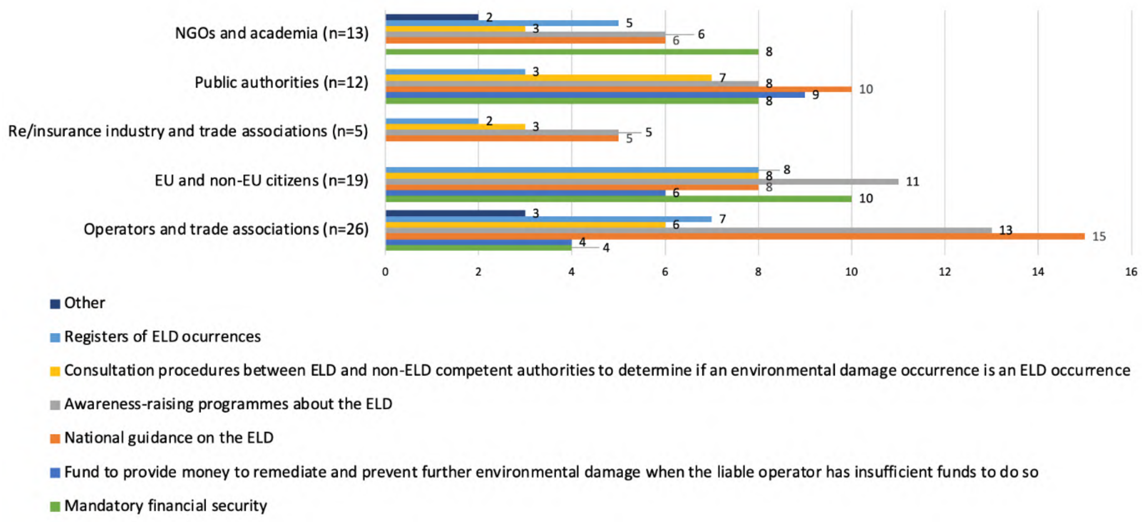

Figure 4: Chart reflecting ranking of some measures introduced by Member States (N=75)

Is the current approach in which financial security for ELD liabilities is not compulsory, appropriate?

Currently financial security for ELD liabilities is not compulsory. The operators in some EU Member States are voluntarily purchasing environmental insurance policies that provide cover for ELD liabilities. Most PC respondents from *public authorities* (83%, or 5 out of 6), *re/insurance industry* (80%, or 4 out of 5) and *operators* (89%, or 17 out of 19) thought that the ELD improved or at least partially improved **the availability of insurance for ELD liabilities** for large and/or multinational companies. Most PC respondents from *public authorities* (83%, or 5 out of 6) as well as *operators* (83%, or 10 out of 12) also agreed that the same was achieved for SMEs, whereas 75% respondents from *NGOs/academia* (6 out of 8) and 60% of *citizens* (9 out of 15) disagreed with this statement. It needs to be noted that less than 50% of all PC participants responded to these questions.

In addition, the *re/insurance industry* specified in the position papers that it was against **mandatory financial security guarantees** at the EU level. According to them, it is important to keep freedom of contract to adapt insurance cover to the diversity and needs of operators. The uncertainty created by the lack of data needed for the process of assessing the amount of risk (such as the lack of sufficient historical data on the frequency of claims and the costs associated with the repair of environmental damage), the lack of a competitive market, and the additional administrative costs for insurers could impose higher premiums. There is also a factor of heterogeneity of risks as environmental risks cannot be addressed in a homogeneous way. A similar view in the position papers was shared by *operator trade associations*. On the contrary, one of the *NGOs* in the position paper said the ELD should impose **mandatory financial guarantees** to reduce the vulnerability of an insolvency of operators and to prevent parent companies from escaping liability.

Furthermore, *re/insurance industry associations* in the position papers also claimed that **the introduction of EU-wide fund solutions** would be unnecessary and detrimental. According to them, the introduction of an EU-wide fund would disincentivise operators from buying adequate levels of insurance and thereby would create a 'moral hazard'. On the other hand, one of the *operator trade associations* shared the opposing views, strongly supporting the fund-based solution.

The TSS questions mainly focused gather information on available insurance and other financial security instruments. All TSS respondents from the *re/insurance industry* (100%, or 6 out of 6) and over 70% of respondents from *public authorities* (71%, or 10 out of 14) said that the insurance for ELD liabilities was available in their Member State for companies that carry out operations only in their country, and the majority of respondents from the *re/insurance industry* (67%, or 4 out of 6) and *public authorities* (78%, or 7 out of 9) said that there had been **no change in the availability of insurance policies for ELD liabilities** in their Member State since 2019. Regarding the demand, all TSS respondents from the *re/insurance industry* (100%, or 5 out of 5) and most respondents from *public authorities* (88%, or 7 out of 8) thought that there had been **no change in the demand for insurance policies for ELD liabilities** since 2019.

The majority of TSS respondents from the *re/insurance industry* (80%, or 4 out of 5) and *public authorities* (83%, or 5 out of 6) said that there had been **no change in the availability or demand of environmental endorsements to general liability policies** in their Member State in the last two years. However, half of TSS respondents from the *re/insurance industry* (50%, or 2 out of 4) and over 70% of respondents from *public authorities* (73%, or 8 out of 11) said that the environmental endorsements to general liability policies in their Member States did not provide cover for all liabilities under the ELD.

In addition, several TSS respondents from *public authorities* indicated that since 2019, there were **additional mandatory financial security requirements for environmental liabilities**, for example, financial guarantee for waste deposits, for restoring after natural resources exploitation, financial security instruments to respond to possible damage to the environment from waste operations and mining. Few respondents from *public authorities* said there were no additional requirements in their countries since 2019.

To what extent have actions undertaken by the Commission and Member States since 2016 (particularly in response to the REFIT Evaluation) made the ELD more efficient?

PC participants were asked to rate **the Commission's actions undertaken since 2016 to improve the efficiency of the ELD**. For almost all proposed actions, the biggest proportion of expressed opinions in all stakeholder groups, with some exceptions concerning re/insurance industry and operators, qualified the improvement as limited, as detailed below in Figures 5 to 8.

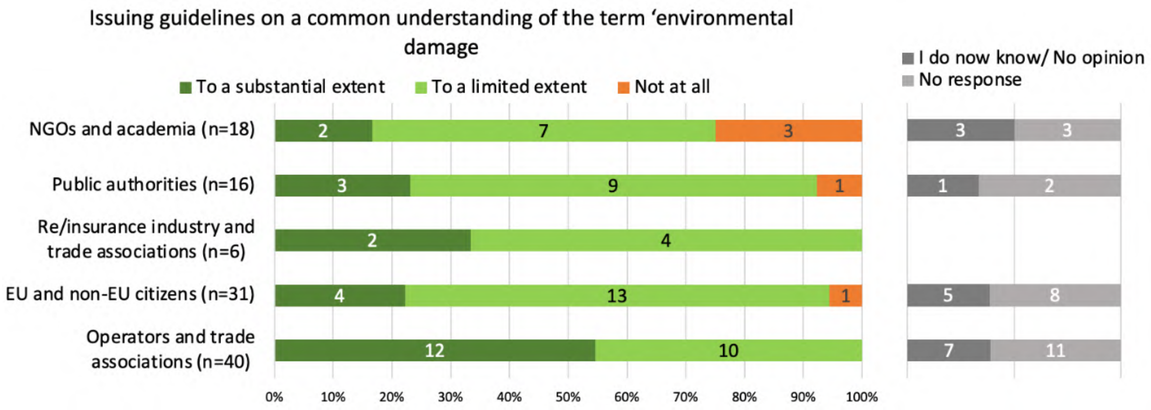

Figure 5: Chart reflecting PC respondents' opinions on improving the efficiency of the ELD by issuing Commission guidelines on a common understanding of the term 'environmental damage' (N=71)

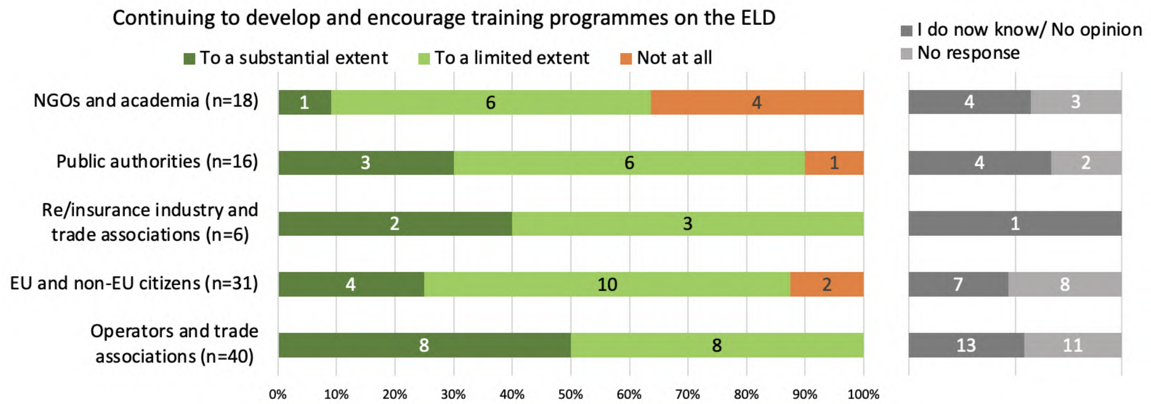

Figure 6: Chart reflecting PC respondents' opinions on improving the efficiency of the ELD by continuing to develop and encourage training programmes on ELD (N=58)

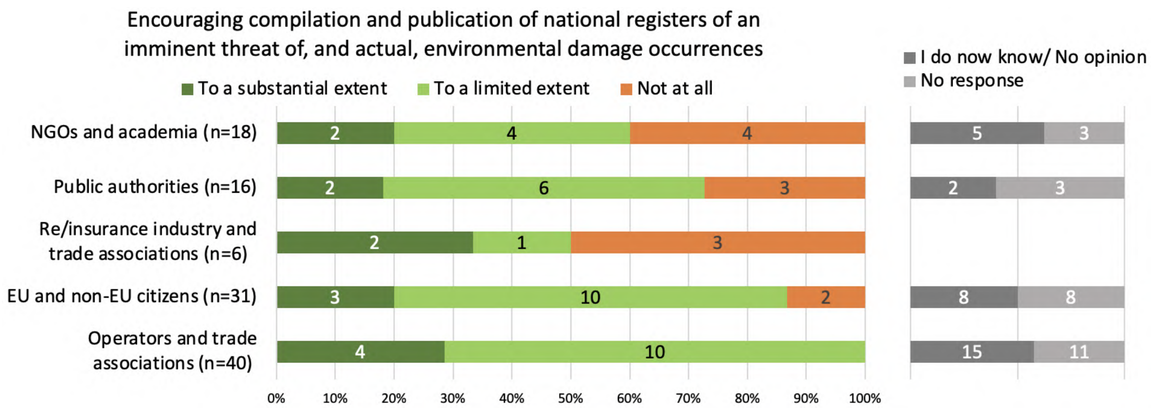

Figure 7: Chart reflecting PC respondents' opinions on improving the efficiency of the ELD by encouraging compilation and publication of national registers of an imminent threat of, and actual, environmental damage (N=56)

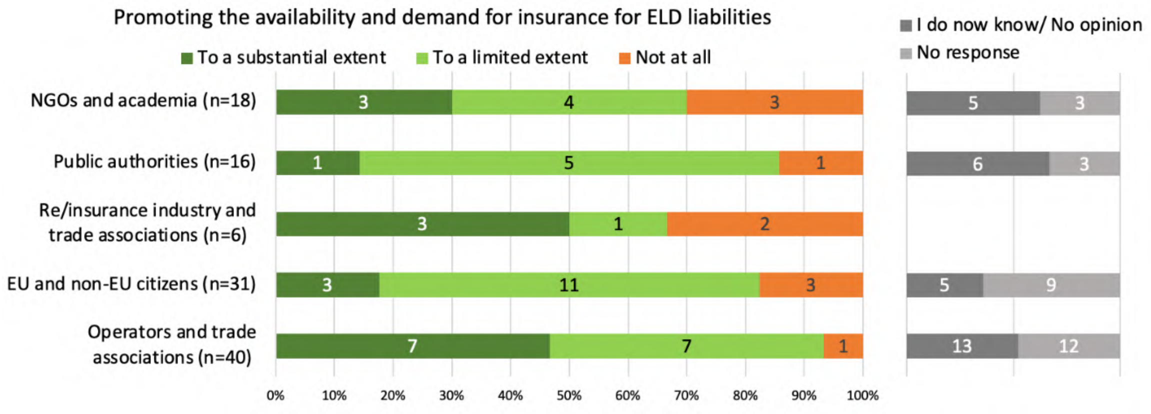

Figure 8: : Chart reflecting PC respondents' opinions on improving the efficiency of the ELD by promoting the availabiltiy and demand for insurance for ELD liabilities (N=55)

When asked if the Commission's **guidelines on a common understanding of the term 'environmental damage' provided sufficient clarity as regards the concept in the ELD**, the majority of *operators* (91%, or 22 out of 23) and PC respondents from *NGOs/academia* (83%, or 10 out of 12), *public authorities* (86%, or12 out of 14) and *re/insurance industry* (100%, or 6 out of 6) as well as two-thirds of *citizens* (63%, or 12 out of 19) partially or fully agreed with this statement.

To improve the ELD implementation following the REFIT evaluation finalised in 2016, the Commission decided to carry out a wide range of complementary measures, including the development of the **training materials on the ELD**. Additional survey for the EU Member States on the ELD training ran in May 2022 and received 19 responses.

When replying to this additional survey, one-third (6 out of 18) of this survey respondents said that such training was available in their countries, but was generally organised irregularly, once per year or upon request.

Two-thirds of survey respondents were aware of the existence of the Commission's training material and had mostly positive feedback, although none of the respondents have used it in their own training. Most of the countries agreed that there was a need for a specific training material on the guidelines on environmental damage. The respondents had also proposed other actions to improve the ELD training, such as webinars, fostering the possibility to exchange experiences with other MSs, and training days for competent authorities with interpreters.

Most survey respondents (14 out of 19) agreed that there was a need for further ELD training. Regarding the proposed options for training, out of 14 respondents, 13 supported training on criteria to determine whether an environmental damage occurrence was an ELD occurrence, and 11 respondents supported training on remediation plans and procedures, environmental damage risk assessments, and exercises on the assessment of practical example/case studies. Training on procedures to follow in case of an imminent threat of environmental damage, procedures to follow in case of environmental damage, and procedures to follow to determine whether an environmental damage occurrence was an ELD occurrence was supported by 10 respondents. Training on assessment of the baseline condition and valuation of (potential) environmental damage remediation was supported by 9 and training on Commission guidelines on environmental damage and financial provision estimation was supported by 8 respondents. Most respondents suggested that authorities (9 out of 11) and operators (8 out of 11) should be the main addressees of the training. The main suggested modality was e-learning followed by a combination of e-learning and in-person training via webinars, seminars and e-workshops.

Out of 14 survey respondents, 6 confirmed that they were using other methodologies and/or IT tools developed in Member States to facilitate implementation and enforcement of the ELD, whereas 7 respondents stated the opposite. Other capacity building actions for ELD stakeholders included mentoring, reference to the Commission's ELD website, working group discussions to identify applicable financial instruments, IT tools to inform the public about legislation, guides and news, annual working meetings of the competent authorities, the IMPEL webinar, guidance documents and protocols, and methodological guidance for the competent authorities.

Other actions proposed to the Commission to improve methodologies and/or IT tools to assist in the implementation and enforcement of the ELD included elaboration of a regulation to establish a common methodology for identification and application of financial instruments, organisation of online workshops and materials with relevant information, establishing a pan-European guarantee fund to deal with cases where a company and an individual have gone bankrupt, practical working groups, instructions on how to assess the monetary value of remedial action, training on different topics, such as risk assessment, criteria for ascertainment of environmental damage, study visits to countries with developed methodologies and experience in the ELD implementation, joint training between experienced inspectors and attorney officers, development of a risk assessment methodology for human health to support the identification of cases of damages/imminent threats of damages to soil, development of a methodology for calculating the amount of the financial guarantees, considering a simplified risk assessment for low-risk activities, promoting the exchange of experiences among Member States, exploring the need of these tools in other MSs, and, in case there is interest, look for ways (including funding) for making them available, guidance for remediation plans and procedures, valuation of (potential) environmental damage remediation.

On ELD capacity building, survey respondents proposed promoting actions for taking a preventative approach, expert missions to specific countries with most important topics for that country and online help for MSs with cases via email or zoom, etc.

3.4. Relevance

Does the ELD still correspond to the needs of the EU?

Regarding the relevance of the ELD, some of *re/insurance industry associations* as well as the *operator trade associations* shared their view in the position papers and indicated that **the ELD was fit for purpose and the current scope of liability was sufficient and appropriate**. According to them, the scope of the ELD should not be extended as any major changes to the scope of the ELD could have unintended adverse impacts on the further development of environmental liability insurance markets. In addition, it is important to keep exemptions. *NGOs*, on the other hand, wanted to see **the scope of the ELD widened** to include areas such as air pollution, consumer products, coal mining, fracking and oil pipes, agriculture, aquaculture, etc.

The majority of all TSS respondents (over 80%) agreed or strongly agreed that the **definition of damage to species and natural habitats** protected by the Birds and Habitats Directives in the ELD should be broadened to include species and natural habitats not protected by these Directives.

Is the scope of the ELD still appropriate?

PC participants were asked to express their opinion if **the scope (coverage) of the ELD is still appropriate**. The questions concerning annex III of the ELD referred to the list of the EU legislation pursuant to which operators carry out so-called ‘dangerous activities’. Operators that carry out annex III activities (annex III operators) are subject to strict liability if their activities cause damage to land, water and biodiversity. Operators that carry out non-annex III activities (non-annex III operators) are subject to fault-based liability if their activities cause damage to biodiversity.

On all aspects of this question, the response profile was very diverse for all stakeholder groups and there was no uniform agreement on any of the listed items of coverage. In general, however, majority of PC respondents from *citizens*, *NGOs/academia* and *public authorities* disagreed or strongly disagreed with the majority of these statements or stayed neutral. Whereas *operators* and the *re/insurance industry* were of the opposing views.

The *operators* and *re/insurance industry* stakeholders mostly agreed or strongly agreed (over 50% of the respondents) that the following scope was still appropriate: **no imposition of liability on non-annex III operators whose activities cause water damage** (61%, or 14 out of 23, and 60%, or 3 out of 5, respectively) and **land damage** (60%, or 12 out of 20, and 60%, or 3 out of 5, respectively), **imposition of fault-based rather than strict liability on non-annex III operators whose activities cause biodiversity damage** (70%, or 16 out of 23, and 60%, or 3 out of 5, respectively), **limiting strict liability to annex III operators** (75%, or 18 out of 24, and 67%, or 4 out of 6, respectively), including a **‘permit defence’** (79%, or 22 out of 28, and 80%, or 4 out of 5, respectively) and **‘state-of-the-art defence’** (75%, or 21 out of 28, and 80%, or 4 out of 5, respectively) in some Member States under the ELD, and **exempting liabilities subject to marine** (64%, or 14 out of 22, and 60%, or 3 out of 5, respectively) and **nuclear** (57%, or 12 out of 21, and 60%, or 3 out of 5, respectively) **conventions**. The majority of *citizens* and respondents from *NGOs/academia* and *public authorities* disagreed or strongly disagreed with the majority of these statements or stayed neutral, although in some instances, *public authority* respondents more agreed than disagreed with some of the aspects, such as imposition of fault-based rather than strict liability on non-annex III operators whose activities cause biodiversity damage (58%, or 7 out of 12) and exempting liabilities subject to marine (50%, or 5 out of 10) and nuclear (45%, or 5 out of 11) conventions.

Around 60% of *operators* (59%, or 13 out of 22) and *re/insurance industry* respondents (60%, or 3 out of 5) agreed or strongly agreed that **the scope of activities listed in annex III was adequate**, whereas only some of *NGOs/academia* (1 out of 14), *public authorities* (17%, or 2 out of 12%) and *citizens* (21%, or 4 out of 19) shared the same views.

In addition, *NGOs*, as elaborated in the position papers, also thought that the **‘permit defence’** and **‘state-of-the-art defence’** should be abolished. On the other hand, *operator trade associations* **shared the opposing view**, stating that these defences are necessary to keep the ELD reasonable, balanced, and predictable. In their opinion, the harmonisation of these defences throughout the EU by making them mandatory could prevent an unevenness of application. Overall, according to *operator trade associations*, it is important to properly implement the ELD at a Member State level instead of extending its scope.

Has the ELD been able to respond to new and/or emerging environmental issues?

PC participants also had an opportunity to provide further comments and observations regarding the scope of the ELD (a thematic map and more detailed analysis of the results to this open question is presented in the Annex E of the Support Study). The most frequently highlighted theme by *NGOs and academia* was **the scope of the ELD being too narrow**. In their opinion, areas such as climate change, air quality, pollution from livestock, diffuse pollution, invasive species and pollution caused by power stations should be covered under the Directive. On the contrary, *operators* suggested that the scope of the ELD was too wide, whereas respondents from the *re/insurance industry* thought that the scope was adequate and the ELD was fit for purpose.

3.5. Coherence

To what extent is the ELD internally consistent and coherent?

Only around 60% of participants expressed their opinion about **the internal consistency and coherence of the ELD** and **coherence with other EU legislation and policies as well as international conventions**. Approximately 60% to 70% of PC respondents from *public authorities* (58%, or 7 out of 12) as well as *operators* (69%, or 18 out of 26) thought that the ELD was internally consistent and coherent. All four PC respondents from *re/insurance industry* shared the same view.

However, most *citizens* (71%, or 12 out of 17) and PC respondents from *NGOs and academia* (62%, or 8 out of 13) thought that the ELD was not internally consistent and coherent at all or consistent and coherent only to a limited extent.

To what extent is the ELD coherent with other EU environmental legislation, EU environmental policies and wider EU policies?

The ELD interlinks with numerous EU legal instruments and policies, in particular: Industrial Emissions Directive, Birds Directive, Habitats Directive, Environmental Crimes Directive, Offshore Safety Directive, Seveso III Directive, Environment Impact Assessment Directive, Waste Framework Directive, Water Framework Directive, Marine Strategy Framework, Non-Financial Reporting, Sustainable Corporate Due Diligence Directive (proposal), Taxonomy Regulation, European Green Deal, Zero pollution action plan, EU Biodiversity Strategy for 2030, EU farm to fork strategy, EU soil strategy for 2030, etc.

Concerning **coherence with other EU legislation and policies as well as international conventions** most *operators* (71%, or 17 out of 24) and half of PC respondents from *public authorities* (50%, or 5 out of 10) thought that the ELD was fully or substantially coherent with other EU legislation and policies or relevant international conventions. All three *re/insurance industry respondents* shared the same views. On the other hand, almost 60% of *citizens* (58%; 11 out of 19) and respondents from *NGOs and academia* (58%; 7 out of 12) had the opposing views.

One of the *NGOs* stated in the position paper that a revision of the ELD should update and align the ELD with other pieces of EU legislation designed to protect the environment. This would provide legal certainty and ensure the convergence of policies and coherence with sectoral legislation. The opinion by one of the *operator trade associations* was that the ELD seemed coherent but complex.

3.6. EU added value

What is the EU added value of the ELD compared to what is likely to have been achieved by Member States in its absence?

The majority (75%-100%) of PC respondents from all stakeholder groups, who expressed the opinion on this question, agreed that following aspects of the ELD had a major or some added value when compared to what could have been achieved by Member States in the absence of the ELD: **creation of a level playing field for all Member States to prevent and remediate environmental damage** (72 out of 81), **introduction of a minimum standards for preventing and remediating environmental damage** (73 out of 79), **reinforcing the 'polluter pays' principle** (70 out of 81), and **introduction of complementary and compensatory remediation for water and biodiversity damage** (66 out of 78).

With regard to **allowing public participation for interested persons**, i.e., to request action in case of an imminent threat of, or actual, environmental damage, provide observations and have access to justice, the views of PC respondents, who expressed their opinion, were more diverse, from 58% of *operators* (14 out of 24) and 60% of respondents from *public authorities* (9 out of 15) to 75% of *EU and non-EU citizens* (17 out of 23), 85% of *NGOs and academia* (11 out of 13) and 100% of respondents from the *re/insurance industry* (3 out of 3) agreeing that it had a major or some added value.

More than two-thirds of all PC respondents, who expressed their opinion on this question, thought that **the growth of an environmental insurance market** had a major or some added value.

Environmental Liability Directive (ELD) liability mechanism

The ELD deals with 'pure ecological damage'. It does not address criminal liability or liability for traditional civil law damage (third-party damage caused to persons/ victims in consequence of environmental damage, including damage to property, health or economic loss). In contrast, the pure environmental or ecological damage, which is the focus of the ELD, refers to the environment directly, without a need for individuals, companies or public bodies to have suffered harm or loss as a result of such damage. Thus, it recognises the need to protect and restore the environmental resources as an autonomous interest.

The ELD mechanism is based on the powers and duties of administrative authorities. The 2016 ELD evaluation explains that as 'the environment' cannot raise claims, it needs a 'trustee' to act on its behalf[187]. The competent administrative authorities identify the liable operator, determine and assess the extent of environmental damage and determine or approve the preventive or remedial measures to be taken by the responsible operator. The competent authorities have not only a power but also a duty to require a person that caused environmental damage, or threat thereof, to remediate or prevent the damage[188].

At the same time the duty of an operator that has caused an imminent threat of, or actual, environmental damage to prevent or remediate the damage and to notify the relevant competent authority of the imminent threat or actual damage is construed as a self-executing provision.[189] The duty arises as soon as an imminent threat or actual environmental damage occurs without the need for any prior action by a competent authority.

Actors subject to liability

ELD only addresses liability of economic operators. This includes liability of operators of illegal activities such as poaching or illegal landfill operation, but it does not cover liability of individuals' for their non-economic activity causing economic damage, such as an individual's own activity undertaken for recreational purposes or limited to residential parcel of land.

The ELD envisages two standards of liability depending on the type of activity having caused the damage. Fourteen types of activities considered as particularly hazardous are listed in Annex III to the ELD, notably those requiring a permit under the Industrial Emissions Directive (IED)[190], discharges of pollutants into groundwater and surface water, abstractions and impoundments subject to prior authorisation under the Water Framework Directive, transport of dangerous goods and waste management activities. Annex III

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187 2016 ELD evaluation, p. 12

188 European Commission, Questions and Answers Environmental Liability Directive (MEMO/07/157, 27 April 2007), Section 2, page 3; https://ec.europa.eu/commission/presscorner/api/files/document/print/en/memo_07_157/MEMO_07_157_EN.pdf

189 ELD articles 5(1), 5(2), 6(1)

190 Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control [2010] OJ L334/17; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02010L0075-20110106

operators fall under strict liability (no need to prove fault). The liability of other operators is fault-based and limited to biodiversity damage only (does not cover water and land damage). A causal link between the activity and the damage is always required.

Protected environmental resources

The ELD addresses cases of environmental damage (and imminent threat thereof) to species and habits protected under the ELD (in this report referred to as biodiversity damage'), to water and to land. However, it needs to be kept in mind that as explained above, it is only for operators carrying out hazardous activities (Annex III operators), that all these environmental resources are being protected. For other operators' the ELD only covers liability for damage to biodiversity.

For the ELD to apply, the damage (with regard to all three types of environmental resources) needs to be significant. The significance criteria are based on a 'measurable adverse change'[191] from the baseline condition of the natural resource. The terms 'services' and 'natural resources services' are defined to mean 'the functions performed by a natural resource for the benefit of another natural resource or the public' [192].

Biodiversity damage under the ELD covers species and natural habitats protected under Birds and Habitats Directives. The significance criterion for biodiversity damage is 'any damage that has significant adverse effects on reaching or maintaining the favourable conservation status of [protected] habitats or species …'.[193] The significance of the effects is 'assessed with reference to the baseline condition, taking account of the criteria set out in Annex I'. The criteria in Annex I are the number, density and role of individuals in a species and the rarity of a species or habitats.

Water damage within the meaning of Art. 2(1)(b) of the ELD covers damage to waters protected under the Water Framework Directive (WFD), i.e., European inland surface waters, transitional waters, coastal waters and groundwater, and, under the Marine Strategy Framework Directive[194] (MSFD), European marine waters. The significance criterion for water damage is, for waters protected under the WFD, 'any damage that significantly adversely affects … the ecological, chemical and/or quantitative status and/or ecological potential, as defined in [the WFD] of the waters concerned, with the exception of adverse effects where Article 4(7) of [the WFD] applies'.[195] For marine waters protected under the MSFD, the significance criterion for water damage is any damage that significantly adversely affects their environmental status, as defined by the MSFD.[196]

The criterion for land damage is 'any land contamination that creates a significant risk of human health being adversely affected as a result of the direct or indirect introduction, in, on or under land, of substances, preparations, organisms or micro-organisms'[197]. Damage

[191] ELD article 2(2)
[192] Ibid article 2(13)
[193] Ibid article 2(1)(a)
[194] Marine Strategy Framework Directive, Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy, OJ L 164, 25.6.2008, p. 19, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02008L0056-20170607
[195] ELD article 2(1)(b)(i)
[196] Ibid article 2(1)(b)(ii)
[197] ELD article 2(1)(c)

to land is not defined with regard to the EU legislation, as there was no EU legislation on land/soil damage when the EU adopted the ELD[198].

Response to damage or imminent threat thereof

The ELD imposes the following obligations on operators responsible for the damage (or immediate threat thereof):

- prevention in case of an imminent threat of damage
- immediate limitation measures
- remediation measures, including primary, complementary and compensatory remediation.

Primary remediation refers to any remedial measure that takes place at the affected site and returns the damaged natural resources and/or impaired services to the original condition. If primary remediation does not fully return the damaged site to its original condition, complementary remediation measures should be taken at another site possibly geographically linked to the damaged one. If full remediation is delayed, compensatory remediation measures should be taken for the interim loss of natural resources and services. The complementary measures are defined based on the equivalency approach.

The thus defined spectrum of remedial and preventive measures applies in case of biodiversity and water damage. Liability for land damage is less stringent, only imposing instead the obligation to remove, control, contain or diminish relevant contaminants to remove the significant risk of an adverse effect on human health.

Temporary and territorial scope

The ELD does not establish retroactive liability. The Directive does not apply to damages caused by an emission, event or incident that took place before 30 April 2007, nor to an emission, event or incident subsequent to this date when they derive from an activity that took place and finished before 30 April 2007, nor to a damage caused by an emission, event or incident that took place more than 30 years ago.

The ELD applies to the geographical extent where Member States exercise jurisdiction (land territories, water damage not only in the coastal and territorial waters but also in the exclusive economic zone and the continental shelf where Member States apply jurisdiction). According to Article 52 TEU, EU law applies to the European territories of the Member States and to certain overseas territories and islands as specified in Article 355 TFEU.

Participatory mechanism

The ELD features an advanced mechanism granting participatory rights to environmental NGOs and other parties concerned, notably those affected (or likely to be affected) by environmental damage, those having interest in environmental decision-making relating to

198 Currently, a proposal for a Soil Monitoring Law that addresses the management of contaminated sites, https://environment.ec.europa.eu/publications/proposal-directive-soil-monitoring-and-resilience_en, is being discussed with the co-legislators. However the proposed Directive is not aimed at revising the concept of land damage under the ELD.

the damage and those alleging the impairment of a right (in Member States in which administrative procedural law requires doing so as a precondition).

Article 12 of the ELD entitles parties concerned to request a competent authority to take action concerning environmental damage and submit observations to a competent authority while Article 13 provides them with access to a court or other independent and impartial public body to review the procedural and substantive legality of the competent authority's decisions, acts or failure to act.

Exceptions and optional provisions:

The ELD contains a number of exceptions and defences limiting the scope of its application, as well as several optional provisions allowing Member States to strengthen the Directive regime.

The ELD sets out the following damage causes which exempt the resulting damage from liability:

- an act of armed conflict, hostilities, civil war or insurrection (including terrorism);
- a natural phenomenon of exceptional, inevitable and irresistible character;
- damage subject to liability under nuclear, marine oil and transportation of dangerous goods conventions as specified in Annexes IV and V;
- diffuse pollution;
- activities the main purpose of which is to serve national defence or international security; and
- activities the sole purpose of which is to protect from natural disasters.[199]

The ELD sets out two mandatory and two optional defences, releasing the operator from the obligation to bear the cost of the remedial and preventive action (but not from taking the action):

- The mandatory defences apply if environmental damage was caused by a third party and occurred despite appropriate safety measures being in place or resulted from compliance with a compulsory order or instruction emanating from a public authority other than an order or instruction consequent upon an emission or incident caused by the operator's own activities.[200]
- The optional defences, which a Member State may choose to adopt, are the permit and state-of-the-art defences. The permit defence applies if the emission or event that caused environmental damage is expressly covered by a specified permit[201.] The state-of-the-art defence applies if an emission or activity which caused the damage was not considered hazardous according to the state of scientific and technical knowledge[202]. The optional defences apply only if the operator is not negligent nor at fault. They may apply to remedial measures but not to preventive ones[203].

The ELD sets out further optional provisions allowing Member States to choose to:

- Impose joint and several or proportionate liability in cases of multiple party

[199] Ibid article 4
[200] Ibid article 8(3)
[201] Ibid article 8(4)(a)
[202] ELD article 8(4)(b)
[203] Ibid article 8(4)

causation.[204]

- Exempt the activity of sewage sludge spreading for agricultural purposes from article III activities.[205]
- Extend participatory rights defined in Articles 12 and 13 to apply not only to the occurrences of environmental damage but also to cases of an imminent threat thereof.
- Extend liability for biodiversity damage to species and natural habitats protected under national nature conservation legislation.
- While Article 193 of the TFEU authorises Member States to adopt more stringent provisions provided the provisions are compatible with the Treaties, Article 16(1) of the ELD explicitly states that Member States may impose more stringent provisions than those in the ELD. Such provisions may be included both in the national legislation transposing the ELD (national ELD legislation) and in the other legal acts (national non-ELD legislation).

The ELD addresses the problem of financial capacity of the operators to cover their responsibilities under the Directive and avoid insolvency through a very soft measure only, namely by imposing on Member States an obligation to encourage the development of financial security instruments and markets. In practice, this provision is applied as if setting up of the mandatory financial security schemes was optional under the ELD.

[204] Ibid article 9
[205] Ibid annex III, item 2

Annex VII. Main Developments During the Evaluation Period

This Annex describes current state of play and developments since the last ELD evaluation in 2016. For earlier developments the references are provided to the 2016 ELD evaluation. Please see Section 4.1.8. of the main evaluation report as regards the effects of the undertaken actions on the ELD efficiency.

1 Legal developments

1.1 Amendments to the ELD

The ELD has undergone only limited changes since its adoption in 2004 and most of them before the 2016 ELD evaluation, notably the extension of the scope of the water damage concerned to cover marine waters[206] and extension of the list of hazardous activities in Annex III[207].

Since 2016 the only changes have been brought by Regulation (EU) 2019/1010[208] updating provisions relating to reporting and evaluation of the Directive, cleaning up provisions of a temporary character and directing the Commission to develop guidelines to provide a common understanding of the term 'environmental damage'[209]. Based on the amended Article 18(1) of the ELD the reporting and evaluation exercises have become cyclical (to be performed every five years) while the scope of the Member States reporting has been substantially limited.

Among the indirect changes (changes in the scope of Annex III) brought through revisions of the legal acts referred therein it is important to mention the 2023 CLP Regulation revision[210] and the 2024 IED revision[211].

1.2 EU level caselaw

Both preliminary rulings and infringement cases referring to the ELD have been tried by the EU courts.

The European Court of Justice rendered overall six preliminary rulings[212] under the ELD. The four rulings rendered since the 2016 ELD evaluation, provided the following clarification as to the ELD provisions:

- In Case C-129/16[213] the Court stated that the ELD did not preclude national legislation from establishing joint liability between the owner of the land on which the pollution occurred and the

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206 Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations and amending Directive 2004/35/EC, *OJ L 178, 28.6.2013, p. 66–106* EUR-Lex - 02013L0030-20210101 - EN - EUR-Lex (europa.eu);

207 Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide, *OJ L 140, 5.6.2009, p. 114* ; Directive - 2009/31 - EN - EUR-Lex (europa.eu)

208 Regulation (EU) 2019/1010 on the alignment of reporting obligations in the field of legislation related to the environment [2020] OJ L170/115, article 3; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019R1010

209 Commission adopted the guidelines in March 2021 (see Section 3.1.3 below).

210 Commission Delegated Regulation (EU) No 2023/707 amending Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.

211 See Section 3.3.2 below;

212 The detailed summaries of all cases concerned are provided in Annex K of the Support Study;

213 Case C-129/16 Túrkevei Tejtermelő Kft. v Országos Környezetvédelmi és Természetvédelmi Főfelügyelőség, CURIA - Case information (europa.eu), https://curia.europa.eu/juris/document/document.jsf?text=&docid=228377&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=1608132

polluter using the land, provided that such legislation complied with the general principles of EU law and the EU Treaties.

- In Case C-529/15[214] the Court stated that the operator could be liable under the ELD for damage which arose after 30 April 2007 but which was caused by the operation of a facility that was authorised and brought into operation before that date; that the ELD precluded national rules which automatically exclude from its scope cases of environmental damage resulting from activity covered by the national law authorisation; and also precluded national provisions depriving persons holding fishing rights from using participatory rights established in Articles 12 and 13 of the Directive.
- In Case C-683/16[215] the Court stated that Regulation No 1380/2013 on the Common Fisheries Policy[216] precludes the adoption, by a Member State, of conservation measures, with respect to the waters under its sovereignty or its jurisdiction not accounted for under the Regulation, even though they would be necessary to meet preventive and remedial obligations deriving from the ELD.
- In Case C-297/19[217] the Court stated that legal persons governed by public law may be liable for environmental damage caused by activities carried out in the context of their statutory tasks, such as the operation of a pumping station for the purpose of draining agricultural land. It also analysed the concept of 'normal management of a site' in the ELD clarifying that with regard to sites protected under the Habitats and the Birds Directives, the management of the site can be regarded as 'normal' only if it complies with those directives. Still further it provided clarifications on the significance criteria for biodiversity damage.

The second of the above-described judgements, case C-529/15[218], led to a large screening operation to check whether all Member States laws clearly empowered to act all categories of natural and legal persons listed in the first sub-paragraph of Article 12 of the ELD (i.e. independently of each other: persons likely to be affected, those with a sufficient interest and those whose rights are impaired). Such persons should be given the right to present complaints and observations under the ELD and to challenge competent ELD authorities' decisions or failures to act (Articles 12 and 13). Following these checks, in July 2020 the Commission opened 16 infringement proceedings by sending letters of formal notice to Austria, Belgium, Cyprus, Czechia, Denmark, France, Germany, Greece, Ireland, Italy, Malta, the Netherlands, Spain, Slovakia, Slovenia and Sweden. By the time of completing this evaluation 14 proceedings have been successfully closed while two remain still open at either formal notice or reasoned opinion stages.

1.3 Guidelines on environmental damage

In March 2021, following consultation with Member States and ELD stakeholders, the Commission adopted guidelines to provide a common understanding of the term 'environmental damage' as per

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[214] Case C-529/15 *Folk v Unabhängiger Verwaltungssenat für die Steiermark* [2017] ECLI:EU:C:2017:419,; https://curia.europa.eu/juris/liste.jsf?num=C-529/15

[215] Case C-683/16 *Deutscher Naturschutzring, Dachverband der deutschen Natur- und Umweltschutzverbände e.V.* v Bundesrepublik Deutschland ECLI:EU:C:2018:433; https://curia.europa.eu/juris/liste.jsf?num=C-683/16

[216] Regulation (EU) No 1380/2013 on the Common Fisheries Policy [2013] OJ L354/22; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1380

[217] Case C-297/19 *Naturschutzbund Deutschland — Landesverband Schleswig-Holstein eV v Kreis Nordfriesland* ECLI:EU:C:2020:533 , judgement of 9 July 2020; https://curia.europa.eu/juris/documents.jsf?num=C-297/19

[218] Case C-529/15 *Folk v Unabhängiger Verwaltungssenat für die Steiermark* [2017] ECLI:EU:C:2017:419, paragraphs 48-50; https://curia.europa.eu/juris/liste.jsf?num=C-529/15

article 2 of the ELD[219]. The guidelines have been prepared in accordance with the relevant obligation instituted in Article 18(3) of the ELD by the last ELD amendment[220].

The guidelines examine in detail the nature and scope of land damage, water damage, and biodiversity damage in the legal and regulatory context with references to relevant CJEU cases and other sources.

2 Measures carried out by the Commission

As follow-up to the 2016 ELD evaluation, a joint work programme was established with the Member States to address the identified shortcomings in the ELD legislation through non-legislative measures. The three work areas of the ELD Multi-Annual Work Programme 2017 – 2020[221] (MAWP) and of the subsequent Multi-Annual Rolling Work Programme 2021 – 2024[222] MARWP focused on:

- improving the implementation of the ELD across Member States through administrative support measures (capacity building, training, guidance, tools etc.),
- increasing the availability and demand for financial security of operators to cover their environmental liabilities, and
- improving the evidence base (better quantitative and qualitative information relating to the application of the Directive).

The first project followed the Commission's recognition that it is entirely reliant on Member States' determining whether an imminent threat of, or actual, environmental damage is an ELD occurrence and the number of such occurrences. The project thus included the preparation of country fiches[223] that set out information on ELD and non-ELD environmental damage occurrences in each Member State, with the caveat that such information was not always available, together with limited information on the enforcement of national ELD legislation and national non-ELD civil, criminal and administrative liability/responsibility legislation.

The project also included a study that evaluated existing EU training material and suggested future training and capacity building concepts.[224]The study also included a Common Understanding Document that set out key terms and concepts of the ELD including the scope/significance of land, water, and biodiversity damage, the scope of primary remediation, defences to costs versus defences to liability, and powers and duties of competent authorities.[225]

A further study contracted by the Commission examined institutional conditions of implementing the ELD. In addition to the main report, country reports assessed implementation of the ELD in the 27 Member States. In-depth country reports for 12 Member States (Austria, Czechia, Denmark, Germany, Greece, Hungary, Italy, Latvia, Poland, Portugal, Slovakia, Sweden) examined practical

[219] Commission Notice, Guidelines providing a common understanding of the term 'environmental damage' as defined in Article 2 of Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage 201/C 118/01 [2021] OJ C118/1; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC0407(01)&from=EN

[220] Regulation (EU) 2019/1010

[221] https://ec.europa.eu/environment/legal/liability/pdf/MAWP_2017_2020.pdf

[222] Multi-Annual ELD Rolling Work Programme (MARWP) for the period 2021-2024, 'Making the Environmental Liability Directive More Fit for Purpose' (18 November 2020); https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/45a92e9d-cdf3-45c7-8417-3b7e002d4cf0/details

[223] The country fiches were prepared by Milieu Consulting, Deloitte and Bilbomática. This study refers to each country fiche as 'Country fiche for [name of Member State]'. The link for the country fiches for all Member States is at: envgov - Library (europa.eu)

[224] Milieu Consulting, Deloitte and Bilbomática, Support for the REFIT actions for the ELD – phase 1 (December 2017); link at https://circabc.europa.eu/ui/group/cafdbfbb-a3b9-42d8-b3c9-05e8f2c6a6fe/library/a7d214a1-9193-4e41-8d2d-8352089aaf14?p=1&n=10&sort=modified_DESC

[225] Ibid

issues such as the potential for increased resources to competent authorities, legislative issues, and implementation of parallel liability systems.[226]

The Commission contracted a further study to encourage the availability of financial security for ELD liabilities. The study[227] included a main report, 27 Member State reports, summaries of the Member State report, and details of the availability and demand for environmental insurance in each Member State. The report revealed that environmental insurance is not available in many Member States and that there is a lack of demand for it in many, if not most, Member States, especially by SMEs and other businesses with sites and/or operations in a single Member State.

In 2021, the Commission commissioned a follow-up study[228] that examined and compared national ELD legislation and national non-ELD legislation that imposed liability for preventing and remediating land, water, and biodiversity damage. The study included a main report and 27 Member State reports. While the MAWRP actions slowed down as of 2022 due to the ongoing ELD evaluation, the new ELD training action was launched as of the beginning of 2024. The aim of the 15 month contract is to revise and update the traditional ELD training materials, develop new e-learning tools and carry out three pilot workshops tailor made for specific Member States.

To complement these efforts, the MAWP and MAWRP recommend that all Member States undertake to:

- support their implementation efforts with proactive initiatives (such as guidance documents, training, electronic tools for risk analysis, baseline setting, financial security models etc.) as some Member States have done already;
- exchange administrative experiences and best practices and support each other in capacity-building efforts;
- review their interpretation of key provisions of the Directive, in particular in relation to ‘significance’;
- record data on ELD incidents and publish ELD registers if they have not done so already;
- systematically gather the necessary data that can document that the application of the Directive in their country is effective, efficient and in line with the overall situation in the EU.

Section 4.1.8. of the main evaluation report analyses to which extent have actions undertaken by the Commission and Member States improved the ELD efficiency.

In parallel with the ELD-specific actions, the Commission included some ELD aspects in its Environmental Implementation Review (EIR)[229]. As the key stocktaking exercise for EU environment policy the EIR is a tool to raise awareness of Member States' authorities and the public at large about the most fundamental implementation and investment gaps in EU environmental policy and law, across all major fields. The EIR allows the Commission to obtain regular updates on three priority aspects of ELD implementation (i) ELD national guidance, (ii) publication of information on environmental incidents or ELD occurrences (including online registers and central databases) and

[226] COWI, Prospect, Justice and Environment, ‘Improving implementation and the evidence base for the ELD’ (March 2021); main report country reports and in-depth country report available at https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/ec101025-1121-4809-a1ac-e72a146fd20d/details?download=true

[227] Valerie Fogleman, ‘Improving financial security on the context of the Environmental Liability Directive’ (May 2020); main report; https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/01708073-da51-4db7-8049-6e7141c901f4/details; annexes; https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/05f3fa17-af2a-4ad1-8253-e96788a9b834/details

[228] Valerie Fogleman, ‘Facilitating enforcement of the ELD by competent authorities’ (31 December 2021); main report: https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/9b423999-cc41-41ea-9629-5682e3bb6b2b/details?download=true; Member State reports: https://circabc.europa.eu/ui/group/3b48eff1-b955-423f-9086-0d85ad1c5879/library/4583a0be-3e7a-49a0-9a87-59e59dabe38d/details?download=true

[229] Environmental Implementation Review - European Commission (europa.eu)

(iii) developments regarding financial security instruments. The EIRs were adopted 2017, 2019 and in 2022. The EIR outcome consists of a series of country reports and an overall communication underlining cross-cutting policy messages.

The 2022 country specific reports notice overall limited progress from Member States. For 17 Member States no progress was noted, for 6 Member States limited progress was noted (Bulgaria, Denmark, Finland, Germany, Lithuania, the Netherlands,) and only for 4 Member States the progress was considered substantial (Greece, Portugal, Slovakia and Spain). Notably the yearly publication of ELD reports by Portugal was qualified as best practice and Spain developed a new online application assisting the operators to carry out the risk assessments (ARM).

3 Implementation by Member States

3.1 Transposition

While the ELD transposition was finalised by the time of the 2016 ELD evaluation, some basic facts regarding the transposition are worth recalling[230].

Member States transposed the ELD in various ways, ranging from a single piece of legislation in some Member States to amendments to numerous pieces of legislation in others. They also included provisions in their national ELD legislation to address issues not covered by the ELD. These included the number of competent authorities (varying from one in some Member States to several hundred in others), sanctions on operators for breaches of obligations in the ELD (varying from purely administrative in some Member States to purely criminal in others, to both in others).

Other differences included the imposition of mandatory financial security for ELD liabilities, the introduction of registers and/or databases of ELD occurrences, and provisions prioritising claims for remediating environmental damage by creditors in insolvency proceedings.

Regarding the main optional ELD provisions:

- 10 Member States (Austria, Belgium (Flemish Region and Walloon Region), Bulgaria, Croatia, Cyprus, Finland, Germany, Malta, Slovakia, Slovenia) did not provide the right to NGOs and other qualified persons to request competent authorities to take action in respect of an imminent threat of environmental damage.
- 16 Member States adopted the permit defence (Belgium (regional level), Croatia, Cyprus, Czechia, Denmark, Estonia (except GMOs), Finland (limited), Greece, Italy, Latvia (except GMOs), Lithuania, Malta, the Netherlands (limited), Portugal, Slovakia, Spain).
- 14 Member States adopted the state-of-art defence (Belgium (regional level), Croatia, Cyprus, Czechia, Estonia (except GMOs), France, Greece, Italy, Latvia (except GMOs), Malta, the Netherlands (limited), Portugal, Slovakia, Spain).
- Mandatory financial security schemes have been established, as a measure to support ELD implementation for some specific types or sectors of activity in many Member States while other Member States rely on voluntary instruments and market developments in this domain (See Section 4.1.7. of the main evaluation report for details).

3.2 Measures supporting the ELD implementation

Two Member States (Slovenia, Greece) have carried out projects funded by the EU's LIFE programme on implementation of the ELD.

[230] A full picture regarding the transposition can be fund in the Study 'Facilitating enforcement of the ELD by competent authorities', mentioned above

A programme entitled 'Raising awareness of the Environmental Liability Directive', enabled by a financial contribution from the LIFE programme of the EU, was carried out by EcoLex Life in Slovenia from 15 July 2017 to 31 December 2019.[231] The programme raised awareness of the ELD including information on financial security for ELD liabilities, especially for SMEs (see Support Study, Annex J, Section 25; and Annex N, Section 17). The programme included 24 workshops, 31 webinars, and a three-day training workshop.[232]

A programme under LIFE + Regulation, entitled 'Promote financial instruments for liability on the environment', is being carried out under the leadership of the Coordination Office for Environmental Liability (the ELD competent authority) of Greece from 18 December 2020 to 17 December 2023. The programme is enabled by funding from the LIFE programme and the Greek Green Fund.[233] The programme includes awareness raising, training, development of an IT tool for environmental risk assessment, an economic evaluation of potential environmental damage, and an estimation of necessary financial security for liabilities under the ELD (see Support Study, Annex J, Section 12; and Annex N, Section 14).

6 out of 18 Member States which provided relevant data held training sessions on the ELD for competent authorities, operators and other ELD stakeholders, although there is a substantial variance in the sessions, including their content, length, number of delegates, format, and timing (see Support Study Annex G, Section 3).

Some Member States have introduced mandatory financial security for ELD liabilities. In addition, some Member States have developed methodologies and IT tools for risk assessment and related measures, especially Member States (Czechia, Ireland (hybrid), Portugal, Slovakia, Spain) that introduced mandatory financial security systems for ELD liabilities. See Sections 4.1.1., 4.1.6. and 4.1.7. of the main evaluation report for further details.

3.3 2022 reporting exercise

In accordance with the obligation set out in Article 18(1) of the ELD, Member States were required to provide the Commission with reports on implementation of the ELD by 30 April 2022. Table 2 (see Section 4.1.1. of the main evaluation report) summarises the number of reported ELD occurrences, comparing them with the first reporting period. Some of the reports have been delayed (in four cases the delay exceeded one year). Following the 2019 reform, the scope of information required through the reports has been reduced in comparison with the reports provided in 2013. The reports are one of the main sources of evidence in the ELD evaluation. The information provided therein is further discussed in Section 4.1.1. and 4.1.2. of the main evaluation report.

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231 See EcoLex, 'About the project; The reasons for the project EcoLex LIFE'; https://ecolexlife.si/about-the-project/ The formal end date was 30 June 2020. European Commission, LIFE Public Database, Raising awareness on Environmental Liability in Slovenia; https://webgate.ec.europa.eu/life/publicWebsite/index.cfm?fuseaction=search.dspPage&n_proj_id=6218

232 European Commission, LIFE Public Database, Raising awareness on Environmental Liability in Slovenia; https://webgate.ec.europa.eu/life/publicWebsite/project/details/4658

233 European Commission, LIFE Public Database; Promote financial instruments for liability on environment (LIFE PROFILE (LIFE19 GIE/GR/001127) (Theme: Environmental Governance and Information); https://webgate.ec.europa.eu/life/publicWebsite/project/details/5371

4 Positions expressed by the EU institutions

4.1 European Parliament resolutions

Since the 2016 ELD evaluation, the European Parliament (EP) assessed the ELD regime in two different resolutions[234] providing recommendations in view of its strengthening.

The second resolution, 'on the liability of companies for environmental damage' ('2021 EP ELD Resolution')[235], adopted on 20 May 2021, analysed the Environmental Liability Directive, in a large context of administrative, civil and criminal law which all contribute to holding companies accountable for environmental damage. It followed a dedicated study commissioned by the EP[236]. A detailed summary of the recommendations concerning the ELD is set out in Annex L of the Support Study.

In terms of possible non-legislative measures related to the ELD, the Resolution stressed the importance of soft-law instruments, calling for the creation of an EU ELD expert task force, improved ELD data collection and a comprehensive monitoring system. It further called for protection and support schemes for victims of environmental damage and on the Commission to assess the efficiency of rapid claim mechanisms with a view to ensuring swift compensation for victims in insolvency cases. Furthermore, it proposed a study on how diffuse pollution is addressed in the different ELD liability regimes and for clarification and guidance on the term of 'significant damage' (this last action has since been implemented).

The Resolution also called for the ELD to be revised, recommending transforming the ELD into a fully harmonised regulation in order to achieve a level playing field for EU industry, extending the ELD definitions, notably for terms such as 'environmental damage' and 'operator', re-evaluating the scope of coverage of occupational activities listed in Annex III of the ELD and introducing restrictions on the permit and state-of-the-art defences. It further recommended aligning the ELD with the Paris Agreement, evaluating the possible alignment of the ELD with the civil liability legislation and assessing the introduction of a secondary liability regime (for chain and parental liability), of a mandatory financial security system and of a financial compensation scheme at EU or national level.

While the Resolution came at a timely moment in terms of the ELD evaluation process, thus allowing to consider the concerns and shortcomings underlined by the EP, the purpose of the evaluation exercise, namely, to assess the fitness for purpose of the ELD in its current form, does not allow to fully address all of the recommendations.

The current evaluation analyses the possible limitations of the current scope of the ELD and possible inadequacies of its provisions, in order to provide better understanding regarding the types of action which could allow the ELD to better respond to EU need. However, it is important to stress that it cannot presume on any future Commission decisions regarding the opportunity of undertaking legislative action nor analyse or recommend any specific legislative changes. This type of

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[234] 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)); Texts adopted - Thursday, 26 October 2017 (europa.eu) ; and European Parliament Resolution on the liability of companies for environmental damage (2020/2027(INI)) Texts adopted - Liability of companies for environmental damage - Thursday, 20 May 2021 (europa.eu)

[235] European Parliament Resolution on the liability of companies for environmental damage (2020/2027(INI)); Texts adopted - Liability of companies for environmental damage - Thursday, 20 May 2021 (europa.eu)

[236] Environmental liability of companies (europa.eu)

recommendations could be only analysed in an impact assessment following the Commission decision to revise the Directive.

The scope of the present evaluation exercise also excludes analysis of the recommendations concerning other related topics and other existing or possible legal acts relevant with regard to the liability of companies as addressed or mentioned in the Resolution, such as the Environmental Crime Directive, the mandate of the European Public Prosecutor's Office, environmental inspections, the Non-financial Reporting Directive; due diligence; procurement contracts, etc.

The specific EP findings and recommendations are discussed as part of the evaluation analysis, to the extent of their relevance with regard to the scope of the present evaluation exercise as defined above.

4.2 2021 ECA Special Report

On 5 July 2021, the European Court of Auditors published a Special Report 12/2021: The Polluter Pays Principle: Inconsistent application across EU environmental policies and actions ('2021 ECA Special Report')[237]. The report recommended considering reinforcing the application of the ELD and notably (i) examining the scope to improve criteria for defining the environmental damage to which the Directive should apply and (ii) making more use of instruments providing financial security with a view to strengthening the implementation of the polluter pays principle.

A summary of the recommendations concerning the ELD in the ECA 2021 special report is set out in Annex M of the Support Study.

In its response to the Report the Commission accepted in respect of (i) above, that there was indeed an absence in the ELD of express criteria for assessing damage to water and land of the kind that Annex I of the ELD provided for assessing damage to protected species and natural habitats. The Commission recognised that having legally binding criteria for water and land damage might be useful and declared that it would consider this in the context of the evaluation[238]. With regard to a key Commission action, namely the adoption of Guidelines on a common understanding of environmental damage, completed in March 2021, the Commission concluded that it was premature at the time of responding to the Special Report to conclude to what extent it was able to solve the Directive's weaknesses.

In respect of (ii) above, the Commission stated that it agreed with the Court of Auditors that the risk of an operator not having the resources to meet the costs of remediating environmental damage without accompanying financial security was a serious risk that increased when the costs of remediating the damage increased.[239] The Commission also agreed that mandatory financial security should reduce the risk of such costs being transferred to the public purse due to an operator's insolvency[240] and accepted to analyse these issues further as part of the present evaluation of the ELD[241].

The ECA findings and recommendations are thus discussed under the relevant parts of the evaluation analysis. However, as with the 2021 EP ELD Resolution described above, it is important to stress that the evaluation does not analyse or recommend any concrete possible legislative changes in the Directive.

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[237] European Court of Auditors, Special Report 12/2021: The Polluter Pays Principle: Inconsistent application across EU environmental policies and actions (5 July 2021) Recommendation 2, page 35; available at https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=58811

[238] Ibid, Replies of the European Commission to the European Court of Auditors Special Report: "The Polluter Pays Principle: Inconsistent Application Across EU Environmental Policies and Actions", 5, paragraph 73

[239] Ibid 4, paragraphs 56, 57

[240] Ibid, paragraph 60

[241] Ibid 5, paragraph 73

ANNEX VIII. ENVIRONMENTAL LIABILITY DIRECTIVE – STATISTICAL TABLES

1. Number of reported ELD occurrences

The numbers of the reported ELD occurrences are based on Article 18(1) reports, provided by Member States for both reporting periods.

Table 1. Numbers of reported ELD occurrences during both reporting periods, including cases of imminent threat and of the confirmed environmental damage[242]

Member State	First reporting period - cases up to 30/04/2013			Second reporting period - cases after 1/05/2013			Total confirmed cases
	Imminent threats	Env. damage	Total	Imminent threats	Env. damage	Total	
Austria	0	0	0	0	1	1	1
Belgium	0	1	1	0	3	3	4
Bulgaria	4	0	4	1	2	3	7
Croatia	N/A	N/A	N/A	0	0	0	0
Cyprus	0	1	1	1	0	1	2
Czechia	0	0	0	0	0	0	0
Denmark	0	0	0	0	1	1	1
Estonia	2	2	4	6	11	17	21
Finland	0	2	2	1	2	3	5
France	0	0	0	0	1	1	1
Germany[243]	0	60	60	0	12	12	72
Greece	11	40	51	0	165	165	216
Hungary	0	563	563	1	14	15	578
Ireland	0	0	0	0	0	0	0
Italy	(Up to 133)	17	(Up to 150)	0	7	7	(Up to 157)
Latvia	0	16	16	0	43	43	59
Lithuania	0	4	4	0	1	1	5
Luxembourg	0	0	0	0	2	2	2
Malta	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0
Poland	0	506	506	0	236	236	742
Portugal	6	2	8	23	2	25	33
Romania	1	3	4	0	1	1	5
Slovakia	0	0	0	4	2	6	6
Slovenia	0	0	0	1	4	5	5
Spain	0	12	12	28	21	49	61
Sweden	0	4	4	0	2	2	6
Total[244]	**(Up to 157)**	**1233**	**(Up to 1,390)**	**66**	**533**	**599**	**(Up to 1,989)**

[242] As regards the first reporting period, the information in this table is adapted from Table 1 of the 2016 ELD Evaluation. Information for the second reporting period is based on the cases reported by Member States under the current article 18(1). In both cases further adjustments in the numbers result from information obtained from Member States in the context of the ELD Evaluation Study. There is no entry for Croatia for the first reporting period because it joined the EU on 1 July 2013.

[243] Germany reported 147 ELD occurrences for the period from 26 June 2019 to 31 December 2021, of which 12 occurrences were handled under national ELD legislation. Germany had previously reported 60 ELD cases for the period up to 30 April 2013.

[244] Some Member States did not record imminent threats of environmental damage. A zero in the columns for imminent threats indicates either that no imminent threat cases were recorded or no imminent threat cases were reported.

2. Number of reported ELD occurrences by type of affected environmental resource

The Article 18(1) reports, combined with the evidence collected in the enhanced summaries thereof[245] allow comparison of the application of the ELD with regard biodiversity, water, and land damage occurrences for both reporting periods.

Table 2: Numbers of reported ELD occurrences during both reporting periods, by affected environmental resource[246]

Member State	First reporting period – cases up to 30 April 2013			Second reporting period - cases as of 1 May 2013		
	Biodiversity damage	Water Damage	Land damage	Biodiversity damage	Water damage	Land damage
Austria	0	0	0	1	0	0
Belgium	0	1	0	3	2	1
Bulgaria	0	0	0	1	3	1
Croatia	N/a	N/a	N/a	0	0	0
Cyprus	1	1	0	0	0	0
Czechia	0	0	0	0	0	0
Denmark	0	0	0	0	1	0
Estonia	1	0	1	11	5	2
Finland	1	1	0	1	2	1
France	0	0	0	0	1	0
Germany[247]	27	42	10	9	4	1
Greece	7	29	47	30	72	103
Hungary	124	244	243	1	9	9
Ireland	0	0	0	0	0	0
Italy	6	8	7	2	3	3
Latvia	7	4	5	7	4	32
Lithuania	0	1	4	0	1	0
Luxembourg[248]	0	0	0	0	2	0
Malta	2	0	0	0	0	0
Netherlands	0	0	0	0	0	0
Poland	92	49	392	63	39	163
Portugal	0	6	0	0	17	25
Romania	0	1	3	0	0	1
Slovakia	0	0	0	1	5	1
Slovenia	0	0	0	3	3	1
Spain	0	11	11	12	16	18
Sweden	2	5	1	0	3	2
Total[249]	**270**	**403**	**724**	**145**	**192**	**364**

245 Annex I to the Support Study

246 The difference in numbers between Tables 1 and 2 is due to Member States reporting occurrences that damaged more than one natural resource separately for each natural resource (see Table 2) versus the total number of confirmed cases which does not include multiple reporting (Table 1).

247 For the second reporting period, Germany reported 147 ELD occurrences, 135 of which were resolved under relevant sectoral legislation. Of these, 33 concerned biodiversity damage; 75 concerned water damage; and 48 concerned land damage). Of these, 12 occurrences were handled under national ELD legislation; the other occurrences were handled under national non-ELD legislation.

248 The figures for Luxembourg do not include the 2014 ELD occurrence in Belgium (Flemish Region) that also caused damage in Luxembourg (see Annex I to the Support Study, Section 4).

249 Table 1 differentiates (when data was available) between imminent threats of, and actual, environmental damage. Table 2 does not do so due to the absence of sufficient data.