

ANNEX 1: PROCEDURAL INFORMATION

1. Lead DG, Decide Planning

Lead DG: DG JUSTICE AND CONSUMERS (“DG JUST”)

Associated DG: DG ENVIRONMENT (“DG ENV”)

Decide Planning: PLAN/2020/8802

2. Organisation and timing

Procedural Steps:

- The Inception Impact Assessment was published on 1 December 2020.
- An upstream meeting with the Regulatory Scrutiny Board was held on 15 February 2021.
- A public consultation was launched on 8 February 2021 and concluded on 3 May 2021. Targeted Stakeholder Consultation were conducted from February 2021 to July 2021.

ISSG Meetings:

An Inter-Service Steering Group (ISSG) was set up to support this initiative. The ISSG was chaired by the Directorate-General Justice and Consumers (JUST). The following DGs and services participated in the Inter-Service Steering Group: Environment (ENV), Migration and Home Affairs (HOME), European anti-fraud office (OLAF), Mobility and Transport (MOVE), Maritime Affairs and Fisheries (MARE), Climate Action (CLIMA), Energy (ENER), Health and Food Safety (SANTE), Internal Market, Industry, Entrepreneurship and SMEs (GROW) International Cooperation and Development (DEVCO), the Legal Service (SJ) and the Secretariat-General (SG).

The ISSG met virtually three times in the period from December 2020 to July 2021, while further ISSG were held by written procedure, where the ISSG members were invited to submit their comments:

- 19 November 2020 (written procedure)
- 18 December 2020 (virtual meeting)
- 25 January 2021 (written procedure)
- 12 April 2021 (virtual meeting)
- 17 May 2021 (written procedure)
- 25 June (written procedure)
- 14 July 2021 (virtual meeting)

The last ISSG meeting before the submission of the Impact Assessment to the Regulatory Scrutiny Board on 1 September 2021 was held virtually on 14 July 2021, as indicated above with a possibility to submit further comments on the draft IA in writing by 26 July 2021.

3. Evidence, sources and quality

For the purposes of this impact assessment, the Commission collected data through various sources and consultation stands.

The impact assessment relies and builds on the Evaluation of the Directive, which took place in 2019/2020. To this end, the Commission published an Evaluation Staff Working Document ({SEC(2020) 373 final} - {SWD(2020) 259 final}), and an Executive Summary of the Evaluation in October 2020. The Evaluation of the Directive received a positive opinion from the RSB¹⁸⁴.

The Commission gathered also evidence following a consultation strategy, which included an open public consultation¹⁸⁵ and a stakeholder consultation¹⁸⁶.

More details can be found in annexes 2A and 2B on the methodology.

4. External Study

The Impact Assessment has been supported by a study commissioned under framework contract No JUST/2020/PR/03/0001-04 – Lot 1, which was conducted between April 2021 and October 2021. The study done by a consortium led by Milieu Consulting SRL aimed at assessing the impacts of different options, mainly with regard to their financial and economic impacts.

5. Regulatory Scrutiny Board

A draft Impact Assessment has been sent to the Regulatory Scrutiny Board (RSB) and a hearing took place on 29 September 2021. The RSB issued a positive opinion, subject to reservations on 1 October 2021. The Impact Assessment was improved taking account of the recommendations of the RSB.

RSB comments	How RSB comments have been addressed in the IA
1) The report should provide greater clarity and additional information on the choices to be made for the essential elements, such as the coverage of the	<ul style="list-style-type: none"> a) More precision on new environmental crime areas to be included under the Directive have been added in chapter 2.1.1. b) Better explanations on the method to update

¹⁸⁴ https://ec.europa.eu/info/news/evaluation-environmental-crime-directive-2020-nov-05_en.

¹⁸⁵ In more detail, see Annex 7

¹⁸⁶ In more detail, see Annex 8.

<p>Directive, the mechanism for updating the Directive, criminal sanctions to be proposed, and clarification of definitions. It should clearly indicate if these choices are merely legal or technical specifications leaving little discretion or require a genuine political judgement based on real alternatives. It should substantiate the impacts of these choices on the basis of the available evidence. On this basis, it should better explain how coherence between EU sectoral legislation and criminal law will be ensure</p>	<p>the Directive have been added under chapter 6.1.</p> <p>c) The element of defining ‘substantial damage’ at a later stage of the proceeding has been deleted from chapter 6.2.1. Instead, the criteria to define relevant damage are discussed.</p> <p>d) Better explanations on the definition of minimum maximum sanctions have been added under chapter 6.3.1</p>
<p>2) The report should better justify the selection of measures under the preferred option, in particular regarding the mechanism to keep the Directive and its coverage up-to-date. In the case of mandatory training and specialisation, it should be clear from the problem definition that this is expected to play an important role and that the available evidence supports the need for binding measures.</p>	<p>The selection of the preferred option has been changed and better explained under chapter 6.1</p> <p>Under 6.2., an option has been added and the section of the bet option has been better explained.</p> <p>More explanations on the necessity of a provision on mandatory training has been added under the problem-definition under chapter 2.1.6. and 6.6.</p>
<p>3) The report should assess the cumulative impact of the best performing package and not only analyse the impact of the individual options. It should clarify whether alternative packages have been assessed.</p>	<p>The explanations of the cumulative impact of the best package and alternatives have been added under chapter 8.</p>
<p>4) The Board notes the estimated costs and benefits of the preferred option in this initiative, as summarised in the attached quantification tables. However, the report should provide a more precise cost estimation. The report should also elaborate on the simplification and burden reduction in view of the REFIT potential of the preferred option.</p>	<p>More precision and a cost table has been added under chapter 8.</p> <p>A paragraph on Refit has been added under Chapter 8.</p>

ANNEX 2A: METHODS

The present Impact Assessment has not used any forecasting model technique, developed either in-house or by an external developer, as this was not deemed the most suitable tool to analyse the issues at hand.

The methodology used to perform this Impact Assessment has been the standard Impact Assessment methodology used by the Commission.

The different steps of the Impact Assessment, from the definition of problems and their drivers, to the definition of possible policy options and the analysis of their impact and their importance was based on the evaluation report (published October 2019), a range of extensive desk research and stakeholder consultations (.. Stakeholder consultations comprised a number of targeted consultations and workshops with businesses, Member States, practitioners, NGOs, practitioner's networks and academia at national and EU level and a public consultation (see Annex 6: - results of the public consultations and Annex 7 – stakeholder consultations synopsis report).

In addition to the review of the literature, numerous written statements from stakeholders, e.g. from Eurojust, Europol, professional networks, practitioners, Member States, NGOs and businesses were analysed. Desk research also covered the review of European Parliament positions, such as the report on the liability of companies for environmental damage (2020/2027(INI)) of Committee on Legal Affairs. Results from working groups, such as the country survey for the 2nd meeting of the Council of Europe's Working Group on the Environment and Criminal Law on 15 June 2021, have also been taken into account.

In addition to a series of targeted workshops and interviews with stakeholder groups, the Commission has also taken the opportunity to present the considered options and seek stakeholder input at externally organised expert events, such as conferences of professional networks, roundtables and seminars. Due to the Covid 19-crisis this was done remotely. The online-conferences did not hamper the liveliness of discussions and the value of the input and feedback received.

Three main assessment criteria that guided the ex-ante evaluation of the envisaged measures have been: a) effectiveness (degree to which the options are likely to meet the initiative's objectives), b) efficiency (costs benefits and their distribution across stakeholders) and c) coherence (with other main EU policies/legislation). The assessment took into account social and economic impacts for different stakeholder groups.

Legal analysis of measures focussed on coherence with EU law and selected instruments of international law. It also inventorised obstacles as well as existing practices at the national level. Legal coherence was assessed through a literature review and review of legal cases in particular in order to inventorise obstacles as well as existing practices at the national level, such as the "Black Mass" Judgment, Court of appeal, Gota Hovratt 09.09.2021.

Costs and benefits analyses included costs for companies, the EU and Member States as well as generally environmental, economic and social impacts for all relevant stakeholder groups. The Commission took particular account of the findings of the "*Study to supply the Impact Assessment of the Directive 2008/99/EC on the protection of the environment through criminal law*", which was commissioned by DG JUST and developed by a contractor. The identification of the problems and of the proposed solutions also used extensively the findings

of the evaluation of the Directive 2008/99/EC. The results of the multiple perspectives – environmental, social and economic – are integrated to provide a final overall assessment for each option. (More information on the approach used for the cost/benefit analyses can be found in Annex 2).

It is therefore worth highlighting that the sources of information used to identify and analyse the problems, as well as assess the impact of proposed policy options have been particularly broad.

ANNEX 2B: ANALYTICAL MODELS - COSTS

INTRODUCTION AND OVERALL METHODOLOGICAL APPROACH

This annex provides the methodological approach, assumptions and analytical models used to estimate the costs of the proposed measures and sub-options for which an efficiency assessment is made in the impact assessment report. For the assessment of efficiency, implementation costs have been quantified wherever possible.

As explained in the impact assessment report, three main categories of cost are expected:

1. All of the proposed measures would lead to more effective investigations of environmental crime, requiring additional staff in the Member States;
2. Broadening the scope of the Directive and clarifying terms would lead to an increase in the number of environmental crime cases taken up, also requiring additional staff;
3. Certain measures, such as training, improved cross-border cooperation, statistical data collection, strategy development and awareness raising measures would have direct implementation costs over and above the need for additional staff.

For cost categories 1 and 2, it is not possible to attribute a specific share or percentage of the need for additional staff to individual proposed policy objectives or measures, as it is impossible to reliably quantify the degree to which the different improvements to the Directive would deliver in terms of the effectiveness of investigations or the volume of new cases. It is also not possible to draw realistic assumptions about the number of new environmental crime cases that would arise as a result of the extended scope of the Directive, as there is no clear understanding of the baseline or the current number of cases in the Member States, nor is it possible to accurately predict the type and location of future environmental crime cases. Therefore, to assess this cost an estimate of the number of additional police and prosecutors that Member States are likely to need add to their current workforce work on environmental crime cases has been prepared. The assumptions and analytical models used to develop these estimates are presented in Section 6 of this annex.

Sources of information

A very targeted literature review was carried out building on the desk research carried out for the Evaluation study of Directive 2008/99/EU, looking in particular at relevant literature on the magnitude and impacts of environmental crime; and the 8th Round of Mutual Evaluation country reports and summary reports to understand where individual Member States are with regard to the implementation of the activities likely to be required under the revised Directive. Baselines across the Member States for different elements of ECD implementation were then developed; details are in the annex on baselines. Statistical data are mainly from Eurostat and other official sources; these are documented in footnotes.

In addition, the research covered other EU criminal legislation and associated impact assessments, to understand the types of legislative provisions that could be envisaged as the result of legislative policy options, and associated impacts to check for reference methodologies and data.

Finally, additional information was collected through consultation activities both to shed light on the actual baseline and to verify the assumptions made for cost estimates. These activities are detailed in the table below.

Table 1: Consultation activities carried out to support the development of cost estimates

Stakeholders	Consultation / verification
Finland authorities – interview 23.06	Verification of baseline and assumptions about the costs in terms of workdays for national strategies and the training of relevant practitioners at national level
Sweden authorities – interview 05.07	Verification of baseline concerning the number of police officers and prosecutors that handle environmental crimes as part of teams dealing with environmental, hunting and occupational safety and health crimes
ENPE - interview 05.07	Verification of baseline and assumptions about the number of practitioners handling such cases and their training needs. Information was collected about the number of police officers and prosecutors handling environmental, agricultural and food safety crimes in the Netherlands.
ENPE national contact points – email exchange	Circulation of a short ‘questionnaire’ to validate baseline information and assumptions concerning the number of police officers and prosecutors handling environmental crime cases and the need for additional personnel. Information was received from the contact points in Latvia, Lithuania, Romania and Portugal
NGO Birdlife – email exchange	Awareness raising costs Training costs

Standard Cost Model and estimation of labour costs

Many of the implementation costs entail human resource costs at the EU level (European Commission, EU agencies) and the Member State level (competent authorities, practitioners). Costs associated with administrative burden have been estimated using the Commission’s Standard Cost Model (SCM), outlined in the Better Regulation toolbox³. The SCM expresses costs as the ‘price per action’ (usually expressed as labour costs) multiplied by the ‘quantity’ of actions carried out (in this case implementation activities and the person days for implementation).

To calculate these costs, a standard estimate of the daily labour cost has been applied for all activities. This approach mirrors the approach taken in recent impact assessments for criminal law initiatives¹⁸⁷, using the latest available data and methods detailed in the EU Better Regulation Guidelines (in particular Tool #60 The standard cost model for estimating administrative costs). The approach is detailed in the box below.

Box 1: Approach to calculating labour costs for EU and Member State administration

Approach to calculating labour costs for EU and Member State administration

In order to obtain daily wages from monthly salary data or hourly wage data, the wages are converted based on the assumption of 215 person days of fulltime equivalent (FTE) in a year¹⁸⁸ or alternatively 1 720 person hours of FTE in a year¹⁸⁹, these assumptions imply a person day of FTE has 8 hours and a person month of FTE has 18 days.

EU labour cost

The daily rate for EU officials is based on the assumption of 18 working days in a month and the average monthly salary for grade AD8 (as a medium grade for officials) as referred to in the Staff Regulations, applicable from 1 July 2020 (specifically Table 1.1 in Annex 1 to COM(2020) 773 final¹⁹⁰). After adding a 25% overhead cost, this results in an EU daily labour cost of EUR 534 for 2020. Using the above assumptions this can be converted to a monthly (EUR 9 571) or annual (EUR 114 852) cost.

Member State labour cost

Data about labour costs in the Member States is obtained from Eurostat's Labour Cost Survey, the latest available being 2016¹⁹¹. Therefore, the EU27 'total labour cost' reported for public administration (i.e. category 'public administration and defense, compulsory social security' per employee FTE) is adjusted for inflation to obtain a daily labour cost for 2020¹⁹², which can be comparable to the EU labour cost. A 25% overhead cost is then added to obtain an average Member State daily labour cost of EUR 294 for 2020. This is alternatively EUR 5 260 per month or EUR 63 119 per year.

Limitations

The accuracy of cost estimates is very much dependent upon the baseline situation in the Member States – e.g. how much training they already do for different practitioner groups, or how many personnel they already have devoted to environmental crime. No specific surveys

¹⁸⁷ See, for example, the SWD (2017) 298 final on combating fraud and counterfeiting of non-cash means of payment.

¹⁸⁸ Eurostat, 2017, Guidelines Unit Costs for Direct Personnel Costs applicable to all grants awarded by Eurostat: <https://ec.europa.eu/eurostat/documents/10186/7970019/Guideline-unit-costs.pdf>.

¹⁸⁹ European Commission, 2019, H2020 Programme User's Guide for the Personnel Costs Wizard: https://ec.europa.eu/research/participants/data/ref/h2020/other/gm/reporting/guide-personnel-costs_en.pdf.

¹⁹⁰ COM(2020) 773 final, Annexes: https://eur-lex.europa.eu/resource.html?uri=cellar:9e757c7c-3328-11eb-b27b-01aa75ed71a1.0005.02/DOC_2&format=PDF.

¹⁹¹ Dataset 'LCS surveys 2008, 2012 and 2016 [lc_ncost_r2]' downloaded on 04.06.21 from Eurostat: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>.

¹⁹² Based on the annual inflation rates reported for 2017-2020 by Eurostat: [2020](#), [2019](#), [2018](#), [2017](#).

were carried out to ascertain these details for all Member States, information was mainly collected from the 8th Mutual Evaluation Member State reports and, where available, letters they submitted as a follow-up to the evaluation process. Some additional information was collected via consultation, but as the consultation was not extensive across all Member States, the consultation activities were mainly used to validate EU-wide assumptions. While the 8th Mutual Evaluation reports were consistent in the type of information requested from Member States, not all Member States provided the same level of detail in the reports, meaning that in some cases an omission in a country report could be misinterpreted as the lack of action in a certain area. The cost calculations are therefore estimates and in some cases Member States may in reality incur less cost than projected as they already have taken steps to implement the proposed measures.

TRANSPOSITION AND THE DEVELOPMENT OF EU-LEVEL GUIDANCE DOCUMENTS

As explained in section 6.1 of the impact assessment report, costs for the transposition of legislation by Member States and for the preparation of EU-level guidance documents were not presented for the individual options per objective nor taken directly into account in the assessment of efficiency. While the costs are relatively minor compared to other elements of the proposed modifications, indicative cost assessments are presented here.

Transposition of legislation

Any legislative option that involves amendments to the ECD would entail some costs for the Member States to transpose the new legislation into their national settings. The cost of the transposition is human resource costs and is likely to be the same or comparable for transposing a legislative option for one of the policy objectives, several or all of them. Furthermore, these costs are one-off costs as the transposition is a single activity that does not entail continuous or recurring expenses.

In order to estimate the cost of the human resources, reference data about the amount of person days needed for transposition is taken from the Impact Assessment of the Directive on combating fraud and counterfeiting of non-cash means of payment¹⁹³. This average amount per Member State is assumed to be between 20 and 60 person days. Using the Member State daily labour cost defined in section 6.1 (i.e. EUR 294), the overall cost of transposition is estimated to be in the range of EUR 5 872 – 17 615 per Member State as summarised in the table below.

¹⁹³ Impact Assessment Accompanying the document Proposal for a Directive of the European Parliament and the Council on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA, SWD(2017) 298 final, Annex 4.2, p.185-191.

Table 2: Estimated costs of transposition of new legislation in the Member States

One-off costs	Low		High	
Per Member State	20 days	€ 5 872	60 days	€ 17 615
All Member States (EU27)	540 days	€ 158 531	1 620 days	€ 475 594

Preparation of EU-level guidance

Some EU-level guidance already exists with regard to environmental crime¹⁹⁴. It is possible that the European Commission would prepare and adopt additional guidance documents specifically linked to the ECD modifications, for example to further support the clarification of terms¹⁹⁵. The main cost would be the human resource costs that the European Commission services need to invest to prepare, adopt and disseminate the material (any implementation costs for Member States or other stakeholders are considered separately). These costs would be one-off as no recurring costs are likely once the document is adopted. The costs are estimated as a unit cost per document and can be considered under different policy objectives or sub-options, as shown in Table 2 (Section 3.1).

In order to estimate the cost of a non-legislative guiding document, reference data about the amount of person days needed for development and publication of, for instance, an implementation report, guidebook on national legislation or a communication, is taken from the Impact Assessment of the Directive on combating fraud and counterfeiting of non-cash means of payment¹⁹⁶. The necessary effort is assumed to be between 30 and 60 person days. Using the EU daily labour cost defined in section 6.1 (i.e. EUR 534), the overall cost of developing one non-legislative guiding document is estimated to be in the range of EUR 16 026 – 32 052 at the EU level as summarised in the table below.

Table 3: Estimated costs of developing and publishing a non-legislative guiding document at the EU level

One-off costs	Low		High	
EU level (European Commission)	30 days	€ 16 026	60 days	€ 32 052

¹⁹⁴ For example, the recently published European Commission, 2021, Guidance Document on combating environmental crimes and related infringements.

¹⁹⁵ Guidance on harmonised standards for statistics (Objective 5) is included in the cost estimate for this option as it is considered integral to the implementation of the option.

¹⁹⁶ Impact Assessment Accompanying the document Proposal for a Directive of the European Parliament and the Council on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA, SWD(2017) 298 final, Annex 4.2, p.185-191.

COSTS RELATED TO OPTIONS UNDER OBJECTIVE 4 OF IMPROVING THE EFFECTIVE COOPERATION AND COORDINATION BETWEEN RELEVANT AUTHORITIES

Option 1, which would require no further action beyond those under objectives 1 to 3, would not entail any direct additional costs. Option 2 would introduce a package of provisions requiring Member States to take actions directly fostering cross-border cooperation. There are three proposed measures; details on the cost estimates for each are considered in the following sections.

Investigative tools

Under this measure, Member States would be required to allow the use of investigative tools for environmental crime cases in the same way that they are allowed for use in organised crime or other serious crime cases, according to the provisions in national law. Investigative tools and techniques used in criminal investigations are likely to include wiretapping; controlled deliveries; telephone interceptions; video surveillance; tracking or undercover agents; as well as laboratories and equipment, and online and geospatial tools for intelligence gathering. While some Member States already do this, many do not and would need to change their practice for environmental crime cases.

According to the 8th Round of Mutual Evaluation country reports and as shown in the baseline annex, 5 Member States specified that they require authorisation from a magistrate or judge to use special environmental techniques for environmental crime, and 14 Member States noted that the use of such techniques requires a link to a severe crime, such as organised crime. A few others noted that such operations are rare or are not used due to a lack of environmental cases. The proposed provision would not harmonise the tools available but would ensure that they are made available more easily. Given this, and the expectation that additional and more serious environmental crime cases would be detected in the Member States as a result of the revised ECD overall, it can be expected that specialised investigative techniques would be used more widely.

Comprehensive quantitative data on the costs of the use of investigative tools in the Member States is not available. However, representatives of prosecution offices from two Member States noted in interviews that these techniques can be costly, particularly for translation and telecommunication services. Media reports have also noted the relatively high cost of wiretapping efforts, mostly linked to telecommunication services. Indicatively, Belgium spent EUR 6 million on 7 475 wiretaps in 2017, giving an average cost of approximately EUR 800 per wiretap¹⁹⁷. The number of wiretaps used has consistently increased in the preceding years, partially due to terrorism investigations. In the UK, at least GBP 6.7 million (EUR 7.9 million) was paid in 2014 by British police forces and government authorities to

¹⁹⁷ Le Soir, 2018, 'Belgique: le nombre d'écoutes téléphoniques en hausse', 20 August 2018, <https://www.lesoir.be/173917/article/2018-08-20/belgique-le-nombre-decoutes-telephoniques-en-hausse>.

telecommunications companies for data on customers (data not including the call or message content)¹⁹⁸. This amount increased each year between 2008 and 2014, probably due to increasing reliance on this data. It was calculated that in 2014 each request cost approximately GBP 50 (EUR 58).

Focal points, cooperation with EU agencies

Member States would be required to install national focal points for cross border cooperation and to ensure cooperation through relevant EU agencies. The main cost of these provisions would be labour costs associated with the human resources needed.

This is subject to several assumptions:

- All Member States would need to establish such focal points. Even though some countries may already have a workforce that is to a certain extent dedicated to environmental crime, the inclusion of such requirements in the ECD would require that such structures are formalised resulting in additional human resource time and costs compared to the baseline.
- The focal or contact points would be needed for cooperation and coordination activities both within the Member States and cross-border and it is assumed that the 'focal point' elements of their cost would only be part time; the rest of their time would be dedicated to other activities.
- One focal point would be established per institution along the enforcement chain implying the creation of focal points within the administrative authorities, police, customs, prosecution and courts (according to the European Commission's guidance on combating environmental crime and related infringements¹⁹⁹). For simplicity, it is assumed that each focal point would be represented by one staff member working part-time on environmental crime.

The cost assessment for implementing new provisions in the ECD requiring the establishment of focal points, specialised units or other entities that would be necessary for facilitating cross-border and intra-EU cooperation on environmental crime in the Member States is based on reference data about the establishment of contact points in similar EU criminal law and the labour costs defined in Section 1.2.

Reference data about the amount of person days needed for focal points in the five relevant institutions along the law enforcement chain is taken from the Impact Assessment of the Directive on combating fraud and counterfeiting of non-cash means of payment²⁰⁰. The

¹⁹⁸ Financial Times, 2016, 'UK police pay millions of pounds for telecoms surveillance', Daniel Thomas, 8 January 2016, <https://www.ft.com/content/1728997e-b3b3-11e5-8358-9a82b43f6b2f>.

¹⁹⁹ European Commission, 2021, Guidance Document on combating environmental crimes and related infringements.

²⁰⁰ Impact Assessment Accompanying the document Proposal for a Directive of the European Parliament and the Council on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA, SWD(2017) 298 final, Annex 4.2, p.185-191.

Directive on combating fraud and counterfeiting of non-cash means of payment contains a similar provision about contact points and can thus be used as a reference point. Therefore, the average amount of time needed for a focal point is assumed to be between 12 and 20 person days in a year per institution per Member State. Using the Member State daily labour cost defined in section 6.1 (i.e. EUR 294), the overall cost of establishing and maintaining contact or focal points, including those needed for cross-border coordination, is estimated to be in the range of EUR 17 615 – 29 358 per year per Member State as summarised in the table below.

Table 4: Estimated annual costs of establishing and maintaining focal points in the Member States

Annual costs	Low		High	
	Per focal point	12 days	€ 3 523	20 days
Per Member State (5 focal points)	60 days	€ 17 615	100 days	€ 29 358
All Member States (EU27)	1 620 days	€ 475 594	2 700	€ 792 656

COSTS RELATED TO OPTIONS UNDER OBJECTIVE 5: IMPROVING STATISTICAL DATA COLLECTION AND REPORTING WITH REGARD TO ENVIRONMENTAL CRIME

Baseline and assumptions for costs of options 1 and 2

Member State statistics on environmental crime are fragmented. They are often kept by different types of stakeholders along the enforcement chain or by environmental authorities and centralised collection of statistics does not take place. None of the EU Member States has a single body with a central coordinating function for all data on environmental crime.

To establish a working baseline for the purposes of understanding the efforts different Member States would need to undertake if they were required to collect and report statistics on environmental crime, information was collected from available desk sources, including the 8th Round of Mutual Evaluation country reports and others²⁰¹.

The systematic collection and reporting of statistical data, including a certain degree of output harmonisation, would primarily require coordination across the various agencies that currently collect data; the desk research suggests all Member States have some environmental crime data available within different institutions. The number of agencies that would need to

²⁰¹ Final Report on the Evaluation of the Environmental Crime Directive (Directive 2008/99/EC) – study by Milieu 2020; DG HOME: Overview of the availability, comparability and consistency of administrative statistical data on recorded crime and on the stages of the criminal justice process in the EU; and stakeholder consultation by DG Justice.

be coordinated differs across Member States. In some Member States, data are widely dispersed among various institutions or agencies, are not available in a centralised data base, and/or are dispersed in various federal or autonomous entities of the country. In others, there is already a good level of central reporting from only a few responsible agencies and/or a few central agencies that already compile some statistics in one or a few common database(s). As those Member States with many different agencies are assumed to require greater effort than those with fewer agencies, this can be considered a reasonable proxy for the differences across Member States

Although the effort needed across Member States to report statistical data on environmental crime may also be impacted by the quality or standards of the data currently available, the information obtained through desk research is not sufficient to make reasoned assumptions about which Member States would require more or less time to revise their existing standards for data collection on environmental crime.

For instance, some of the data available in the reviewed sources is already presented in a format that looks harmonised (e.g. ‘investigations/prosecutions/convictions for waste trafficking’), but it remains unclear what data is behind these common headlines. It is possible that Member States produced these data in a different format and then reported them under these headings or that the data were compiled at the EU level.

In any case, the assumption is that coordination and collection activities would constitute the bulk of the additional administrative burden resulting from requirements on statistical data collection.

Based on these considerations, for the baseline assessment the Member States can be divided into six groups based on the number of agencies currently involved with statistical data on environmental crime as summarised below.

Table 5: Baseline for statistical data collection – number of agencies providing data in each Member State

Group	7 agencies	6 agencies	5 agencies	4 agencies	3 agencies	2 agencies
Member States	BE, EL, ES, IT, NL	FR, PL, RO	IE, SE, SI	AT, BG, DK, EE, FI, LT, PT	CY, CZ, DE, HR, MT, SK	HU, LU, LV

Following the SCM approach, in order to estimate the administrative burden associated with each sub-option, a set of implementation activities for each sub-option has been defined together with an estimation of the person days in fulltime equivalent (FTE) necessary to implement them. The definition of implementation activities and approximate effort in person

days has been developed based on expert judgement by practitioners with first-hand experience with the practical activities and tasks associated with data collection and reporting for crime statistics²⁰². The estimates defined in the following analysis are approximations for standard activities based on rough evaluation of past data collections. The estimates are assumed to provide a good representation of the minimum amount of effort necessary, but they do not take into account possible variations that may occur between Member States beyond those represented by differences in coordination costs which are accounted for through the number of relevant institutions. Nevertheless, it can be assumed that any possible variations are unlikely to significantly impact the overall implementation costs.

Option 1: Oblige Member States to collect and regularly report to the Commission statistical data related to environmental crime in combination with further supporting measures

The assumption behind this option is that Member States are required to collect and report the existing statistical data they currently collect on environmental crime to the EU without further efforts at harmonisation. The estimate of resource requirements for this option assumes that no additional time for the collection of the data within the agencies will be spent and all additional efforts are related to coordination and data compilation activities at a central (national) level and at EU level. It is further assumed that only basic data validation is carried out at the national and EU levels (e.g. checking data for completeness and consistency, but not for accuracy or relevance). No data analysis or report writing efforts are included.

The activities required to implement this option at the national and EU levels entail some one-off efforts for set-up and then continuous activities such as annual collection and transmission of the data. The main implementation activities include:

National level:

- Setting up a central reporting system or procedure in order to put in place the common reporting platform, communicate with agencies, provide guidelines for national level reporting, develop templates etc.
- Round tables to discuss and confirm approach across the agencies before the start of the reporting.

²⁰² Cost estimates were prepared by a team of statistical experts from Gopa Luxembourg, co-authors of the impact assessment support study. The experts Michael Jandl and Paul Smit have a long track record in statistical data collection and analysis. In particular, Mr Jandl has worked for the United Nations Office on Drugs and Crime (UNODC) as a Research Officer, responsible for data collection, research and analysis on crime and criminal justice, and the development and promotion of international standards on crime and justice statistics and surveys. He was Senior Research Officer at the International Centre for Migration Policy Development and carried out research on migration and asylum. Mr Smit has a degree in Mathematics, Statistics and Computer Science and worked with Statistics Netherlands on the migration from manually collected statistics towards digitalized data collection. He later worked for the research department of the Dutch Ministry of Justice on international crime statistics and their comparability. As a consultant, he was part of various UN and EU projects improving crime statistics in the MS.

- Annual collection, compilation and transmission of data from the agencies to the national coordinating office, including reporting from each relevant agency, collection at the central level as well as basic data validation, checking, feedback and revisions at the central level.

EU level:

- Setting up an EU level reporting procedure in order to set up the common reporting platform, communicate with national competent authorities, provide guidelines for EU level reporting, develop templates etc.
- Round tables to discuss and confirm the approach across Member States before the start of the reporting.
- Annual collection, validation and revision of data received from the Member States, including collection of the data from each Member State as well as data validation, checking, feedback and revision.

Total cost estimates as provided in the main impact assessment report are shown below for reference.

Table 6: Member State costs for Option 1

MS	Baseline # agencies	Set-up/one off				Annual / continuous			
		Central reporting system	Round tables*	Total set-up / one-off days	Total set-up / one-off costs	Reporting **	Compilation ***	Total annual / continuous days	Total annual / continuous costs
AT	4	8	16	24	€ 7,046	4	12	16	€ 4,697
BE	7	14	28	42	€ 12,330	7	21	28	€ 8,220
BG	4	8	16	24	€ 7,046	4	12	16	€ 4,697
CY	3	6	12	18	€ 5,284	3	9	12	€ 3,523
CZ	3	6	12	18	€ 5,284	3	9	12	€ 3,523
DE	3	6	12	18	€ 5,284	3	9	12	€ 3,523
DK	4	8	16	24	€ 7,046	4	12	16	€ 4,697
EE	4	8	16	24	€ 7,046	4	12	16	€ 4,697
EL	7	14	28	42	€ 12,330	7	21	28	€ 8,220
ES	7	14	28	42	€ 12,330	7	21	28	€ 8,220
FI	4	8	16	24	€ 7,046	4	12	16	€ 4,697
FR	6	12	24	36	€ 10,569	6	18	24	€ 7,046
HR	3	6	12	18	€ 5,284	3	9	12	€ 3,523
HU	2	4	8	12	€ 3,523	2	6	8	€ 2,349
IE	5	10	20	30	€ 8,807	5	15	20	€ 5,872
IT	7	14	28	42	€ 12,330	7	21	28	€ 8,220
LT	4	8	16	24	€ 7,046	4	12	16	€ 4,697
LV	2	4	8	12	€ 3,523	2	6	8	€ 2,349
LU	2	4	8	12	€ 3,523	2	6	8	€ 2,349
MT	3	6	12	18	€ 5,284	3	9	12	€ 3,523
NL	7	14	28	42	€ 12,330	7	21	28	€ 8,220
PL	6	12	24	36	€ 10,569	6	18	24	€ 7,046
PT	4	8	16	24	€ 7,046	4	12	16	€ 4,697
RO	6	12	24	36	€ 10,569	6	18	24	€ 7,046
SE	5	10	20	30	€ 8,807	5	15	20	€ 5,872
SI	5	10	20	30	€ 8,807	5	15	20	€ 5,872
SK	3	6	12	18	€ 5,284	3	9	12	€ 3,523
Total		240	480	720	€ 211,375	120	360	480	€ 140,917

* 2 persons for 2 round tables (1 day each) per agency

** 1 day per agency

*** 3 days per agency

Table 7: EU-level costs for Option 1

	Set-up / one-off			Annual / continuous
	Coordination 3 days per MS	EU round tables*	Total set-up /one-off	EU collection**
Days	81	108	189	108
Cost	€ 43,270	€ 57,693	€ 100,963	€ 57,693

* 1 person for 2 round tables (2 day each) per MS

** 1 day per MS for collecting data + 3 days per MS for data validation/ checking/ feedback/ revision

Option 2: Oblige Member States to collect and report statistical data according to harmonised common standards

This sub-option differs from the previous in that it emphasizes the application of minimum common standards for the collection, compilation and reporting of statistics on environmental crime. These are broadly defined as standards that do not entail deep and costly changes in the data collection systems of the Member State – for example, by necessitating a major redesign of data entry and recording systems at the level of law enforcement authorities/police or requiring a complete overhaul of the judicial recording systems. Such minimum standards set at EU level, as practiced in other areas of EU data collection, would allow for some, limited comparability of the data, while not (yet) aiming at full data harmonisation across Member States.

Estimating the resource requirements and cost of applying common standards is highly dependent on the scope and the contents of these standards. The exact distinction between minimum and full data harmonisation could be determined at EU level with participation of Member States in a working group and a task force on the methodology of data collection. For the purposes of this work, minimum harmonisation should reflect the key dimensions necessary for **limited data comparability**, including:

- Application of common counting units (e.g. offences rather than investigations or cases).
- Use of a common classification of environmental crime to be prepared by the EU working group (ECECS – European Classification of Environmental Crime for Statistical Purposes which should be a satellite classification of the ICCS²⁰³) for reporting purposes – this requires Member States that do not already collect data according to a common crime classification to carry out a detailed mapping of existing crime categories to the ECECS and report data according to these common categories.

²⁰³ Concretely, the definitions and categories of the classification should be in line with the ICCS (chapter 10). While the ICCS is probably not detailed enough, it seems sensible to start from this international standard which is adopted by Eurostat for the reporting of crime data by MS.

- Reporting of common indicators according to common reporting standards (e.g. persons convicted for waste crime; number of custodial sentences for pollution offences; number of fines for pollution offences exceeding threshold of X Euro, etc.).
- Counting rules will only be harmonised if this can be done on the basis of data already collected within electronic databases and/or if the application of common counting rules does not require major changes to data collection systems. Some tentative examples could be:
 - persons suspected for several offences (of different crime types) should be counted for each type separately;
 - persons convicted for serial offences should be counted only once;
 - persons prosecuted for several crimes should be counted for each crime separately.

Data that do not fulfil these minimum standards should be reported to the EU level with a clear indication where these standards have not been met, but may not be included in EU level comparative analysis (e.g. overall trends in recorded waste crimes).

The different considerations, alternatives and consequences of the application or non-applications of these standards will be analysed further in the separate activity (ToR point 3.3), however, for the purposes of conducting a high-level cost estimate, we have made the following assumptions regarding these common standards:

- **No statistics are foreseen for the total number of offences committed.**
This means that only offences that came to the attention of law enforcement authorities are considered. For this cost estimate no victim surveys or other methods to estimate the so-called ‘dark number’ of environmental crime will be part of the requirement.
- **Infractions/misdemeanors/administrative offences are not part of the required standards.**
This means that it is up to Member States whether to include these or not. Each Member State will probably take this decision on practical grounds (what is easily available).
- **If and in what way prosecution statistics are included are not part of the standards.**
Many Member States do not have any prosecution statistics. Those that do exist are often collected on a very aggregate level and apply completely different counting principles. The assumption is that at this point, available data per crime type (which are often not collected) are used without modifications.

- **Only offences that are explicitly registered as an environmental crime are included in the statistics.** Offences that are basically environmental but are registered as another crime (e.g. falsification of documents) are not part of the statistics
- **Metadata are explicitly part of the statistics.** Since the common standards may not be binding or fully implemented by Member States, all reporting entities and Member States have to provide metadata in order to show where deviations from the standards occur.

In order to estimate the effort needed (both at EU level and national level) to implement minimum common standards and reporting, the following set-up and continuous activities are assumed:

EU level:

- **Definition of common standards:** the definition of common standards (i.e. indicators, classification, counting units, counting rules and reporting templates) would mainly consist of independent and/or EU experts (both on statistics and on environmental crime) and would be responsible for meetings, drafting of technical documents, guidelines, standards setting, bilateral discussions/missions to Member States to assess capacities and capabilities, coordination with other EU environmental crime statistics users, support/ ad-hoc advice on standards implementation.
- **Annual maintenance of common standards:** this would be ensured by regular (e.g. annual) meetings of the Task Force to discuss issues, feedback or necessary updates to the standards.
- **Annual collection and review of the data:** this activity includes the collection, review, analysis and interpretation of the data delivered by Member States. Basically this includes data checking and feedback to the Member States.
- **Annual reporting and dissemination:** this activity refers to the preparation of a dedicated publication at the EU level and associated maintenance costs.

National level:

- **Setting up a national coordination procedure, including:** designation of a national coordinating office that leads the process of standardization, data collection and reporting facilities in the Member States and coordinates contacts with the different agencies within the Member States and the EU. A representative from this office should be part of the Working Group with other Member States (see below).
- **Member States Working Group:** it would support the definition of common standards at the Member State level. The work of the Working Group would include meetings and discussions, reviewing technical documents, translation. An important and often neglected issue of standardization across European countries and jurisdictions is the language issue. While the EU Task Force defining standards would

likely use one language (probably English), the results have to be translated into the language of the Member State. And because the terms to be translated are judicial terms defined within a specific jurisdiction this cannot be a purely linguistic translation. Therefore, translating (‘transposing’) common standards will be a specific task for the Working Group where each Member State would be represented.

- **Setting up the common standards:** this would require minor changes in current statistics and coordination across the agencies involved in environmental crime statistics in each Member State. In practices, the activities might include round tables between all agencies in the Member States, development of templates, revisions and feedback before the reporting starts.
- **Annual coordination:** similarly to the EU level, in each Member State efforts will be required to maintain the coordination system (e.g. coordinating office) and contacts with national agencies, other Member States and the EU.
- **Annual maintenance of common standards:** this would require some regular coordination across the agencies and implementation of feedback if necessary (e.g. updates received from the EU Task Force).
- **Annual collection and reporting:** this would entail the coordinated collection and compilation of data from the different agencies in the Member States, validation and other necessary quality checks and transmission/reporting of the data to the EU.

Total cost estimates as provided in the main report are shown below for reference.

Table 8: Member State costs for Option 2

MS	Baseline # agencies	Set-up / one-off					Annual / continuous				
		Set-up national coordination procedure	MS working Group*	Setting up standards**	Total set-up / one-off days	Total set-up / one-off costs	Coordination	Maintenance of standards	Collection and reporting***	Total annual / continuous days	Total annual / continuous costs
AT	4	5	13	32	50	€ 14,678.82	10	4	16	30	€ 8,807.29
BE	7	5	16	56	77	€ 22,605.38	10	7	28	45	€ 13,210.94
BG	4	5	13	32	50	€ 14,678.82	10	4	16	30	€ 8,807.29
CY	3	5	12	24	41	€ 12,036.63	10	3	12	25	€ 7,339.41
CZ	3	5	12	24	41	€ 12,036.63	10	3	12	25	€ 7,339.41
DE	3	5	12	24	41	€ 12,036.63	10	3	12	25	€ 7,339.41
DK	4	5	13	32	50	€ 14,678.82	10	4	16	30	€ 8,807.29
EE	4	5	13	32	50	€ 14,678.82	10	4	16	30	€ 8,807.29
EL	7	5	16	56	77	€ 22,605.38	10	7	28	45	€ 13,210.94
ES	7	5	16	56	77	€ 22,605.38	10	7	28	45	€ 13,210.94
FI	4	5	13	32	50	€ 14,678.82	10	4	16	30	€ 8,807.29
FR	6	5	15	48	68	€ 19,963.20	10	6	24	40	€ 11,743.06
HR	3	5	12	24	41	€ 12,036.63	10	3	12	25	€ 7,339.41
HU	2	5	11	16	32	€ 9,394.44	10	2	8	20	€ 5,871.53
IE	5	5	14	40	59	€ 17,321.01	10	5	20	35	€ 10,275.17
IT	7	5	16	56	77	€ 22,605.38	10	7	28	45	€ 13,210.94
LT	4	5	13	32	50	€ 14,678.82	10	4	16	30	€ 8,807.29
LV	2	5	11	16	32	€ 9,394.44	10	2	8	20	€ 5,871.53
LU	2	5	11	16	32	€ 9,394.44	10	2	8	20	€ 5,871.53
MT	3	5	12	24	41	€ 12,036.63	10	3	12	25	€ 7,339.41
NL	7	5	16	56	77	€ 22,605.38	10	7	28	45	€ 13,210.94
PL	6	5	15	48	68	€ 19,963.20	10	6	24	40	€ 11,743.06
PT	4	5	13	32	50	€ 14,678.82	10	4	16	30	€ 8,807.29
RO	6	5	15	48	68	€ 19,963.20	10	6	24	40	€ 11,743.06
SE	5	5	14	40	59	€ 17,321.01	10	5	20	35	€ 10,275.17
SI	5	5	14	40	59	€ 17,321.01	10	5	20	35	€ 10,275.17
SK	3	5	12	24	41	€ 12,036.63	10	3	12	25	€ 7,339.41
Total	120	135	363	960	1458	€ 428,034.39	270	120	480	870	€ 255,411.47

* Round tables: 1 person for 2 round tables (1 day each) per MS + Reviewing results by task force: 4 days per MS + Translating/ transposing standards: 3 days per MS + Round table for feedback: 1 day per agency

** Preparation: 3 days per agency + Minor changes in current statistics: 3 days per agency + Round table before start of reporting: 2 persons for 1 day each per agency

*** Reporting: 1 day per agency + collection: 1 day per agency + validation: 2 days per agency

Table 9: EU-level costs for Option 2

Table of the costs for the Commission				
Objective	Preferred option	Implementing measures for the Commission	One-off / Set-up / Recurring costs	Costs for the Commission in euros
5: Improving statistical data collection and reporting on environmental crime	/MS to collect, and transmit statistical data	Provide reporting format to the MS / Definition of minimum standards	One-off costs	111 297
	/Development of minimum standards to compare comparable data	Maintenance of standards	Recurring costs	16 582
	/Biennial report by the Commission on data received by MS	Biennial EU report on the data received by MS	Recurring costs	27 636

COSTS RELATED TO OBJECTIVE 6: IMPROVING THE EFFECTIVE OPERATION OF THE ENFORCEMENT CHAIN

Option 1, which would require no further action beyond those under objectives 1 to 5, would not entail any direct additional costs. Option 2 would insert into the Directive obligations that directly strengthen practical implementation; details on the cost estimates for each are considered in the following sections.

Set-up specialised units in police and prosecution services; establish specialised court chambers and improving cooperation and information exchange within Member States

This measure would consist of recommendations to Member States, e.g. in the non-binding recitals to the Directive. As detailed in the baseline annex, many Member States already do have units specialised in environmental crime within the policy, public prosecution office; a few also have dedicated courts and administrative authority divisions. For those Member States who do not, and would wish to set up such structures, the main additional cost would be related to new staff working on environmental crime. The approach to estimating these costs is provided in Section 6 of this Annex.

Provide training along the enforcement chain

The cost assessments for training assume a combination of training provided at EU level by organisations such as CEPOL or the European Judicial Training Network (EJTN) as well as training provided directly by Member State authorities for its own practitioners. Cost estimates are calculated separately for training at national level (Section 5.2.1) and training at EU level (Section 5.2.2), based on different assumptions and reference data. A thorough investigation of desk research sources was conducted to establish a baseline of what training

already exists, and cost assumptions were validated with stakeholders. Section 5.3.3 looks at who is likely to bear the costs of different types of training.

Training provided by Member State authorities

The amount of additional training each Member State would need to carry out in response to a training requirement in the ECD would depend upon the amount of training already carried out. To establish a working baseline to define these assumptions, Member States have been grouped according to the relative amount of training they already carry out. This is done first for each practitioner group based on the available information and then collectively across all groups as information was not always completely available for some groups. Detailed research findings are provided in the annex on baselines.

Four groups of practitioners have been identified as the primary recipients of training on environmental crime: **judges, police and prosecutors, customs agents and administrative authorities responsible for environmental inspection**. Member States currently provide varying degrees of training for each group. It is assumed that training for all practitioners would be necessary, as the lack of necessary expertise in one or more parts of the enforcement chain may produce a vicious circle and undermine efforts in other parts of the chain²⁰⁴. It may also be desirable to provide common training to different types of practitioners in one group, to foster better cooperation across institutions within a Member State.

For the **judicial branch**, all Member States have a specialised body, such as a national institute or academy, which organises training for judges and/or prosecutors. Continuous professional training of judges is optional in the majority of Member States.

Based on the country reports of the 8th Round of Mutual Evaluation and follow-up comments, three groups of Member States could be identified in terms of the extent of training already provided for the judicial branch at national level.

- **Group A:** Member States in this group offer training opportunities for practitioners in the judicial branch in relation to environmental crime on a regular basis – i.e., at least one course per year. For example, in Germany, the German Judicial Academy regularly offers a four-day conference on current issues in relation to environmental criminal law and regular training activities are also held at regional (Länder) level. (AT; BE; BG; CZ; DE; ES; FI; FR; IT; PT; SE).
- **Group B:** Member States in the group offer limited/ad hoc training for practitioners in the judicial branch, which based on the available information does not seem to occur on a regular basis (EE; EL; HU; NL; PL; RO).
- **Group C:** Member States in this group do not organise any training activities on environmental crime at national level for the judicial branch. The only training

²⁰⁴ European Commission, 2021, Guidance Document on combating environmental crimes and related infringements.

available to practitioners in these Member States is at EU level (CY; DK; HR; IE; LT; LV; LU; MT; SI; SK).

For the **police and public prosecutors**, the bodies responsible for providing training are usually spread out across the different institutions/units - with each institution/unit responsible for the training of its respective staff. In France, Poland and Spain the training on environmental crime is provided by a body specialised in environmental issues, namely, the Institute for Environmental Training (IFORE) in France, the Chief Inspectorate of Environmental Protection in Poland, and the Nature Protection Service (SEPRONA) of the Spanish Civil Guard. The majority of Member States provide some form of training on environmental crime for the law enforcement branch, although the extent of the training and the bodies covered vary greatly from one Member State to another. Three categories of Member States could be identified in terms of the level of training provided for the law enforcement branch at national level.

- **Group A:** Member States in this group provide a degree of both initial and continuous training on environmental crime to law enforcement practitioners (AT; CZ; DE; EE; ES; FI; FR; IT; PL). Finland can be taken as an example of best practice; the Police University College coordinates a national training programme on environmental criminal law, which covers police, customs and border guard, environmental authorities (both state and municipal) as well as prosecutors. The training consists of six thematic modules in the form of lectures that are live-streamed across the country and last around two days each over a period of 18 months. The Police University College also organises annually a one-week course on environmental crime covering a wide range of subjects, including one afternoon on forensic sampling.
- **Group B:** Member States in this group provide some degree of training on environmental crime as part of the initial training of officers/new recruits. However, no opportunities for continuous training could be identified in the country reports (BE; BG; IE; LV; MT; NL; PT; RO; SE).
- **Group C:** Member States in this group either provide training on environmental crime on an ad hoc basis with no clear training programme, or do not provide any training on environmental crime at national level (the only training available is provided by EU level organisations) (CY; DK; EL; HR; HU; LT; LU; SI; SK).

For **customs and administrative authorities**, very limited information is available on the current level of training on environmental crime provided at national level. The following groups of Member States could be identified, based on the information available in the some of the country reports of the 8th Round of Mutual Evaluation:

For customs:

- **Group A:** Member States in this group provide a degree of both initial and continuous training on environmental crime to customs (CZ; DE; FI; FR)

- **Group B:** Member States in this group provide a degree of training on environmental crime as part of the initial training of customs officers/new recruits or ad hoc training only (BG; EE; IE)
- **Group C:** Member States in this group provide no training to customs (CY; DK; HR; HU; LT; LU; SI; SK)
- **No information is available** for the following Member States (AT; BE; EL; ES; IT; LV; MT; NL; PL; PT; RO; SE)

For administrative authorities:

- **Group A:** Member States in this group provide a degree of both initial and continuous training on environmental crime to administrative authorities (AT; CZ; DE; EE; FI)
- **Group B:** Member States in this group provide a degree of training on environmental crime as part of the initial training of customs officers/new recruits or ad hoc training only (EL; IE; SE)
- **Group C:** Member States in this group provide no training to administrative authorities (CY; HR; HU; LT; LU; SI; SK)
- **No information is available** for the following Member States (BE; BG; DK; ES; FR; IT; LV; MT; NL; PL; PT; RO)

Given that comprehensive baseline information was not available for all four practitioner groups in each Member State, and that the bulk of the training to be carried out focuses on the police and prosecution practitioners, a simplified categorisation was made, taking the average level of training provided at national level for both the judicial and law enforcement branch. The overall national baseline consists of three groups, with Group A providing regular training, Group B providing ad hoc training or only initial training and Group C provided very limited/no training.

Table 10: National baseline groups

Groups	Group A	Group B	Group C
Member States	AT; BE; CZ; DE; EE; ES; FI; FR; IT; PL; PT; SE	BG; EL; HU; NL; RO	CY; DK; HR; IE; LT; LV; LU; MT; SI; SK

Although many Member States (17 in total) currently provide some form of training in relation to combating environmental crime, previous studies²⁰⁵ and stakeholder consultation

²⁰⁵ European Commission, 2021, Guidance Document on Combating environmental crimes and related infringements; European Commission, 2020, Good practice document on Combating environmental crime: Waste and wildlife; European

have emphasised the need for more and better targeted training for all practitioners along the enforcement chain. Stakeholders in the field stressed that the current level of training does not ensure sufficient expertise in the highly technical and complex field of environmental crime. Furthermore, modifications to the ECD will change how environmental crime is defined and broaden the types of activities that can be considered environmental crime, as well as mandate additional enforcement activities within and between Member States. It is therefore assumed that *all* Member States, will need to provide some degree of additional training on environmental crime for all practitioner groups. The amount of additional training estimated takes into account the level of national training currently provided: it is assumed that Member States in Group A will need to provide less additional training compared to Member States in other groups, particularly Group C, for all personnel expected to work on environmental crime along the enforcement chain.

To develop the cost estimates, three key variables were used. These key variables are:

1. The estimated **average cost of one day of training** per participant
2. The **number of annual training days** to be offered per practitioner group and Member State group
3. The **number of participants** estimated to receive training per Member State

- **Variable 1: Average cost of one day of training per participant**

An estimate of the average cost of one day of training per participant has been developed using different reference data sources. This unit of analysis (i.e. cost per day of training) was chosen as it accounts for different types of costs associated with the provision of training, such as the development of the content of the training, costs of trainers, venue, training materials etc.

Initial desk review found the following sources of reference data:

- The French Higher Institute of the Environment (ISE) provides training on environmental issues (also to French law enforcement officers). According to the online training catalogue for 2018, the lowest cost for one day of training was EUR 900 for 12 participants and the highest cost for one day of training was EUR 1 200. This means the cost per participant ranged from EUR 75 to EUR 100²⁰⁶.

Commission, 2020, Evaluation of the 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 (Environmental Crime Directive), SWD(2020) 260 final.

²⁰⁶ <https://institut-superieur-environnement.com/wp-content/uploads/2018/01/Catalogues-formation-Pro-ISE.pdf>.

- Based on the call for proposals for Grant Agreements for the implementation of CEPOL Residential Training Activities in 2021, the cost per participant per day of training is on average EUR 239²⁰⁷.
- The Police Service of Northern Ireland indicated that it costs on average GBP 58 (EUR 68) per officer per training day in the initial firearm course²⁰⁸.
- An NGO providing training in the field of environmental crime to law enforcement provided the research team with data on the costs of their training. This NGO provides a two-day, in-person training course for around 40 officers in the framework of the fight against the illegal use of poison in the natural environment. This course costs a total of EUR 3 120, which amounts to EUR 39 per day per participant. The NGO also provides a more expensive type of training on investigation of environmental crimes which includes both theoretical and practical courses over a period of three days for approximately 40 officers. This training costs around EUR 196 per day per participant.
- The Annex of the Evaluation of the Directive 2008/99/EC states that the stakeholder consultation indicated that training costs per individual involved in environmental crime enforcement ranges from EUR 50 to EUR 428 per year²⁰⁹.

Taking the average of the different reference data sources, the average cost of one day of training per participant can be estimated at EUR 119.5. During targeted interviews, the ENPE and authorities in Sweden confirmed that this average daily rate of training per participant is consistent with their experience and the costs of the training they conduct.

- **Variable 2: Number of training days**

To better understand the requirements for the number of training days needed on environmental crime, available data from several Group A Member States (i.e. those currently providing the best level of training) have been reviewed; these are compiled in the table below. This allows for assumptions on the number of continuous annual training days on environmental crime that are likely to be provided by the Member States for police officers, public prosecutors, and judges in response to a training requirement in the ECD.

Table 11: Overview of training days currently provided in Group A Member States

MS	Continuous training for police and prosecutors	Continuous training for judicial branch
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²⁰⁷ https://www.cepola.europa.eu/sites/default/files/Annex_3_CEPOL_Training_Catalogue_2021.pdf.

²⁰⁸ https://www.psnipolice.uk/globalassets/advice--information/our-publications/disclosure-logs/2011/human-resources/training_costs_police_officers.pdf.

²⁰⁹ SWD(2020) 259 final part 2.

AT 210	One week every two years	<i>No detailed information in the country report</i>
CZ 211	3 days annually	1 day annually for the judicial branch
DE 212	Example at Länder level: 2 days annually (Rhineland/Palatinate)	4-day conferences for judicial branch
EE 213	4 days annually for EI investigators and public prosecutors	<i>No detailed information in the country report</i>
FI ²¹⁴	5 days annually	<i>No detailed information in the country report</i>
FR 215	3 days annually for inspectors	<i>No detailed information in the country report</i>
PL 216	4 days annually	3 days annually for the judicial branch

Note: the table only contains information on the training activities for which the length of the training was indicated in the 8th Round of Mutual Evaluation country report, some reports mention other training activities but no detailed information on the length of the training was available.

On average Group A Member States (for which information was available) provide 3 days of annual continuous training for both judges and the police and prosecutor groups. To account for differences in the level of training already provided by Member States, the estimated additional training days required due to the new ECD is adjusted for each baseline group as follows:

- **Group A** – 1 additional training day for judges and police / prosecutors
- **Group B** – 2 additional training days for judges and police / prosecutors
- **Group C** – 3 additional training days for judges and police / prosecutors

The revision of the ECD is expected to primarily impact the practitioners along the enforcement chain that deal with investigation, prosecution, and conviction (e.g., police

²¹⁰ Council of the European Union, 2019, 8th Round of Mutual Evaluations -'The practical implementation and operation of European policies on preventing and combating Environmental Crime': Report on Austria, 10079/1/19 REV 1.

²¹¹ Ibid - Report on the Czech Republic, 14129/1/18 REV 1.

²¹² Ibid - Report on Germany, 11430/1/18 REV 1.

²¹³ Ibid - Report on Finland, 8430/1/18 REV 1.

²¹⁴ Ibid - Report on Finland, 8430/1/18 REV 1.

²¹⁵ Ibid - Report on France, 6734/18 DCL 1.

²¹⁶ Ibid - Report on Poland, 15079/1/18 REV 1.

officers, prosecutors, and judges). It is therefore assumed that less training for customs and administrative authorities would be necessary compared to other types of practitioners as these actors are mainly involved in the monitoring and detection of environmental crime (administrative authorities being responsible for the investigation and enforcement of administrative offences). It is therefore assumed that customs and administrative authorities would receive one additional day of continuous annual training in all Member States.

- **Variable 3: Number of persons targeted by the training**

The expected number of practitioners to be trained within each Member State was calculated based on different assumptions for each practitioner group.

Judges

Given the lack of data available on the specialisation of judges in Member States, estimates for the number of judges that would be targeted by training were based on the current practice in Poland, whereby on average 50 judges receive training annually on environmental crime²¹⁷. Based on Eurostat data (CRIM_JUST_JOB²¹⁸) on the total number of professional judges in Member States, this represents 0.5% of judges in Poland.

Police and public prosecutors

It is assumed that the revision of the ECD will result in the need for additional personnel within the police and public prosecution offices in all Member States, and an estimate number of additional staff required in each Member State is presented in Section 6 of this annex. Training should be provided to existing staff working on environmental crime as well as new staff added in response to the revised Directive. An estimate for the number of police and prosecutors who will require training has been calculated using a proxy for the baseline number of personnel currently working on environmental crime in each Member State (1.0% of all police and 3.5% of all prosecutors) plus the number of new staff to be hired (0.20% of all police and 0.17% of all prosecutors). Details regarding these figures can be found in Section 6. These figures for each Member State are shown in Table 20; the total to be trained is 18 743.

Customs

There is also a lack of data available on the current level the number of customs agents who actively work on or specialise in environmental crime in the Member States. Given that customs officers are often on the front line of detecting cross-border environmental crime, it is important that a high proportion of officers receive elementary training in relation to combating environmental crime. Estimates for the number of targeted customs officers were

²¹⁷ Council of the European Union, 2019, 8th Round of Mutual Evaluations - 'The practical implementation and operation of European policies on preventing and combating Environmental Crime': Report on Poland, 15079/1/18 REV 1.

²¹⁸ https://ec.europa.eu/eurostat/databrowser/view/crim_just_job/default/table?lang=en%20b.

therefore calculated based on the assumption that 10% of all customs officers in the Member States would receive basic training on environmental crime.

As no data on the total number of customs officers in each Member State is available, figures were extrapolated based on statistics from four Member States (BE; DE; FR; LU) using 3 steps: (1) The number of customs officers per inhabitant was calculated for these four Member States using official national statistics on customs and Eurostat population data; (2) the average number of customs officers per inhabitant was calculated across the four Member States (see Table 10); (3) the number of total customs officers in all other Member States was estimated using the average calculated in step 2 and Eurostat population data.

Table 12: Calculations for number of customs targeted by training

MS	Customs workforce	National population ²¹⁹	Customs per inhabitant
BE	3 199 ²²⁰	11 566 041	0.00028
DE	44 000 ²²¹	83 166 711	0.00053
FR	16 897 ²²²	67 320 216	0.00025
LU	443 ²²³	626 108	0.00071
Average number of customs per inhabitant applied to all other MS		0.00044	

The calculation for the costs of providing training to customs, takes 10% of the estimated total customs officers in each Member State.

Administrative authorities

The type of administrative authorities involved in the detection and investigation of environmental crimes vary across Member States (e.g., environmental inspectorates, local authorities) depending on each country's legal framework. While acknowledging that not all Member States have environmental inspectors, for simplicity, estimates for the number of

²¹⁹ Eurostat, 2021, Population on 1 January by age and sex, DEMO_PJAN, Available at: https://ec.europa.eu/eurostat/databrowser/view/demo_pjan/default/table?lang=en.

²²⁰ Cour des comptes, 2017, Organisation d'un service continu au sein de l'Administration générale des douanes et accises. Available at: https://www.ccrek.be/Docs/2019_02_AGDA.pdf.

²²¹ Generalzolldirektion, 2021, Der Zoll - Daten und Fakten im Überblick. Available at: https://www.zoll.de/SharedDocs/Downloads/DE/Links-fuer-Inhaltseiten/Der-Zoll/zdf_zoll_daten_fakten_ueberblick_2020.pdf?__blob=publicationFile&v=2.

²²² Direction générale des douanes et droits indirects, 2020, Bilan Annuel de la Douane 2020, République Française. Available at: <https://www.douane.gouv.fr/sites/default/files/2021-04/02/Bilan-annuel-de-la-douane-2020.pdf>.

²²³ Administration des douanes et accises, 2020, Rapport d'activité du Ministère des Finances 2020, Gouvernement du Grand-Duché de Luxembourg. Available at: <https://douanes.public.lu/content/dam/douanes/fr/actualites/rapport-annuel-ADA.pdf>.

persons within administrative authorities that would be targeted by training were extrapolated based on the number of environmental inspectors in four Member States (those for which data was available) using the same approach as for customs. For Member States that do not have environmental inspectors, the target numbers account for personnel within other administrative bodies that may be in need of training.

Table 13: Calculations for number of inspectors targeted by training

MS	Number of inspectors based on 8th Round of Mutual Evaluation reports	National population²²⁴	Inspectors per inhabitant
EE	6 ²²⁵	1 330 068	0.000045
HR	77 ²²⁶	4 036 355	0.000019
LT	433 ²²⁷	2 795 680	0.00015
RO	621 ²²⁸	19 186 201	0.000032
Average number of inspectors per inhabitant applied to all other MS		0.000053	

Using the assumptions above, cost estimates for training activities provided within Member States to comply with a legal requirement that actors along the environmental crime enforcement chain be provided with appropriate training in environmental crime are shown in the table below. The three key variables – number of days, average cost per day of training per participant, number of practitioners targeted are linked to actual Member State practice. In this scenario, the costs would range from EUR 14 034 to EUR € 1 429 746 annually at national level, with a total annual cost of EUR € 7 978 446 across all Member States.

²²⁴ Eurostat, 2021, Population on 1 January by age and sex, DEMO_PJAN, Available at: https://ec.europa.eu/eurostat/databrowser/view/demo_pjan/default/table?lang=en.

²²⁵ Council of the European Union, 2019, 8th Round of Mutual Evaluations - 'The practical implementation and operation of European policies on preventing and combating Environmental Crime': Report on Estonia, 6767/1/19.

²²⁶ Ibid – Report on Croatia, 9178/1/19.

²²⁷ Ibid – Report on Lithuania, 10080/1/19.

²²⁸ Ibid – Report on Romania, 8783/1/19.

Table 14: Total costs for providing training at Member State level

MS	Baseline group	# police & prosecutors (1-3 days)	# judges (1- 3 days)	Number of days of training for PP, police and judges	Estimated costs for police and prosecutors	Estimated costs for judges	# customs officials (1 day)	# inspectors (1 day)	Estimated costs customs	Estimated costs inspectors	Estimated cost total
AT	A	367	2	1	€ 43,842	€ 232	393	469	€ 46,913	€ 56,065	€ 147,053
BE	A	515	12	1	€ 61,578	€ 1,466	320	607	€ 38,228	€ 72,577	€ 173,849
BG	B	116	11	2	€ 27,616	€ 2,656	307	366	€ 36,638	€ 43,786	€ 110,696
CY	C	62	1	3	€ 22,241	€ 212	39	47	€ 4,680	€ 5,593	€ 32,726
CZ	A	513	4	1	€ 61,290	€ 455	472	564	€ 56,362	€ 67,358	€ 185,466
DE	A	3074	107	1	€ 367,350	€ 12,750	4,400	4,384	€ 525,800	€ 523,846	€ 1,429,746
DK	C	154	4	3	€ 55,061	€ 1,280	257	307	€ 30,689	€ 36,676	€ 123,705
EE	A	52	1	1	€ 6,172	€ 141	59	6	€ 7,004	€ 717	€ 14,034
EL	B	642	20	2	€ 153,484	€ 4,716	473	565	€ 56,492	€ 67,513	€ 282,205
ES	A	2065	27	1	€ 246,825	€ 3,238	2,088	2,495	€ 249,466	€ 298,136	€ 797,666
FI	A	104	5	1	€ 12,441	€ 646	244	291	€ 29,121	€ 34,802	€ 77,010
FR	A	2647	29	1	€ 316,298	€ 3,481	1,690	3,548	€ 201,919	€ 424,033	€ 945,731
HR	C	258	9	3	€ 92,370	€ 3,140	179	77	€ 21,389	€ 9,202	€ 126,101
HU	B	529	15	2	€ 126,530	€ 3,505	431	515	€ 51,490	€ 61,536	€ 243,061
IE	C	173	1	3	€ 62,134	€ 269	219	262	€ 26,165	€ 31,270	€ 119,838
IT	A	3289	33	1	€ 393,057	€ 3,964	2,630	3,144	€ 314,340	€ 375,666	€ 1,087,027
LT	C	121	4	3	€ 43,259	€ 1,361	123	433	€ 14,726	€ 51,744	€ 111,090
LU	C	25	1	3	€ 9,040	€ 389	44	33	€ 5,294	€ 3,944	€ 18,667
LV	C	111	2	3	€ 39,625	€ 703	84	101	€ 10,054	€ 12,016	€ 62,398
MT	C	27	1	3	€ 9,833	€ 359	23	27	€ 2,712	€ 3,241	€ 16,144
NL	B	618	12	2	€ 147,639	€ 2,974	768	918	€ 91,747	€ 109,646	€ 352,006
PL	A	1361	47	1	€ 162,675	€ 5,568	1,674	2,001	€ 200,058	€ 239,088	€ 607,390
PT	A	592	9	1	€ 70,775	€ 1,041	454	543	€ 54,265	€ 64,851	€ 190,932
RO	B	676	23	2	€ 161,660	€ 5,453	852	621	€ 101,873	€ 74,210	€ 343,195
SE	A	269	4	1	€ 32,111	€ 518	455	544	€ 54,432	€ 65,051	€ 152,111
SI	C	91	4	3	€ 32,468	€ 1,595	92	110	€ 11,046	€ 13,201	€ 58,311
SK	C	292	7	3	€ 104,588	€ 2,558	241	288	€ 28,766	€ 34,378	€ 170,289
Total		18743	394		€ 2,861,964	€ 64,668	19,010	23,265	€ 2,271,670	€ 2,780,145	€ 7,978,446

EU funding for training on environmental crime

Most of the training provided at EU-level on environmental crime is funding by EU programmes. In the majority of cases shown in the baseline annex on EU-level training for environmental crime, the training providers receive funding through EU programmes – typically the Justice Programme or the LIFE programme, so the costs are borne by the EU and the networks themselves²²⁹. There appear to be very limited costs for the Member States in relation to EU level training.

Second, there are many options for Member States to fund training on environmental crime through EU programmes. One way is for Member States to access funding directly for

²²⁹ Examples of EU level training co-financed by the EU include:

- CEPOL residential activities, which are co-financed up to 95% through grant agreements, see: <https://www.cepola.europa.eu/sites/default/files/Annex%201%20Call%20for%20Proposals%20for%20Grant%20Agreements%202022.pdf>.
- The IMPEL Capacity Building and Training programme, which is funded by the European Commission, see: https://www.impel.eu/wp-content/uploads/2019/09/ToR-2019_23-Capacity-Building-and-Training.pdf.
- The LIFE programme co-financed 60% of the ENPE-LIFE project, see: https://www.environmentalprosecutors.eu/sites/default/files/document/LIFE-ENPE%20Final_report_web%20version.pdf.
- The EJTN and ERA both receive funding from the EU’s Justice Programme to carry out their training activities. E.g., according to Regulation (EU) 1382/2013 on establishing a Justice Programme for the period 2014 to 2020, the European Judicial Training Network shall receive an operating grant to co-finance expenditure associated with its permanent work programme, see: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R1382>.

training provided by their own authorities to national practitioners (with or without EU input on the content). National authorities can benefit from these funds either **directly** by applying for grants through call for proposals under these programmes, or, **indirectly** through third parties (such as NGOs or European networks) that obtain EU grants for projects which include training of national practitioners. Three key EU funding programmes support national and EU level training of practitioners in relation to environment crime:

- **The LIFE Programme**

The LIFE Programme co-finances projects in the field of environmental protection, such projects have included initiatives to reinforce training of national practitioners. For example, between 2016-2021, the LIFE programme financed 60% (grant of EUR 538 945) of a project implemented by the Polish General Directorate for Environmental Protection, whose main aim was to improve training on environmental crime for practitioners along the enforcement chain²³⁰. National level NGOs have also received funding from the LIFE programme for projects that included the provision of training for national practitioners. Between 2018-2022, the Spanish SEO/Bird Life NGO received a grant of EUR 1 158 538 (co-financing rate of 60%) for a project which includes as an objective the training of 100 Spanish SEPRONA officers, eight officers of Portugal's Guarda Nacional Republicana and over 130 environmental officers to improve environmental crime investigation and prosecution²³¹. Similarly, the Bulgarian WWF received a EUR 1 740 018 (co-financing rate of 55%) for a project that will run between 2020-2023, which includes provision of training for national practitioners²³².

- **The Internal Security Fund (ISF) – Police**

For the period 2014-2020, the ISF Police has included yearly calls for proposals in relation to the fight against environmental crime under which projects that aim to improve training of practitioners and capacity building were eligible²³³. Beneficiaries of ISF grants can be state and federal authorities, local public bodies, NGOs, and private companies. As an example, between 2015 and 2017, the ISF Police funded a project entitled Tackling Environmental Crime through Standardised Methodologies (TECUM) with a grant of EUR 780 489. This project was implemented by BS Europe, the Italian Carabinieri, the Spanish SEPRONA, the

²³⁰ See the 'You have right to effective protection of nature' project at: https://webgate.ec.europa.eu/life/publicWebsite/index.cfm?fuseaction=search.dspPage&n_proj_id=5828.

²³¹ See the 'Minimize the incidence of environmental crimes' project at: <https://webgate.ec.europa.eu/life/publicWebsite/project/details/4848>.

²³² See the 'Successful Wildlife Crime Prosecution in Europe' project at: <https://webgate.ec.europa.eu/life/publicWebsite/project/details/5269>.

²³³ See: https://ec.europa.eu/home-affairs/financing/fundings/security-and-safeguarding-liberties/internal-security-fund-police/union-actions_en.

National Environmental Guard of Romania, and CEPOL, with the aim of filling operational gaps in the cross-border fight against environmental crime²³⁴.

- **The Justice Programme**

The Justice Programme is the key EU programme that provides funding opportunities for judicial training and notably provides financial support for the training activities of the EJTN and ERA. The funding areas of the Justice Programme 2021-2027 include criminal justice and specifically environmental crime.

Finally, the baseline research indicates that most of the internal training that Member States provided to the own practitioners is funded by the Member States themselves. There are, however, opportunities for Member States to further access EU funds to support their own training. For instance, the European Structural and Investment Funds (especially the European Regional and Development Fund (ERDF) and the Cohesion Fund (CF) in certain countries) can provide funding for technical assistance linked to implementation of the funds or EU legislation and meeting national obligations under such legislation, as well as resources for networking or capacity building. While each Member State manages and administers this funding differently based on their needs and priorities (e.g. in some there are dedicated technical assistance programmes while in others this objective is funded as part of thematic programmes), it is possible that EU funds can be used to support training and capacity building activities of the public administration and relevant practitioners in many Member States. While the technical assistance funding from the ERDF or the CF is usually directed at national authorities, financing from other EU funds (e.g. LIFE) can be accessed also by other types of beneficiaries, which can then provide training to practitioners at the national level. This includes NGOs and national professional networks that operate. Financing training of practitioners along the enforcement chain with EU funds means that part of the costs associated with the training will be borne by the EU rather than at the national level reducing the direct costs for Member States.

Take measures to raise public awareness of the harmfulness of environmental crime

The range of activities considered under the umbrella of awareness-raising is wide. It includes: public information campaigns, both at national and local level; educational activities; cooperation and collaboration with external bodies or organisations; creating channels for the public to report environmental crime; information aimed at the public and businesses; organisation of events.

Member States have been divided into several groups according to the activities that they currently undertake to raise awareness around environmental crime. For the purposes of this

²³⁴ See: <https://www.bseurope.com/project/tackling-environmental-crimes-through-standardised-methodologies-tecum> and https://ec.europa.eu/home-affairs/sites/default/files/financing/fundings/security-and-safeguarding-liberties/internal-security-fund-police/union-actions/docs/efce_list_of_awarded_projects_2014_en.pdf.

baseline, awareness raising has been considered to relate to raising awareness amongst the public and amongst private enterprises. The baseline does not include awareness raising amongst employees of law enforcement bodies such as the police or public prosecution office; this is considered to be covered under the activities of training and establishment of specialised units. The baseline has been constructed from information given in the 8th Round of Mutual Evaluation country reports.

- Group A: AT, CZ, IE, IT, NL, SE: These Member States provide clear information to raise awareness about environmental crime amongst both the general public and private businesses.
- Group B: DE, FI, LV, PT, SK: These Member States take actions targeting private enterprise OR comprehensive action informing the general public, including a reporting point for environmental crime.
- Group C: BE, BG, DK, FR, LT, LU, PL: These Member States take some action to educate the general public, particularly children.
- Group D: CY, EE, EL, ES, HR, HU, MT, RO, SI : These Member States carry out little or no awareness raising activities according to the source documents of the Country Reports

In practice, awareness raising can take many forms according to the target. The principal targets in this case are assumed to be businesses whose activity may have a strong impact on the environment and the general public.

For both of these groups, targeted information regarding environmental crime would be made available online. This would necessitate the production of accessible content adapted to the target group. In the case of businesses content would detail companies' environmental obligations. This would require human resources for the writing and design of content and creation of the website pages.

Awareness raising with businesses is likely to involve the establishment of a list of businesses to target. This may be composed of pre-existing lists of businesses with particular environmental permits, for example, and is therefore likely to require little in human resources. Targeted information campaigns could include sending of guidelines (paper or email) to businesses. The campaigns would likely involve the organisation of conferences or workshops to provide information about environmental obligations. This may be done in partnership with other organisations, such as relevant NGOs²³⁵. During inspection, inspectors can provide information, including printed guidelines, to businesses. Investment of human resources would be required to write guidelines, if they do not already exist, and send them; also to organise conferences or workshops. If organised in person, conferences would incur costs from renting of venue, provision of food etc.; these would be mostly not incurred if

²³⁵ See Italy country report, p. 15.

organised online. Costs may be reduced if organising in collaboration with other organisations. Printing of awareness material would have costs associated.

Awareness raising amongst the general public would be based primarily on information campaigns. These may be online or advertising in public spaces. Costs involved include human resources for the production of material for advertising and buying of advertising space in public spaces or online. Creation of a dedicated reporting space would require human resources to set it up and to monitor it, although some filtering could be automated. Cost may also increase in the short-to-medium term due to increased information about environmental crime to investigate.

The costs would largely depend on the format of the awareness-raising activities, some reference data on particular examples is summarised in the table below.

Table 15: Reference data about the costs of awareness raising activities

Activity	Cost	Source
Animation (3-minute video including voice over and subtitles for one language)	€9 000	ENPE
Video (2-minute video, single language, no animation)	€1 000	ENPE
Electronic magazine ('E-zine' comprising videos, interviews, key figures from conference)	€5 000 per publication	ENPE
Awareness raising among generalist professionals of criminal law for relevant provisions + preparation of practitioners' guidelines compiling the best practices (EU level cost including meeting organisation, travel expenses, working time of officials)	€3 080 000	Impact Assessment of the Directive on the protection of the financial interests of the EU ²³⁶
Education measures, awareness raising campaigns at the Member State level	100 person days per MS	Impact Assessment of the Directive on combating fraud

²³⁶ IMPACT ASSESSMENT (Part I) Accompanying the document Proposal for a Directive of the European Parliament and of the Council on the protection of the financial interests of the European Union by criminal law, SWD(2012) 195 final, pp. 31-40.

Activity	Cost	Source
		and counterfeiting of non-cash means of payment ²³⁷

Given the strong baseline of activity already undertaken by Member States with regard to awareness-raising activities, the very important synergies that this work would have with efforts to collect and report additional statistical data, and the fact that such work is often carried out by NGOs or other environmental organisations, it seems that adoption of a provision in the ECD with regard to awareness-raising would not generate significant additional costs for Member State authorities.

Set-up an overarching national enforcement strategy to combat environmental crime

The baseline for the development of national strategies on environmental crime has been developed based on the 8th Round of Mutual Evaluation country reports. The information from these reports indicates that in the majority of Member States there is currently no dedicated national strategy on environmental crime. A national strategy does exist in **Finland** and **the Netherlands** and has been recently produced in **Czechia** and **Slovakia**. Austria has indicated that it has plans to produce one. For example, in the Netherlands the strategy and action plan are determined by a coordination group of actors representing different levels of enforcement (public procurement, law enforcement, administrative authorities) and relevant ministries. Priorities for action are based on a prior assessment that identifies current environmental crime threats. In addition, an enforcement strategy sets out guidelines for appropriate responses to different environmental infractions that can be referred to by different levels of enforcement.

Some Member States (BE, ES, MT, SI) have general frameworks that, among other things, address environmental crime. In these cases, other national or regional documents may give further information regarding specific targets or actions to be carried out. In some other Member States (DE, IT, LV, PT, SE), the various institutions involved in combatting environmental crime are left to develop their own strategies. In certain countries, a joint approach between different national ministries or authorities has been taken. Finally, some Member States (EE, IE) have included measures related to combatting waste crime as part of their National Waste Management Plan, produced as part of a legal obligation under Directive 2008/98/EC on waste.

Consequently, countries have been grouped according to how close they currently are to having a dedicated national strategy or action plan on environmental crime coordinated centrally between different relevant institutions. Three groups have been established:

²³⁷ Impact Assessment Accompanying the document Proposal for a Directive of the European Parliament and the Council on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA, SWD(2017) 298 final, Annex 4.2, pp. 185-191.

- **Group A:** CZ, FI, NL, SK These Member States have a dedicated national environmental crime strategy and/or action plan, coordinated at central level.
- **Group B:** BE, DE, EL, ES, IE, IT, PL, PT, SE, SI These Member States have some form of environmental crime strategy. It may be a strategy for one or several institutions but not coordinated centrally; or a section on environmental crime within a general crime strategy or wider environmental framework.
- **Group C:** AT, BG, CY, DK, EE, FR, HR, HU, LT, LV, LU, MT, RO These Member States currently have not indicated that they have any environmental crime strategy.

The main assumption is that a national strategy document should set out the priorities for combatting environmental crime and be accompanied by an action plan that assigns responsibilities and actions to be taken. The documents should build upon an up-to-date assessment of current threats of environmental crime that would be carried out prior to the writing of the strategy, enabling the writers to define priorities. This threat assessment is likely to be linked to development of systems for collection and processing of data. The national strategy and action plan would set out targets for furthering expertise through training, hiring new staff and establishment of specialised units and running of awareness raising activities. It would also set out the framework for inter-institutional cooperation between different actors involved in fighting environmental crime.

The writing of the national strategy would require input from different actors in the environmental crime enforcement chain, including judges, public prosecution, law enforcement and administrative authorities. It would likely be linked to the development of a coordinating group comprising the different actors, which would be responsible for leading the development and implementation of the national strategy and action plan. Therefore, from a cost perspective, the production of the national strategy and action plan would require primarily human resources.

Based on interviews with representatives of the Finnish government regarding the elaboration of Finland's national strategy and action plan on environmental crime, a model for estimating the costs of developing a national strategy has been created.

This model is based on the assumption that there would be one-off cost for the creation of the first national strategy and action plan followed by regular costs for the updating of the strategy and action plan at pre-determined intervals. The writing of the national strategy is assumed to be completed by staff in the relevant ministry based on discussions in a working group comprising relevant actors from the public administration such as representatives from ministries of justice and environment; representatives from the police, public prosecution, border guard and customs; environmental agencies or authorities responsible for inspections. Other stakeholders such as representatives of local and regional authorities, of industry and of NGOs might also be consulted depending on the procedures and means typically used for stakeholder consultations in each Member State. Updating of the action plan and strategy is

assumed to happen on a two-yearly basis and involve a smaller amount of work from staff in the ministries as well as further meetings of the working group.

The model estimates human resources for the **one-off starting cost** to be three months of work for two full-time equivalent staff in the relevant ministry, in addition to two one-day-meetings of a ten-person working group. This comes to six months of full-time equivalent labour cost and 20 days of daily labour cost (EUR 37 578 in total).

Costs for the updating of the strategy and action plan are calculated as one month of work for two full-time equivalents every two years, in addition to the ten-person working group meeting for a full day three times per year to review the strategy and action plan. This gives an annual cost of one month of full-time equivalent labour cost and 30 days of daily labour cost (EUR 14 092).

The cost is applied to all Member States except CZ, FI, NL and SK, which all have an existing national strategy and action plan and are not expected to have new costs compared to the baseline. No annual costs are assigned to these Member States because it is assumed that these costs are already incurred as part of the baseline and a revision of the ECD would not change that. Furthermore, the costs for countries in groups B and C are assumed to be the same and to be the full costs estimated above. This is because having a ‘partial’ strategy might not be enough and therefore both categories B and C are likely to require all the efforts described above.

Table 16: Estimated cost of developing national strategies in the Member States

MS	Baseline	One-off cost	Annual costs
AT	C	€ 37 578	€ 14 092
BE	B	€ 37 578	€ 14 092
BG	C	€ 37 578	€ 14 092
CY	C	€ 37 578	€ 14 092
CZ	A	-	-
DE	B	€ 37 578	€ 14 092
DK	C	€ 37 578	€ 14 092
EE	C	€ 37 578	€ 14 092
EL	B	€ 37 578	€ 14 092
ES	B	€ 37 578	€ 14 092

MS	Baseline	One-off cost	Annual costs
FI	A	-	-
FR	C	€ 37 578	€ 14 092
HR	C	€ 37 578	€ 14 092
HU	C	€ 37 578	€ 14 092
IE	B	€ 37 578	€ 14 092
IT	B	€ 37 578	€ 14 092
LT	C	€ 37 578	€ 14 092
LV	C	€ 37 578	€ 14 092
LU	C	€ 37 578	€ 14 092
MT	C	€ 37 578	€ 14 092
NL	A	-	-
PL	B	€ 37 578	€ 14 092
PT	B	€ 37 578	€ 14 092
RO	C	€ 37 578	€ 14 092
SE	B	€ 37 578	€ 14 092
SI	B	€ 37 578	€ 14 092
SK	A	-	-
Total		€ 864 289	€ 324 108

COSTS OF AN INCREASE IN STAFF IN MEMBER STATE POLICE AND PROSECUTION OFFICES

The organisation of detection, investigation and prosecution of environmental crime varies significantly between Member States. Competence is divided between the judiciary, public prosecution office, police and administrative environmental authorities depending on each country's legal and policing traditions. Variation is also seen in the division of competence between local, regional and national authorities. As the revision of the ECD is expected to result in more environmental crime cases, it can be expected that this higher volume of cases would primarily impact the practitioners along the enforcement chain that deal with investigation, prosecution and conviction. This usually covers the police force, prosecutors

and judges (as shown in the following figure). While this approach does not rule out impacts on the human resource capacity required from other actors, such as administrative environmental authorities (inspectorates) in particular, for reasons of simplicity and data availability, the cost estimates have not taken them into account.

Figure 1: Actors in the compliance assurance chain and those most likely to be impacted by an increase in the number of criminal cases



Source: European Commission, 2021, Environmental Compliance Assurance Guidance Document, Combatting environmental crimes and related infringements

Consequently, the labour costs of additional police officers, prosecutors or judges needed to handle the environmental crime cases can be a useful approximation of the costs associated with an increase of the number of such cases resulting from the revision of the ECD. In order to estimate what number of additional personnel might be needed, it is important to understand the baseline or the current situation across the Member States.

Currently, around half of the Member States already have personnel that have some responsibility for environmental crime. They do not usually work exclusively on environmental crime, but their remit includes other specific types of crimes related to, for example, occupational health and safety, food safety, natural heritage or fraud.

The baseline research does not indicate that having specialised judges or courts for environmental crime is a common practice. The possibility for judges to work exclusively on one type of crime depends on the specificities of each national judicial system and might be unlikely²³⁸. Moreover, one of the interviewed stakeholders signalled that there is no need for judges to be specialised in a particular domain to effectively handle environmental crime cases²³⁹. (This does not, however, exclude the possibility for additional training of judges to improve their knowledge on environmental crime generally and the impacts of the revised ECD.) It was, therefore, more suitable to base calculations of the expected cost of an increase

²³⁸ In addition, some Member States have also highlighted the lack of sufficient number of cases to warrant having a judge dedicated to environmental crime.

²³⁹ Interview with representatives of the Swedish authorities and practitioners.

in the number of environmental crime cases on the human resource needs for police officers and prosecutors in the Member States.

The starting point to generate a realistic prediction of the number of additional staff that Member States would be likely to add in reaction to the revised ECD is the current number of staff working on environmental crime in the police and prosecution offices in each Member State. However, quantitative data for these were only available for a fraction of Member States and were not entirely comparable. Using statistical data on the total numbers of police and prosecutors in each Member State, the percentage of those working on environmental crime was calculated for those Member States who reported data. This is shown in the table below.

Table 17: Quantitative baseline data and calculation of % of police and prosecutors working on environmental crime in Member States for which data available

MS	Total police officers in MS ⁺	Police working on environmental crime ^{**}	% of police working on environmental crime	Total prosecutors in MS ⁺	Prosecutors working on environmental crime ^{**}	% of prosecutors working on environmental crime
AT	30,240	548	1.81%	375		
EL	53,156			585	1	0.17%
ES	169,139	1890	1.12%	2465	174	7.06%
FR	220,305	435	0.20%	2022		
MT	2,289	33	1.44%	19		
NL	50,389	260	0.52%	800	20	2.50%
PL	98,709			5702	59	1.03%
PT	46,363	977	2.11%	1389		
RO	50,024	322	0.64%	2521	200	7.93%
SE	20,040	84	0.42%	948	21	2.22%
SI	7,091			212		
SK	21,918	105	0.48%	978		
Average			1.0%			3.5%

*Data for total police officers in MS from Eurostat; data for total prosecutors in MS from Council of Europe; more details in Table 20.

**Numbers of police and prosecutors working on environmental crime is based on information available in the 8th Round of Mutual Evaluation country reports as well as information obtained through consultations with some authorities; more details in Baseline Annex.

It was then assumed that the lowest observed percentage of police and prosecutorial staff working on environmental crime (0.20% and 0.17% respectively, cells shaded grey²⁴⁰) from across the Member States could be considered a reasonable proxy for the amount of *additional* staff that each Member State would be likely to take on to carry out a larger volume of work on environmental crime. The average of the available baseline data has also been calculated (1.0% for police and 3.5% for prosecutors), and these data are used to

²⁴⁰ These proportions are based on the proportion of total police working on environmental crime in France and the proportion of the prosecution in Greece, as these were the lowest figures from those Member States for which data were available.

generate an estimate for the number of police and prosecutors that would require training in Section 5.2.1 above (Variable 3).

The total estimated costs for additional staff linked to the revised ECD presented in the impact assessment are shown in the table below for reference.

Table 18: Costs for additional staff in police and prosecution offices in response to revised Directive

MS	Total police officers in MS*	Total prosecutors in MS*	Additional police (0.02%)	Additional prosecutors (0.17%)	Cost police	Cost prosecutors
AT	30,240	375	60	1	€ 3,768,828	€ 40,461
BE	41,370	879	82	2	€ 5,155,966	€ 94,840
BG	28,742	1526	57	3	€ 3,582,131	€ 164,649
CY	4,927	123	10	1	€ 614,055	€ 63,119
CZ	40,040	1238	79	2	€ 4,990,207	€ 133,575
DE	244,800	5882	483	10	€ 30,509,558	€ 634,642
DK	11,050	671	22	1	€ 1,377,168	€ 72,398
EE	3,893	169	8	1	€ 485,187	€ 63,119
EL	53,156	585	105	1	€ 6,624,861	€ 63,119
ES	169,139	2465	334	4	€ 21,079,886	€ 265,963
FI	7,684	393	15	1	€ 957,661	€ 42,403
FR	220,305	2022	435	3	€ 27,456,733	€ 218,165
HR	20,199	595	40	1	€ 2,517,412	€ 64,198
HU	39,423	1887	78	3	€ 4,913,310	€ 203,599
IE	14,499	109	29	1	€ 1,807,018	€ 63,119
IT	274,653	2230	542	4	€ 34,230,154	€ 240,607
LT	8,247	666	16	1	€ 1,027,828	€ 71,858
LU	1,987	55	4	1	€ 247,641	€ 63,119
LV	8,049	452	16	1	€ 1,003,151	€ 48,769
MT	2,289	19	5	1	€ 285,279	€ 63,119
NL	50,389	800	99	1	€ 6,280,009	€ 86,316
PL	98,709	5702	195	10	€ 12,302,157	€ 615,221
PT	46,363	1389	92	2	€ 5,778,246	€ 149,867
RO	50,024	2521	99	4	€ 6,234,519	€ 272,005
SE	20,040	948	40	2	€ 2,497,596	€ 102,285
SI	7,091	212	14	1	€ 883,755	€ 63,119
SK	21,918	978	43	2	€ 2,731,652	€ 105,522
Total	1,519,226	34891	3000	64	€ 189,341,968	€ 4,069,175

*The sources for the data on numbers of police officers and prosecutors in the Member States are as follows:

Police: data from Eurostat, https://ec.europa.eu/eurostat/databrowser/view/crim_just_job/default/table?lang=en%20b, except Ireland, found at: <https://www.garda.ie/en/faqs/>. All police data are 2018 except Italy latest figure available 2016.

Prosecutors: data are for 2018 and taken from Council of Europe, https://public.tableau.com/app/profile/cepej/viz/CEPEJ-Explorerv2020_1_0EN/Tables.

These estimates are highly dependent the following uncertainties:

- **The baseline existing capacity within Member States:** there is only qualitative information about this for the majority of Member States, as detailed in the Baseline annex. In reality, some Member States may already have sufficient or close-to sufficient capacity to handle environmental crime and would not need to engage the additional staff shown in the estimate. Alternatively, some Member States may need more capacity. As discussed in Section 1.3 on limitations, the baseline information

relies to a large extent on Member State reporting linked to the 8th Round of Mutual Evaluations, and some information may have been omitted by Member States in their reporting.

- **The precise increase in environmental crime cases and their distribution across the Member States:** it was not possible to predict this with any accuracy, as many factors will influence this. Some information on where environmental crime exists in the Member States is available in the impacts annex, but it was not enough to confidently make quantitative estimates in this regard.
- For reasons of simplicity and data availability, and an assumption that it is primarily those responsible for criminal investigations who will be most impacted by the revised ECD, **the estimates for additional staff concern only the police and prosecution.** In those Member States where the administrative authority (i.e. environmental inspectorates) has a strong role in enforcement and can be expected to support the police and prosecution²⁴¹, the increase in staff might be required in those institutions. Nevertheless, the numbers and costs might be equivalent in such cases.
- **It is assumed that the additional personnel would work full-time on environmental crime to capture a potential increase in the number of criminal cases.** In practice, this may not be realistic and in some Member States, the police officers or prosecutors might dedicate only a proportion of their time exclusively to environmental crime cases, resulting in lower annual costs.
- **It is assumed that all Member States would choose to recruit additional personnel** to handle the increase in environmental crime cases. In practice, the decision to hire any additional personnel would depend on the decision-making in each Member State. In some cases, synergies with training or existing structures/personnel working with such cases may be possible, reducing the annual costs.

²⁴¹ According to the baseline research, these Member States are: CY, CZ, EE, FR, IE, LT, PL, PT, SE.

ANNEX 3: WHO IS CONCERNED AND HOW?

1. PRATICAL IMPLACATIONS OF INITIATIVE

1.1. Member State public authorities

The adoption of additional provisions on the implementation of the ECD are expected to create some costs for judicial and environmental authorities and law enforcement and judicial practitioners in the Member States, both one-off and ongoing. The greatest burden is the need for additional resources in terms of staff will be required in all Member States along the enforcement chain (mainly in the police and prosecution offices as the institutions most often responsible for investigation and prosecution of environmental crime), due to the combined impacts of all policy measures aimed at increasing the number environmental crime cases detected, prosecuted and convicted. Equally, an obligation for Member States to collect and report statistical data according to new and more harmonised standards would create administrative burden in terms of possibly adapting systems in place for law enforcement to record cases and in terms of elaborating those statistics at national level, before transmitting them to the EU. All Member States would need to provide some degree of additional training to relevant professionals along the enforcement chain, taking into account the revised terms of the Directive and the additional personnel; the resources required depend on the extent to which Member States already provide regular training on environmental crime. Finally, there are some additional costs associated with provision of national focal points in different institutions and the development of national strategies on combating environmental crime.

1.2. The European Commission

The implications of the proposal on the European Commission are considered marginal and limited in times. For instance, most of the obligations, which rely upon the Commission, only occur once and are linked to the follow-up of the transposition of the Directive. Recurring costs are set to be highly limited.

1.3. EU businesses

There are no direct costs foreseen for EU businesses associated with the Directive; compliance costs stem from administrative environmental law. More effective law enforcement in the area of environmental crime would protect legally operating businesses from unfair competition from illegal business activity. Furthermore, reputational damage for an industry (e.g. waste management, chemical production) that is impacted by illegal activity would be reduced, providing additional benefits for compliant businesses. As environmental crime will continue to be linked to a breach of administrative laws listed in an Annex to the Directive, there is limited risk that businesses could be sanctioned for environmental activity that is permitted under administrative law.

1.3.1. SMEs

SMEs face somewhat higher risks due to less capacity to pay fines and/or engage legal expertise and carry out due diligence activities. The option of linking fines to the financial situation of a company, in addition to other circumstantial aspects of the crime, could reduce the vulnerability of SMEs to such fines.

1.4. EU citizens

Increased enforcement of environmental criminal legislation is expected to have positive impacts on society at large. In addition to the quality of life benefits associated with an environmental protection, the reduction in criminal activity supports better governance, reduced corruption and reduction of the risks posed by large organised criminal groups.

2. SUMMARY OF COSTS AND BENEFITS

Overview of benefits – preferred option

<i>I. Overview of Benefits (total for all provisions) – Preferred Option</i>		
<i>Description</i>	<i>Amount</i>	<i>Comments</i>
<i>Direct benefits</i>		
Reduction in all types of environmental crime in the EU due to increased enforcement activity	Indicatively, combined value of illegal revenue derived from environmental crime and losses for legal commerce and tax revenue at between USD 91-259 billion annually	Not possible to quantify the exact amount of environmental crime cases that would be tried and convicted or their distribution across the Member States.
Reduction in types of environmental not previously included in the Directive, such as illegal logging and timber trade and fishery crimes	Indicatively, the worldwide revenue from fishery crimes has been estimated at between USD 11 – 30 billion annually. The EU is responsible for almost EUR 3 billion of losses due to illegal logging, with an import of around 20 million cubic meters of illegal timber every year	As above, it is not directly quantifiable.
<i>Indirect benefits</i>		
Improved state of the environment due to reductions in activity that pollutes, harms species	Citizens and society benefit from a cleaner environment and a reduction in negative health impacts.	Criminal law is only one of many legislative tools aimed at environmental protection and enhancement and criminal law measures are a last resort when other measures are not sufficient.

Reputational and competition benefits for legally compliant businesses	Businesses that comply with environmental law will not face unfair competition from those that do not. The reputation of certain industries will recover if there is less criminal activity.	Not quantifiable, but point was raised by a majority of businesses consulted.
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Overview of costs – preferred option

The tables below summarise those costs that could be directly quantified for each policy objective. For objectives 1, 2 and 3, only transposition costs are foreseen; these are shown in a range depending upon the complexity of national laws and required efforts. For Member States, the main costs are continuous costs for training and additional staff to implement the Directive. A few costs have not been directly quantified due either to lack of data (i.e. investigative tools).

To the extent possible potential differences between Member States, which may impact the costs they incur, have been considered and reflected in the cost estimations. Factors that may result in different costs across the Member States include differences in the baseline or the size of the workforce along the enforcement chain (for details see Annex 4 [on baseline] and Annex 2 B [on analytical models]).

Under some of the objectives, certain costs may also be incurred by the European Commission. However, these costs are considered marginal and only occurring once for most of them.

Table of the Costs for the Commission

Table of the costs for the Commission				
Objective	Preferred option	Implementing measures for the Commission	One-off / Set-up / Recurring costs	Costs for the Commission in euros
5: Improving statistical data collection and reporting on environmental crime	/MS to collect, and transmit statistical data	Provide reporting format to the MS / Definition of minimum standards	One-off costs	111 297
	/Development of minimum standards to compare comparable data	Maintenance of standards	Recurring costs	16 582
	/Biennial report by the Commission on data received by MS	Biennial EU report on the data received by MS	Recurring costs	27 636
Reporting	Reporting obligations which rely on the Commission	Report on the transposition by MS 2 years after the entry in force of the Directive	One-off costs	404 581
		Evaluation Report 5 years after transposition	One-off costs	422 720

Table of the costs for Member States

Table of the costs for Member States				
Costs of transposition objective 1 to 6	Total cost for all MS in	475 594		
Objective	Preferred option	Implementing measures	One-off / Set-up / Recurring costs	Total costs for all MS (if different figures in the same cell - means there are low-medium or high option)
4: Improving the effective cooperation and coordination between Member States	Introducing a package of provisions directly fostering cross-border cooperation	Investigative tools	Recurring	Data not available
		Set up of national contact points at all level of the enforcement chain and cooperation through EU agencies	Recurring	475 594 / 792 656
5: Improving statistical data collection and reporting on environmental crime	MS to collect, and transmit statistical data Development of minimum standards to compare comparable data Two-annual reporting the Commission on data received by MS	Set up national coordination procedure	One-off	146 201
		Definition of minimum standards	One-off	281 833
		Maintenance of standards	Recurring	35 229
		Coordination, collection and reporting	Recurring	220 182
6: Improving the effective operation of the enforcement chain	Insert in the Directive obligations that directly strengthen the effectiveness of the law enforcement chain	Training	Recurring	7 978 446
		Raise public awareness (depends on the choice made by the MS)	3 min video	9 000
			2 min video	1 000
			per electronic message	5 000
		National strategy	Set up	864 289
			Recurring	324 908
Increase of staff	Recurring	4 069 175		

ANNEX 4: BASELINES

1. Objective 1: Updating the scope of the Directive; introduce a simple mechanism to keep the Directive up-to-date also in the future

1.1 Baseline information on existing criminal sanctions in three key areas likely to become criminalised under the revised ECD

Information has been collected from the following sources:

- IIU Fishing:
 - Milieu Consulting, 2021. Study on the sanctioning systems of Member States for infringements to the rules of the Common Fisheries Policy.
 - EMPACT, 2020. Compilation of national criminal law provisions on illegal fishing in the Member States participating in the OA 2.1 and Overview of EU law on fisheries control, inspection and enforcement.
- Illegal logging and timber trade:
 - European Commission, 2019. Key obligations and practical aspects of the application of the EUTR – 2019.
- Poaching / wildlife crimes:
 - LIFE-ENPE, 2017. Environmental prosecution report: tackling environmental crime in Europe, LIFE14 GIE/UK/000043.
 - European Network against Environmental Crime (ENEC), Study on the implementation of Directive 2008/99/EC on the Protection of the Environment Through Criminal Law.

Member State	IIU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
AT	Partly covered by criminal law, if rights of other people are violated. StGB paragraphs 137, 138 The Market Organisation Act 2007	Included in Forestry Act with penalties. Forestry Act para 174; Bundesgesetz über die Überwachung des Handels mit Holz (Holzhandelsüberwachungsgesetz -	ECD 3f and 3h covered. 3g transposition ambiguous and missing derivatives in national legislation. Austrian law (ArtHG) provides for control, enforcement, and sanction mechanisms relating to the violations described in CITES

Member State	IUU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	forms the national legal basis of the IUU Fisheries Ordinance.	HolzhÜG), Article 14, 15	and Regulation 338/97. Penalties for violation of ArtHG and the EC Regulation 338/97 range EUR 1,453.50 to a maximum penalty of EUR 36,340.00 depending upon the offence and within which Annex the species is listed. Imprisonment for two years, seizure of all specimens, including containers, also is applicable under Austrian law and EC Regulation 338/97 depending upon the offence.
BE	Administrative and criminal sanctions in law, criminal sanctions mostly used in practice	Covered by general administrative law. Administrative fines, criminal fines, imprisonment, seizures and suspension of authority to trade. Law of 21.12.1998 on sustainable ways of consumption and production, Article 17 &18	No inclusion of possession of wildlife at Federal Level; No criminal provisions at Federal Level. Sanctions differ at regional level but can include imprisonment and/or fines. Article 127 of the Programme Law of 27 December 2004 (which came into force on January 10, 2005) sets a fine of EUR1000-50 000 and/or a prison sentence of 6 months to 5 years for violations of EC Reg. No. 338/97.
BG	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice. Illegal fishing is considered a crime, according to Bulgarian Penal Code, e.g. when using explosives, poisonous or stunning substances or in quantities considerably exceeding the norms of amateur fishing; in reserved places or in law waters; in non-industrial waters during the reproductive period of the fish or; of the kinds threatened by extinction. Penalties include imprisonment and fines, and revocation of rights.	Covered by EUTR specific legislation and Forest (management) law. Administrative fines, seizure of timber/timber products, suspension of authority to trade. Unspecified legal basis for infringements.	ECD 3f, 3g and 3 h covered.

Member State	IIU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
CY	<p>Administrative and criminal sanctions in law, administrative sanctions mostly used in practice</p> <p>Illegal fishing actions that are criminal offences are specified in the Fisheries Law, the relevant Regulations, and the Sponge Fishing Law (Chapter 146) and e.g. includes fishing without a valid licence and to fish for sponges or use a trawler. Penalties include imprisonment up to three years and fines up to CYP 500.</p>	<p>Covered by Forest (management) law. Administrative fines, imprisonment, seizure of timber/timber products, suspension of authority to trade. Unspecified legal basis for infringements.</p>	<p>ECD 3f, 3g and 3 h covered.</p> <p>According to the Law on the Protection and Management of Nature and Wildlife (No. 153(I)/2003) sanctions (fine/imprisonment) can be as high as CYP 10,000 (approx. EUR 17,500) and/or not more than 3 years imprisonment.</p>
CZ	Unknown	<p>Covered by EUTR specific legislation and general administrative sanctions law. Administrative fines, seizure of timber/timber products, suspension of authority to trade. 1) Act No. 226/2013 Coll on placing timber and timber products on the market Article 12; 2) Act No. 255/2012 Coll on the Control Article 15; 3) Act No. 500/2004 Coll Code of Administrative Procedure Article; 4) Act No. 250/2016 Coll., on Liability for Administrative Offences and Proceedings</p>	<p>ECD 3f, 3g and 3h covered.</p> <p>Penalties for violation of the Act on Trade in Endangered Species stipulates fines ranging from EUR 6,250 for private persons to EUR 46,875 for offences committed by businesses.</p> <p>An amendment was made to the Criminal Code (No. 134/2002 Coll) allowed for infringements against protected species to be treated as criminal offences with penalties including imprisonment. The maximum penalty under the Criminal code (max. 8 years).</p>
DE	Sanctions provided by law are mainly criminal, administrative sanctions are mostly used in practice	<p>Covered by EUTR specific legislation and Forest (management) law. Administrative fines, criminal fines, imprisonment, seizure of timber/timber</p>	<p>Administrative offences for infringement of Regulation (EC) No. 338/97 can be punished under the Federal Nature Conservation Act (65 para.3) by a fine of up to EUR50,000 while criminal acts related to Regulation (EC) No. 338/97 can be sanctioned by</p>

Member State	IIU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
		products. Holzhandelssicherungsgesetz HolzSiG, Article 2, 7, 8	imprisonment (max. 5 years) or a fine. The Federal Agency for Nature Conservation (BfN) also initiates administrative offence procedures.
DK	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice	Covered by Timber Act No. 1225, 18/12/2012. Criminal fines, imprisonment, seizure of timber/timber products. Timber Act no. 1225; 18/12/2012, Article 7	Covers ECD 3h and 3f and 3g broader. No set minimum or maximum amount. However, violations that are intentional, for commercial purposes, or committed with gross negligence may carry a fine of imprisonment up to one year. The most frequently used sanctions are fines and/or confiscation. Specimens in Annex B imported in good faith for non-commercial use (e.g. tourist souvenirs), usually result in confiscation. Cases of this nature involving Annex A specimens usually result in fines. Violations that are intentional or committed with gross negligence and/or for commercial use will normally be punished by a fine together with confiscation. The proposed fine will be equivalent to the market value for Annex B specimens and two to three times the market value for specimens of Annex A. According to the Danish Criminal Code any economic gain of a perpetrator may also be (partly) confiscated.
EE	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice. All criminal offences against the environment are consolidated in the Estonian Penal Code. Illegal fishing is criminalised by the Penal Code, if the damage is more than 4000 EUR. Penalties depends on the circumstances of the crime and can	Covered by Forest (management) law and by Penal (procedural) law. Administrative fines, criminal fines, imprisonment. Penal Code Charter 20; Forest Act chapter 6	ECD 3f and 3g endangerment missing. 3h covered. Regulation No. 69 provides the legal framework for sanctioning environmental infractions caused by destroying or damaging of protected natural objects or protected species. In the case of infringement with specimens of species listed in Annexes A–D of this regulation, compensation for environmental damages will be between EEK 200–1 000 000 (EUR 12–65 000), depending on the conservation status and the market value of the specimen. Highest fine for violation of the Nature Conservation Law (2004) is EEK 18 000

Member State	IIU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	be punishable by a pecuniary punishment or up to three years' imprisonment.		(EUR 1 150) or arrest, or up to EEK 50,000 (EUR 3 200) for a corporation. The Penal Code also allows for pecuniary sanctions and for imprisonment of up to five years for false declaration, forged documents, and other attempted means of evading detection.
EL	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice. The legislation on penalties for fishing infringements consists of the "Fishing Code", "Supplementary measures for the implementation of EU provisions for point system in regard to serious infringements in the fisheries sector" and "Supplementary measures for the implementation of EU provisions on the Common Organisation of the Markets in fishery and aquaculture products and the establishment of a Community Control System in regard to the distribution and commerce of such products". Penalties include for example varies according to crime and for example includes removal of fishing licences, fines and imprisonment for up to three years.	Covered by EUTR specific legislation and oint Ministerial Decision No. 134627/5835/23-12-2015) (GG2872/2015), Article 10. Administrative fines, imprisonment, seizure of timber/timber products. Join Ministerial Decision No.134627/5835/23-12-2015 (GG 2872/2015), Article 9; National Legislation (Law 86/1969)	ECD 3f, 3g an 3 h covered. Penalties for violation of CITES under Greek Law range from imprisonment (1 month to two years) and a fine of 200,000 Greek Drachmas (around EUR 587) and GRD 5 000 000 (around EUR 14,674), depending on the nature of the offence. According to the Greek Customs Code, the penalty for illegal import or transportation is EUR 3000 for wild animal specimens; 3 times the amount of evaded duties and taxes (at least EUR 1 500) for specimens or samples of wild fauna and flora
ES	Administrative and criminal sanctions in law, administrative	Covered by Forest (management) law and General administrative sanctions law;	ECD 3f incomplete due to missing possession of wildlife and ambiguous around

Member State	IIU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	<p>sanctions mostly used in practice.</p> <p>Fishing actions which can be considered criminal offences (Spanish Criminal Code, Articles 334, 335, 336, 338, 339) for example include fishing of protected species of wild fauna or fishing in areas subject to authorisation without the necessary licence. Penalties include for e.g. fines and imprisonment of up to two years.</p>	<p>Administrative fines, seizure of timber/timber products, suspension of authority to trade. Ley 21/2015 de Montes, Article 67, 68, 69 and 74</p>	<p>offences covered. 3g incomplete due to missing possession of wildlife and ambiguous around if wildlife parts are covered. 3h incomplete due to no gross negligence.</p> <p>There are two possibilities for considering an offence an act against CITES: one is included in Articles 332 and 334 if the Criminal Code which provide for offences against protected flora and fauna and the other is included in the “Organic Law 12/1995 to Deter Smuggling”.</p> <p>According to Articles 332 and 334 of the Criminal Code, sentences vary from six months to two years imprisonment or a (daily) fine from eight to twenty-four months (as a day fine can reach up to EUR 300, the maximum fine would be EUR 41 265).</p>
FI	<p>Administrative and criminal sanctions in law, administrative sanctions mostly used in practice</p>	<p>Covered by EUTR-specific legislation; Administrative fines, criminal fines, imprisonment, seizure of timber/timber products, suspension of authority to trade. Chapter 7 of the Coercive Measures Act (806/2011); Chapter 4, section 38 of the Act on the Execution of a Fine (672/2002); Chapter 2, section 8 of the Act on Conditional Fines (1113/1990)</p>	<p>ECD 3f, 3g and 3h covered.</p> <p>Section 58 of the Nature Conservation Act details the sanctions for violation of Art. 12.1 and 2 of EU Council Regulation 338/97 and refers to the environmental crime sections of the Penal Code. Chapter 48, section 5 of the Penal Code prescribes penalties of nature conservation offences with a maximum penalty of 2 years imprisonment. Any financial gain/corresponding monetary value of the specimen also is forfeited to the State.</p>
FR	<p>Administrative and criminal sanctions in law, administrative sanctions mostly used in practice.</p> <p>Illegal fishing crimes are covered by the Rural and Maritime Fisheries Code - Book IX: Marine Fisheries and Marine Aquaculture. Penalties</p>	<p>Covered by forest (management) law. Administrative fines, criminal fines, imprisonment, suspension of authority to trade. Loi d'Avenir pour l'Agriculture, l'Alimentation et la Forêt (LAAF), Article 76</p>	<p>Penalties for violation of EC Reg. No. 338/97 are punishable through Article L.415-3 of the Environment Code with a maximum fine of EUR 9 000 and/or six months imprisonment; or Article 414 of the Code of Customs by a maximum prison sentence of three years, and a fine ranging from one to two times the object's value. The sanction may be increased to a maximum of 10 years and the fine increased to a maximum of five times the value of the specimen if the act of smuggling endangers human health,</p>

Member State	IUU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	are found in Article L954-4 of the Rural and Maritime Fisheries Code and provides for a fine EUR 22 500.		moral or public security, or when the illegal activities are part of organised crime.
HR	<p>Administrative and criminal sanctions in law, administrative sanctions mostly used in practice.</p> <p>According to the Croatian legislation, the national penal provisions on illegal fishing are defined by the Criminal Law of the Republic of Croatia (OG RH 125/11, 144/12, 56/15, 61/15, 101/17, 118/18) as environmental offences set out in Article 204, and e.g. includes the destruction of protected habitats and the use of electric shock generators in fishing.</p>	<p>Covered by EUTR-specific legislation. Administrative fines. Zakon o provedbi uredbi Europske unije o prometu drva i proizvoda od drva ("Narodne novine", broj 25/2018), Article 8</p>	<p>3f, 3g and 3h covered.</p>

2. OBJECTIVE 3 OF IMPROVING THE PROPORTIONALITY AND DISSUASIVENESS OF SANCTION TYPES AND LEVELS

2.1 Existing sanction systems in Member States based on profit obtained from a criminal act or based on the financial situation

Information has been collected from the following sources:

- European Commission (2020). EVALUATION of the 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. SWD(2020) 259 final.
- Hall, M.; Wyatt, T. (2017). LIFE-ENPE. Environmental prosecution report – tackling environmental crime in Europe.
- Milieu Consulting (2021), Study on the sanctioning systems of Member States for infringements to the rules of the Common Fisheries Policy.

Member State	Sanctions under national environmental criminal law and administrative fines in MS	Sanctions under national administrative law in scope of Article 3	Fisheries legislation in MS
DK			Fixed penalty notice: fine for the master of the equivalent of 1/4 the value of the catch concerning the infringement. If the licence holder is also the master, he/she should be fined 1/3 of the value. These rates are binding on the administration.

Member State	Sanctions under national environmental criminal law and administrative fines in MS	Sanctions under national administrative law in scope of Article 3	Fisheries legislation in MS
EL		<p>Natural persons acting for the benefit of legal persons are punished as natural persons. Additionally, legal persons can be punished as follows:</p> <p>An administrative fine up to three times the amount of the value of the benefit attained or pursued</p>	
ES		<p>Administrative sanctions include fines within a range set for each area of crime. The amount of the fine will be determined taking into account elements such as the extent of the damage, the degree of involvement and the benefit obtained, the economic capacity of the actor, the intent, and the repetition of the offense.</p>	
FI			<p>For legal persons from EUR 2,000 up to EUR 100,000 (EUR 50,000 for non-serious infringements).</p> <p>The maximum level of the sanctions shall be five times the value of such products, if it is greater than the set EUR 100,000 or EUR 50,000 .</p>

Member State	Sanctions under national environmental criminal law and administrative fines in MS	Sanctions under national administrative law in scope of Article 3	Fisheries legislation in MS
HU	The maximum level of fines for crimes specified in the ECD is three times the financial benefit gained or aimed to be gained, but at least 500,000 HUF (EUR 1,500). If the benefit gained or intended to be gained through the criminal act is not financial advantage, the court imposes the fine considering the financial situation of the legal entity, but at least HUF 500,000 (EUR 1,500).		
LT			Under the Law on Fisheries, a fine may be imposed for economic operators in the range of 2-8 times the value of the fishing products obtained by committing the serious infringement
LV			In practice, the inspectors apply Art. 44(2) IUU directly, and tie the amount of the penalty with the value of the fishery products
MT			The Fishing Order sets the following fines: - Fine of five times the value of the fishery products obtained for serious infringement - Fine of EUR 1,000 to EUR 10,000 for serious infringement if no fishery products obtained.

Member State	Sanctions under national environmental criminal law and administrative fines in MS	Sanctions under national administrative law in scope of Article 3	Fisheries legislation in MS
NL	If an offence against one of the ECD's provision is punishable by a fine in the sixth category and that category does not permit an appropriate penalty, a fine may be imposed up to a maximum of 10 % of the annual turnover of the legal person in the business year preceding the judgment or decision.		
PL	Environmental crimes are fined between EUR 250 and 1,250,000, but not higher than 3% of the yearly income of the entity		In case of serious infringements: a fine of five times the value of fishery products
SE			- Fine of up to SEK 500,000 (EUR 48,600) - Special fee based on the market value or the selling price of the catch, depending on which is higher
SK		Confiscation of a sum of money in amount of €800 - 1 660 000 Euro. When determining the amount of money to be confiscated the court shall consider seriousness of the committed criminal offence, scope of the offence, gained benefit, damage arisen, circumstances of the commission of the criminal offence and consequences for the legal person	

3. OBJECTIVE 4 OF IMPROVING THE EFFECTIVE COOPERATION AND COORDINATION BETWEEN RELEVANT AUTHORITIES

3.1 Use of investigative tools in the Member States for environmental crime

Information has been collected from the following sources:

- 8th round of mutual evaluation country reports

Member State	All conventional / legal techniques	Special investigative techniques need authorisation from magistrate or judge	Special investigative techniques require link to severity or type of crime, such as organised crime	Difficulties in getting evidence / full range of available techniques not used	Lacks power to use full range of measures for environmental crime	Covert operations rare	No special investigative techniques used, potentially related to lack of environmental cases
AT	x						
BE	x	x	x				
BG				x			
CY					x		
CZ	x	x					
DE	x		x			x	
DK	x		x				
EE	x		x				
ES	x						
FI	x		x				

Member State	All conventional / legal techniques	Special investigative techniques need authorisation from magistrate or judge	Special investigative techniques require link to severity or type of crime, such as organised crime	Difficulties in getting evidence / full range of available techniques not used	Lacks power to use full range of measures for environmental crime	Covert operations rare	No special investigative techniques used, potentially related to lack of environmental cases
FR	x		x				
GR	x		x				
HR			x	x			x
HU	x					x	
IE	x		x				
IT	x		x				
LT	x		x				
LU							x
LV	x	x					
MT							x
NL	x	x					
PL	x		x				
PT	x	x					

Member State	All conventional / legal techniques	Special investigative techniques need authorisation from magistrate or judge	Special investigative techniques require link to severity or type of crime, such as organised crime	Difficulties in getting evidence / full range of available techniques not used	Lacks power to use full range of measures for environmental crime	Covert operations rare	No special investigative techniques used, potentially related to lack of environmental cases
RO			x				
SE			x		x		
SI							x
SK							

4. OBJECTIVE 5: IMPROVING STATISTICAL DATA COLLECTION AND REPORTING WITH REGARD TO ENVIRONMENTAL CRIME

Based on the available information on the responsibilities for investigating and prosecuting environmental crime in the Member States as well as the current availability of relevant statistical data, three groups can be identified with regard to the efforts that Member States would need to take to centralise their existing statistical data:

- **Member States that require more efforts to centralise and publish their (existing) statistics:** These include Member States whose data are often widely dispersed among various institutions or agencies, are not available in a centralised data base, and/or are dispersed in various federal or autonomous entities of the country. **For the purposes of the baseline assessment, these Member States are considered to have seven agencies.**
- **Member States that require medium efforts to centralise and publish their (existing) statistics:** These include Member States whose data are partly available in a central data base, or where significant efforts have already led to a compilation of statistics of various agencies in a few centralized data bases. **For the purposes of the baseline assessment, these Member States are considered to have six agencies.**
- **Member States that require less efforts to centralise and publish their (existing) statistics:** These include Member States that generally have a good level of central reporting from only a few responsible agencies and/or a few central agencies that already compile some (yet not all) statistics in a common data base from various entities. **For the purposes of the baseline assessment, these Member States are considered to have two to five agencies.**

Based on these considerations, for the baseline assessment the Member States can be divided into six groups based on the number of agencies currently involved with

statistical data on environmental crime as summarised below.

Group	7 agencies	6 agencies	5 agencies	4 agencies	3 agencies	2 agencies
Member States	BE, EL, ES, IT, NL	FR, PL, RO	IE, SE, SI	AT, BG, DK, EE, FI, LT, PT	CY, CZ, DE, HR, MT, SK	HU, LU, LV

5. OBJECTIVE 6: IMPROVING THE EFFECTIVE OPERATION OF THE ENFORCEMENT CHAIN

5.1 Baseline information on training

5.1.1 Training provided at national level along the enforcement chain

- Information has been collected from the country reports of 8th Round of Mutual Evaluation

MS	Level of training provided					Topics covered by the training				
	Police	Public prosecutors	Judges	Customs	Administrative authorities	Police	Public prosecutors	Judges	Customs	Administrative authorities
AT	Initial and continuous training	Initial and regular training	Initial and regular training	No information	Initial and continuous training	General courses /investigative tools, internal cooperation	General courses /investigative tools, internal cooperation, cross-border cooperation	General courses, internal cooperation, cross-border cooperation	No information	General/investigative tools, internal cooperation
BE	Initial training only	Regular training	Regular training	No information	No information	General courses/investigative tools			No information	

BG	Initial training only	Initial training only	Regular training	Initial training only	No information	General courses /investigative tools, cross-border cooperation	General courses	General courses	No information	
CY	No training at national level									
CZ	Initial and continuous training	Regular training	Regular training	Initial and continuous training	Initial and continuous training	No information				
DE	Initial and continuous training	Regular training	Regular training	Initial and continuous training	Initial and continuous training	General courses/investigative tools, internal cooperation, cross-border cooperation				
DK	Limited training	Regular training	No training at national level	No training at national level	No information	Mainly waste related	General courses/investigative tools, internal cooperation	No training		No information
EE	Env. Inspectorate - initial and continuous training	Continuous training	Ad hoc training	Ad hoc training	Initial and continuous training	General courses /investigative tools	General courses /investigative tools	General courses	General courses /investigative tools	No information
EL	Ad hoc training			No information	Ad hoc training	General courses /investigative tools	General courses /investigative tools	General courses	No information	
ES	Initial and continuous training	Regular training		No information	No information	General courses /investigative tools, internal cooperation	General courses /investigative tools, internal cooperation	No information		

FI	Initial and continuous training	Regular training		Initial and continuous training	Initial and continuous training	General courses /investigative tools	General courses /investigative tools, internal cooperation	No information		
FR	Initial and continuous training	Initial training	Regular training	Initial and continuous training	No information	General courses /investigative tools, internal cooperation	No information	No information	General courses /investigative tools, internal cooperation	No information
HR	No training at national level									
HU	No training at national level	Regular	Ad hoc training	No training at national level	No information	No information				
IE	Initial training only	No training at national level		Initial training only	Initial training only	No information				
IT	Initial and continuous training	Regular training		No information	No information	General courses/investigative tools, cross-border cooperation	No information			
LT	No training at national level									
LV	Initial training only	No training at national level		No information	No information	General courses/investigative tools	No training		No information	
LU	No training at national level									
MT	Initial training	No training at national level		No	No information	No information	No training		No information	

	only			information					
NL	Initial training only	Ad hoc training	Ad hoc training	No information	No information	General courses/investigative tools	No information		
PL	Initial and continuous training	Regular training	Ad hoc training	No information	No information	General courses/investigative tools, internal cooperation, cross-border cooperation, multi-disciplinary training	General courses/investigative tools, internal cooperation, cross-border cooperation, multi-disciplinary training	No information	
PT	Initial training only	Initial and regular training	Regular	No information	No information	General courses/investigative tools, internal cooperation, cross-border cooperation	General courses/investigative tools, internal cooperation, cross-border cooperation	General courses, internal cooperation, cross-border cooperation	No information
RO	Initial training only	Ad hoc training	Ad hoc training	No information	No information	No information			
SE	Initial training only	Regular training		No information	Initial training only	No information			
SI	No training at national level								
SK	Currently no training at national level, however it is being developed								

5.1.2 Training provided at EU level

Organisation	Practitioners targeted	Example of courses
CEPOL	LEAs and public prosecutors	<ul style="list-style-type: none"> • May and November 2021: Two online webinars to enhance the effectiveness of investigations and reinforce international cooperation against cross-border environmental crime. • Q3/Q4 2021: Face to face course on fighting environmental crime and reinforcing cross-border cooperation. • 19/11-22/11/2019: Three-day face to face course • March and May 2019: Two one day online webinars, one to exchange best practice regarding arson cases, one on the application of financial investigative techniques in environmental crime cases • 09/10–30/10/2019: One-month online course on environmental crime • 23-27/04/2018: 4-day face to face course on improving investigation techniques for tackling environmental crime. To make the law enforcement aware of the phenomenon and of the available tools they can use, especially in cross-border dimension. • 05/06/2018: Webinar on illicit waste trafficking • 07-10/02/17: Face to face course on wildlife trafficking²⁴²
FRONTEX	LEAs	<ul style="list-style-type: none"> • FRONTEX offers course on cross-border crime detection which includes environmental crime (dumps and waste trafficking and also wildlife/CITES trafficking)²⁴³
EJTN	Judges and prosecutors	<ul style="list-style-type: none"> • 20-21/05/2021: Two-day online course on Judicial Cooperation in Criminal Matters: Cross-border Environmental crimes - CR/2021/06 36 places • 15-18/06/2021: Three-day online seminar on cooperation in protected species trafficking cases (30 participants)

²⁴² See <https://www.cepola.europa.eu/publications-training-catalogue>.

²⁴³ See https://frontex.europa.eu/assets/Publications/Training/TRU_Course_Catalogue_2018.pdf.

Organisation	Practitioners targeted	Example of courses
		<ul style="list-style-type: none"> • 28-29/09/2021: Two day in person workshop on EU Environmental Law. 39 places • 13-15/10/2021: Two day in person seminar on Environmental crimes • 03-05/11/2021: Three day in person course on legal language training in cooperation in environmental law²⁴⁴
ERA	Judges and prosecutors	<ul style="list-style-type: none"> • Online training materials and e-learning modules on continuous offer on environmental law, combatting waste crime, EU law on industrial emissions, the EU Aarhus Acquis, EU Nature protection legislation, EU water law, wildlife trafficking etc.²⁴⁵ • 09-11/03/2020: Two-day in person workshop on EU Waste Legislation and Protection of the Environment through Criminal Law
ENPE	Prosecutors	<ul style="list-style-type: none"> • The LIFE-ENPE project which took place between 2015-2020 resulted, inter alia, in the development of training packages and events in the fields of wildlife, waste, and air pollution crimes, as well as, in relation to sanctioning and prosecution of environmental crimes²⁴⁶. • Over 1 000 delegates have been trained by the ENPE over the 5-year period.
IMPEL		<ul style="list-style-type: none"> • Continuous offer of online toolkits for members of relevant Competent Authorities on shipment of waste, wildlife and waste crime, available via the IMPEL-PREVENT website²⁴⁷ • The IMPEL programme Capacity Building and Training established as part of the implementation of the Action Plan to improve environmental compliance assurance in partnership with the European Commission aims to improve cooperation between practitioner and other bodies, providing training for environmental compliance assurance professionals at national and European level²⁴⁸

²⁴⁴ See <https://frontex.europa.eu/we-build/building-capabilities/courses/> and <https://www.ejtn.eu/Catalogue/EJTNS-searchable-database/>.

²⁴⁵ https://www.era.int/cgi-bin/cms?_SID=a1a4bb07794b7a2f9728f38b75d630cd13430f9500784449058078&_sprache=en&_bereich=artikel&_aktion=detail&idartikel=124138.

²⁴⁶ See: <https://www.environmentalprosecutors.eu/eu-life-project>.

²⁴⁷ <https://www.impel-prevent.eu/>.

²⁴⁸ <https://www.impel.eu/impel-programme-capacity-building-and-training-is-catching-up-speed/>.

Organisation	Practitioners targeted	Example of courses
DG ENV Action Plan		In 2018, the European Commission adopted an Action Plan to increase compliance with and improve governance on EU environmental rules. One of the nine actions was to identify necessary professional skill-sets and training needs for environmental inspectors and improve cooperation with practitioners and other bodies that provide training at national and EU level ²⁴⁹ . This resulted in the publication of a report from IMPEL on the training needs of practitioners ²⁵⁰ . The Commission (DG ENV) also continues its Programme for cooperation with national judges and prosecutors which includes the preparation of training materials, organisation of a limited number of training events and the publication of a training package on EU Environmental Law accessible via the Commission's website ²⁵¹ .

5.2 Baseline information on awareness-raising measures

- Information has been collected from the 8th round of mutual evaluation country reports

MS	Campaigns	Education in schools	Information aimed at private sector	Online info for the public	Manuals, guidelines, fact sheets	Reporting point for public	Collaboration with NGOs or other organisations	Events	Waste register	Little or nothing

²⁴⁹ https://ec.europa.eu/environment/legal/pdf/COM_2018_10_F1_COMMUNICATION_FROM_COMMISSION_TO_INST_EN_V8_P1_959219.pdf.

²⁵⁰ <https://circabc.europa.eu/ui/group/cafdbfbb-a3b9-42d8-b3c9-05e8f2c6a6fe/library/fafe3895-04ae-4c42-b8b1-a233a5a780f3/details>.

²⁵¹ https://ec.europa.eu/environment/legal/law/training_package.htm.

MS	Campaigns	Education in schools	Information aimed at private sector	Online info for the public	Manuals, guidelines, fact sheets	Reporting point for public	Collaboration with NGOs or other organisations	Events	Waste register	Little or nothing
AT	x	x	x Practical information, explanatory notes and standard documents	x Information in several languages	x	x	x For events and campaigns	x		
BE	x Local information campaign – leaflets	x								
BG	x National information campaign and local information campaign	x			x		x			
CY										x
CZ	x National information campaign	x		x	x	x	x	x For private sector		

MS	Campaigns	Education in schools	Information aimed at private sector	Online info for the public	Manuals, guidelines, fact sheets	Reporting point for public	Collaboration with NGOs or other organisations	Events	Waste register	Little or nothing
DE			x	x			x			
DK	x National information campaign	x						x		
EE										x
ES										x
FI	x National information campaign	x				x				
FR	x				x					
GR									x	x
HR										x
HU										x
IE	x National information campaign - 1.6	x	x	x				x		

MS	Campaigns	Education in schools	Information aimed at private sector	Online info for the public	Manuals, guidelines, fact sheets	Reporting point for public	Collaboration with NGOs or other organisations	Events	Waste register	Little or nothing
	million EUR waste awareness campaign in 2018 Local information campaign									
IT	x	x	x				x	x		
LT	x							x		
LU	x National information campaign					x				
LV	x National information campaign	x				x	x	x		
MT										x
NL			x	x	x					
PL	x	x					x			

MS	Campaigns	Education in schools	Information aimed at private sector	Online info for the public	Manuals, guidelines, fact sheets	Reporting point for public	Collaboration with NGOs or other organisations	Events	Waste register	Little or nothing
	National information campaign and local information campaign									
PT	x Local information campaign	x				x				
RO										x
SE	x National information campaign									
SI	x National information campaign	x	x			x	x			x
SK	x National information campaign		x	x						

5.3 Baseline information on national enforcement strategies to combat environmental crime

Information has been collected from the following sources:

- 8th round of mutual evaluation country reports
- Interview with Finnish environmental ministry

MS	National environmental crime strategy	National environmental crime action plan	Inspection plans (sector specific)	Environmental strategy for individual institution(s)	Environmental strategy within a wider crime strategy	Relevant waste management plans	Guidelines for combatting environmental crime	Within environmental framework
AT	Planned implementation	Planned implementation	x					
BE			x		x			
BG			x			x		
CY								
CZ	x					x		
DE				x				
DK			x	x				
EE								x
ES			x		x	x		

MS	National environmental crime strategy	National environmental crime action plan	Inspection plans (sector specific)	Environmental strategy for individual institution(s)	Environmental strategy within a wider crime strategy	Relevant waste management plans	Guidelines for combatting environmental crime	Within environmental framework
FI	x	x						
FR			x			x		
GR			x		x			x
HR								
HU								
IE			x	x				x
IT			x	x				
LT						x		
LU								
LV								
MT						x		x
NL	x							
PL				x		x	x	x
PT			x	x				

MS	National environmental crime strategy	National environmental crime action plan	Inspection plans (sector specific)	Environmental strategy for individual institution(s)	Environmental strategy within a wider crime strategy	Relevant waste management plans	Guidelines for combatting environmental crime	Within environmental framework
RO			x			x		
SE				x	x			
SI					x			
SK		x						

5.4 Baseline information on specialised units and personnel working on environmental crime

Information has been collected from the following sources:

- 8th round of Mutual Evaluation country reports
- Letters from Member States responding to these reports
- Interviews and correspondence with following stakeholders:
 - National authorities and practitioners from Sweden (interview)
 - ENPE – interview with practitioners from the Netherlands and the UK
 - ENPE national contact points in Latvia, Lithuania, Romania and Portugal (responses to short questionnaire)

Note: Blank cells indicate that it was not possible to find data either in the country reports or through the targeted consultation activities.

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
AT	Specialised personnel	<i>de facto</i> specialists in some regional prosecution offices	No specialised judges	Administrative courts call on experts from the competent authorities when necessary	548 (total) 503 at National level: 3 in federal crime unit; 500 low-level specially trained officers 45 at regional level: Provincial teams with average of 5			

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
					personnel per province (9 provinces)			
BE	Specialised personnel at federal level; also in some regions and some local police areas	<i>de facto</i> specialists Magistrates in almost all districts with specific expertise in environmental offences	No legislation providing for specialised judges				Magistrate in each district	
BG			No specialised judges					
CY	No specialised body		No specialised court					
CZ	Specialised units but also working on economic crime	<i>de facto</i> specialists In prosecutor's office informal groups analyse environmental issues and cooperate.			Total number unknown. 2 officers at national level with expertise; 1 officer in each region with expertise			

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
		Planned further specialisation and development of network (see upcoming strategy)			in waste crime (14 regions) Unspecified number of CPIS officers specialised in environmental crime (non-exclusive)			
DE	Specialised units at federal and regional level	Specialised units PPO of Länder usually have environmental department and specialised units	Specialised court in almost all Länder; sometimes environmental cases are handled by economic crime divisions					
DK		<i>de facto</i> specialists	No specialised judges except through experience					
EE			No specialised court	The environmental				6 Investigation

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
				inspectorate is responsible for investigation of all environmental offences				unit in Environmental Inspectorate – 1 head of unit and 5 investigators
EL	Environmental protection department but no specialised police officers	Specialised prosecutor in the PPO of Athens	No specialised court	Environmental inspectors work with police		1 specialised prosecutor for Athens PPO		
ES	Specialised units in civil guard at regional and local level; environment group within national organised crime unit	Specialised units in all provincial PPOs	No specialist judicial bodies		1889 In Guardia Civil 1884 specialist investigation officers; Environmental Group in national organised crime unit has 5 experts	174		

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
FI	No special unit; environmental crime unit pilot project in one region	<i>de facto</i> specialisation acquired through experience	No specialised court					5 persons working in the team on waste shipment - this would appear to be policy people
FR	Specialised units in national environmental office; network of specialised investigators; additional units within gendarmerie	Designated courts	Designated courts (since 2020) Specialised tribunal in each court of appeal for environmental matters Each public prosecutor's office of a court can appoint a specialist judge for environmental matters.		435 70 officers for national environmental crime office; 365 investigators specially trained in environmental issues; unknown number of additional territorial units within gendarmerie		New law 2020	

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
			Specialised public health courts exist in Paris and Marseille, with competence in environmental cases affecting public health.					
HR	No specialised authority		No specialised court	Environmental protection inspectorate responsible for inspections and action on illegal waste shipments				77 inspectors
HU	Grouping of specialised police but not from formal training	<i>de facto</i> specialists 3% of prosecutors have specialist degrees in environmental	No specialised court or judges					

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
		criminal law						
IE			No specialised court or judges	Strong collaboration with police to provide expertise				
IT	Specialised unit for Forestry, Environmental and Agri-Food Protection with offices across the country	Specialised unit for environmental crimes linked to organised crime; specialised teams in almost all PPOs	No specialised judges but one specialised court attached to the court of cassation					
LT	No specialised unit	No specialised PPO	No specialised judges					433 (inspectors)
LV	Specialist within economic crime department							

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
LU		No specialised PPO	No specialised court or judges					
MT	Specialised unit	No specialised PPO	No specialised judges		33 17 field officers, 4 office clerks, 1 sergeant and 1 inspector			
NL	Specialised teams at national level and in each region	Specialised units	Specialised courts 4 specialised courts		260 400 specialised officers deal with environment and food safety crimes, of which 140 deal with agriculture and food crimes	20 Specialised prosecutors estimated at 2-3% [2.5% of 800 prosecutors]		
PL	No specialised structures for environmental crime	Specialised units: Coordinators in regional and circuit prosecutor	No specialised court or judges			59 3 at national level; 11 at regional level; 45 at district		

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
		officers for environmental crime Investigations can be carried out directly by prosecutors				level		
PT	Specialised unit within national guard, service for protection of nature and the environment; specialised police officers in environmental protection teams at regional level	<i>de facto</i> specialisation	No specialised court – prohibited by constitution		977 893 officers in environmental enforcement in Service for protection of nature and environment; 84 police officers in environmental protection teams			
RO	Specialised units for areas covering	<i>de facto</i> specialised personnel	No specialised court or judges		322 142 posts for fighting illegal	Network involves approximately		621

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
	elements of environmental crime at national level	linked through a network bringing together 1 prosecutor in each local PPO, 1-2 prosecutors from PPOs attached to tribunals and courts of appeal, and prosecutors from high court, dealing with environmental cases with priority			forestry, poaching and fishing; 45 officers working for the Directorate of Arms, Explosives and Dangerous Substances, responsible for environmental crime 85 officers in economic crime unit on 'environmental protection, recyclable materials and forestry'; 50 officers in transport police on	200 prosecutors but these are not working exclusively on environmental crime		

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
					environmental crime			
SE	Specialised units	Specialised unit National unit for environment and working environment located in five cities	Specialised court on environmental and water issues. Special courts give permits for waterworks operations and environmentally harmful operations and determine environmental administrative fines. It is the general courts that handle criminal cases, not the specialised courts.		84 (approx.) National team and 9 regional teams of 7-9 investigators; 4 analysts at national level dealing with environmental crimes, hunting crimes and OSH crimes.	21 prosecutors working with the national unit for environment and working environment		

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
SI	Specialised units but also working on other types of crime	No specialised prosecutor team	No specialised court					
SK	Specialised units at national level and regional level	Specialised prosecutors at district, regional and national level	No specialised court or judges		105 13 at national level; Regional teams of approximately 11 officers (8 regions)			

ANNEX 5: ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACTS

1. INTRODUCTION

The degree to which a more effective approach to combating environmental crime through the ECD is likely to impact each category of environmental crime specifically will depend on a range of factors internal and external to the Directive. First of all, it depends on the **degree to which each type of environmental crime takes place and the effects it has on the environment, the economy, and society as a whole** – crimes occurring in areas that produce a higher negative impact will have the highest potential to be reduced, thus having the highest potential for a positive impact to occur in the long run.

Unfortunately, there is a lack of reliable and comparable statistics pertaining to the degree to which specific types of environmental crime take place. However, their occurrence is significant – the evaluation of the ECD found that in 2017, there were 5 644 recorded instances of illegal wildlife trade (seizures of CITES rules) and 5 306 recorded instances of illegal waste shipment in the EU. In both cases, an upward trend was observed over time. The overall impact of environmental crime has never been quantified, but some studies have attempted to assess the magnitude of environmental crime - a UN study put the combined value of illegal revenue derived from environmental crime and losses for legal commerce and tax revenue at between **USD 91-259 billion** annually²⁵².

This annex provides an overview of the different types of environmental crime, the current status in terms of relevant environmental legislation and its implementation in the Member States and available estimates of the total magnitude of environmental crime, in monetary and other terms. It also identifies the main environmental, social and economic impacts of environmental crime across the EU, based on a wide range of recent studies and reports. Each type of environmental crime is accompanied by an example of such a crime occurring in an EU Member State, so as to illustrate the potentially devastating impact of these crimes, as well as give an indication as to the possible positive impact (or benefits) of reducing them by strengthening the (implementation of) the ECD. **All of these findings are summarised in Section 4 at the conclusion of this Annex.**

Most of the policy options proposed as part of the review of the ECD aim to improve the overall effectiveness of the ECD. Through increased legal clarity, more effective sanctions, better cooperation across all actors, better enforcement, and a higher degree of awareness and precision about the nature of environmental crime, it is expected that environmental crime rates overall will gradually reduce. One of the policy objectives, which concerns the scope of the ECD (Policy objective 1) is likely to have greater impacts on specific types of

²⁵² UNEP (2018), The State of Knowledge of Crimes That Have Serious Impacts on the Environment.

environmental crime, as the options to address it would target areas of environmental crime not previously covered by the Directive. These are: illegal logging and timber trade; illegal, unreported and unregulated (IUU) fishing, and poaching of wildlife. The focus of the analysis has been placed on the ‘new’ crimes, as these would have the largest possible impacts in light of a revised ECD.

Some possible impacts of the proposed policy options could have **unintended negative economic impacts, particularly for certain business sectors**. These impacts have been identified primarily through consultation, where stakeholders from the business sector have expressed concerns about ensuring that sanctions actually deter those who wilfully circumvent existing rules and are appropriately strict in this regard.

2. ECONOMIC IMPACTS ON BUSINESSES

Before analysing all types of impacts for different types of environmental crimes, both currently covered in the scope and ones considered to be included in the scope in the future, this section provides an assessment of economic impacts on businesses of the different policy objectives and the options to reach these.

The assessment of impacts on businesses is based on a review of existing reports on elements impacting businesses (e.g. sanction levels), along with the 28 responses from businesses to the online public consultation, and qualitative data collected through interviews with business stakeholders (see Table 19) and discussions during a workshop on the issue hosted by the European Commission.

Table 19 Business stakeholder interviews

Industry	Organisation
Chemicals	The European Chemical Industry Council (CEFIC)
Recycling	Plastic Recyclers Europe (PRE)
Hazardous Waste	Hazardous Waste Europe (HWE)
Ships	European Community Shipowners' Associations (ECSA)
Various	Chamber of Commerce Austria (WKÖ)

Overall, the notion of legal certainty is expressed by businesses in respect to all policy objectives and options and in all stakeholder consultation activities. All consulted businesses express in some respect that a revised ECD needs to improve legal certainty and avoid changes that might reduce it. According to two stakeholders’ explanations in interviews, higher uncertainty about criminal offences – and prosecution – would impact the attractiveness of industries to skilled leadership personnel and limit the investment in new operation sites.

A second general aspect raised by two different stakeholders concerns the reputation of legitimate businesses. The public image of the concerned sectors would benefit from stricter criminal standards and their enforcement, because scandals tend to dominate the public perception. A more positive reputation would enable easier permit granting processes and recruitment for such sectors.

2.1. EXPANDING THE SCOPE OF THE DIRECTIVE

In general, findings indicate that illegal economic activities result in lost revenue and markets for legitimate business activities. An expanded and up-to-date scope is instrumental in order to ensure that as many activities as possible are of legitimate nature. The case of illegal, unreported and unregulated fishing illustrates that expanding the scope to new environmental crimes would have strong benefits for legitimate business activities as well.

In response to the online public consultation, the responding businesses see benefit in the two options of updating the list of legislation mentioned in the Annex of the Directive²⁵³ and defining environmental crime independently of administrative law²⁵⁴. No action – an unchanged scope of the Directive – is considered not useful by half of the respondents, with five further respondents giving no answer. This underlines the benefits for businesses of an updated and expanded scope.

However, legal certainty is the key parameter for the business sector. As such, a clear definition of the scope is necessary. Accordingly, the current system of having an exhaustive list is supported by businesses, while a revision of the approach to defining the scope is considered not necessary.

The contributions of stakeholders mostly concerned the option of defining environmental crime decoupled from a breach of administrative law. Two opposing arguments were made by the business sector representatives consulted. On the one hand, substantial environmental damage with impact on the reputation of a whole sector would be criminalised in all cases. It is also expressed that actors currently not specified as part of the scope²⁵⁵ would then be subject to the Directive's scope as well. On the other hand, one stakeholder sees a risk of penalising good-willed companies who by mistake create damage through an operation for which they have a permit. This is described as a higher risk for legitimate businesses compared to businesses purposefully violating permits and environmental law and could thus even lead to an increase in activities with low or no environmental compliance.

In summary, an expanded scope is expected to have beneficial impacts on businesses. However, any changes to the approach of defining the scope would need to be carefully defined in order to ensure certainty for economic actors.

²⁵³ 17 respondents consider this option useful or very useful.

²⁵⁴ 15 respondents consider this option useful or very useful.

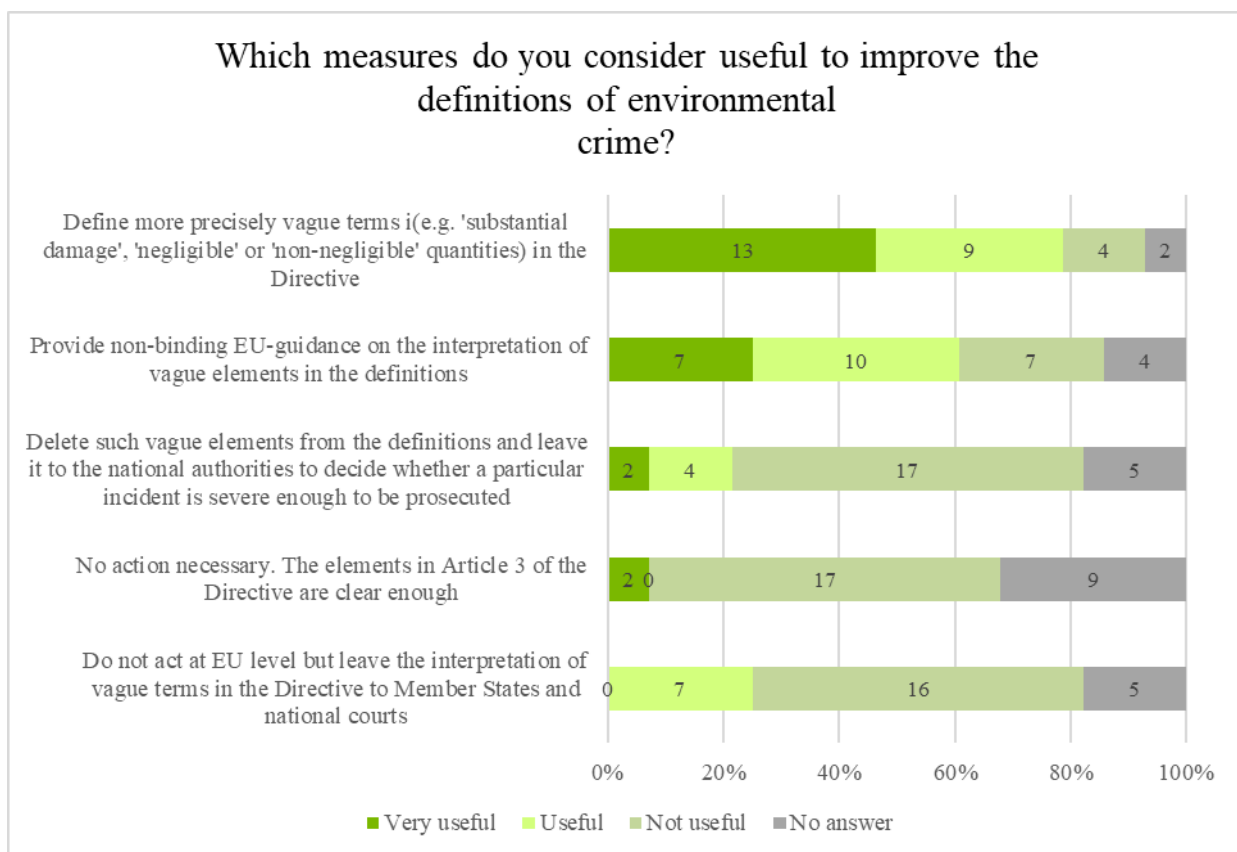
²⁵⁵ As an example, waste brokers are mentioned by the stakeholder.

2.2. CLARIFYING DEFINITIONS OF VAGUE TERMS USED IN THE DIRECTIVE

Clarifying the vague terms used in the Directive has strong benefits for businesses, as it would improve legal clarity and support the harmonisation of implementation of environmental crime legislation across the EU. In all consultation activities, business stakeholders express support for clarified terms. The responses to the online public consultation show a clear preference for definitions, or guidance for definitions, to be coming from the EU level rather than the national level. Figure 2 presents the responses from business stakeholders to this question.

In interviews, stakeholders explain the importance of a level playing field for legitimate businesses, which would be improved by clearer definitions of damage and quantity thresholds. One stakeholder comments that such definitions should, wherever possible, be coherent with existing definitions in sectoral EU legislation in order to ensure the highest legal certainty possible.

Figure 2 Business stakeholder responses to the OPC on options to improve the clarity of definitions and vague terms



2.3. CREATING AN EFFECTIVELY DETERRENT SANCTIONING SYSTEM

The evaluation of the Directive²⁵⁶ as well as several interviewees commented on the high variations between sanctions (e.g. fines) across different EU Member States. The low sanctions in some Member States incentivise criminal activities by making them profitable even in case of prosecution. An effectively deterring sanctioning system throughout the EU helps solve this issue and contributes to an even playing field for legitimate businesses. However, it also needs to be coupled with enforcement (see next section) in order to provide sufficient risk of criminal actions being discovered. Stakeholders report that these objectives would be beneficial particularly in the fight against organised crime. As an example, illegal trade and disposal of waste is particularly attractive to organised crime groups as the financial volume is estimated to be similar to drug trafficking but with substantially lower sanctions²⁵⁷.

Appropriate sanctions based on the financial situation of an organisation or the benefit gained from the environmental crime are one option in this respect. Some business stakeholders express concerns about such an approach and see a risk in penalising legitimate businesses that accidentally cause environmental damages that are considered criminal, while the main problem that needs to be tackled are the wilfully non-complying actors²⁵⁸. Large companies risk being fined high amounts for accidental damages or ones occurring for the first time. The responses to the online public consultation, however, indicate a diverse view among businesses. The same number of respondents consider sanctions linked to the generated profits and the financial situation very useful as the number that consider them not useful (7 respondents each). As an adaptive sanctioning system based on profits and the financial situation would apply to criminal offences only, a key determinant will also be the scope and threshold defined under the options for the other objectives.

Linking sanctions to the benefits gained from a criminal or non-compliant act and to the financial situation of a business are in place in several Member States already for either environmental criminal law or administrative law. Table 20 summarises the sanction systems in Member States where such adaptive sanctions exist. This shows that such an approach would not be new in many national contexts. However, the calculations and levels of fines differ substantially, further highlighting the need for a harmonised sanction level.

²⁵⁶ European Commission (2020). EVALUATION of the 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. SWD(2020) 259 final. https://ec.europa.eu/info/sites/default/files/evaluation_-_swd2020259_-_part_1_0.pdf.

²⁵⁷ IPEC (2015). EnviCrimeNet Intelligence Project on Environmental Crime. http://www.envicrimenet.eu/images/docs/ipec_report_on_environmental_crime_in_europe.pdf.

²⁵⁸ CEFIC (2021). Cefic views on the review of the Environmental Crime Directive. <https://cefic.org/app/uploads/2021/05/Cefic-views-on-the-review-of-the-Environmental-Crime-Directive.pdf>.

Table 20 Existing sanction systems in Member States based on profit obtained from a criminal act or based on the financial situation

Member State	Sanctions under national environmental criminal law and administrative fines in MS²⁵⁹	Sanctions under national administrative law in scope of Article 3²⁶⁰	Fisheries legislation in MS²⁶¹
DK			Fixed penalty notice: fine for the master of the equivalent of 1/4 the value of the catch concerning the infringement. If the licence holder is also the master, he/she should be fined 1/3 of the value. These rates are binding on the administration.
EL		Natural persons acting for the benefit of legal persons are punished as natural persons. Additionally, legal persons can be punished as follows: An administrative fine up to three times the amount of the value of the benefit attained or pursued	

²⁵⁹ European Commission (2020). EVALUATION of the 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. SWD(2020) 259 final. https://ec.europa.eu/info/sites/default/files/evaluation_-_swd2020259_-_part_1_0.pdf.

²⁶⁰ Hall, M.; Wyatt, T. (2017). LIFE-ENPE. Environmental prosecution report – tackling environmental crime in Europe. https://www.environmentalprosecutors.eu/sites/default/files/document/Cap%20and%20Gap%20report_FINAL_Print.pdf.

²⁶¹ Milieu Consulting (2021), Study on the sanctioning systems of Member States for infringements to the rules of the Common Fisheries Policy. <https://op.europa.eu/en/publication-detail/-/publication/dfb452c8-c4df-11eb-a925-01aa75ed71a1>.

Member State	Sanctions under national environmental criminal law and administrative fines in MS²⁵⁹	Sanctions under national administrative law in scope of Article 3²⁶⁰	Fisheries legislation in MS²⁶¹
ES		Administrative sanctions include fines within a range set for each area of crime. The amount of the fine will be determined taking into account elements such as the extent of the damage, the degree of involvement and the benefit obtained, the economic capacity of the actor, the intent, and the repetition of the offense.	
FI			For legal persons from EUR 2,000 up to EUR 100,000 (EUR 50,000 for non-serious infringements). The maximum level of the sanctions shall be five times the value of such products, if it is greater than the set EUR 100,000 or EUR 50,000 .
HU	The maximum level of fines for crimes specified in the ECD is three times the financial benefit gained or aimed to be gained, but at least 500,000 HUF (EUR 1,500). If the benefit gained or intended to be gained through the criminal act is not financial advantage, the court imposes the fine considering the financial situation of the legal		

Member State	Sanctions under national environmental criminal law and administrative fines in MS²⁵⁹	Sanctions under national administrative law in scope of Article 3²⁶⁰	Fisheries legislation in MS²⁶¹
	entity, but at least HUF 500,000 (EUR 1,500).		
LT			Under the Law on Fisheries, a fine may be imposed for economic operators in the range of 2-8 times the value of the fishing products obtained by committing the serious infringement
LV			In practice, the inspectors apply Art. 44(2) IUU directly, and tie the amount of the penalty with the value of the fishery products
MT			The Fishing Order sets the following fines: - Fine of five times the value of the fishery products obtained for serious infringement - Fine of EUR 1,000 to EUR 10,000 for serious infringement if no fishery products obtained.

Member State	Sanctions under national environmental criminal law and administrative fines in MS²⁵⁹	Sanctions under national administrative law in scope of Article 3²⁶⁰	Fisheries legislation in MS²⁶¹
NL	If an offence against one of the ECD's provision is punishable by a fine in the sixth category and that category does not permit an appropriate penalty, a fine may be imposed up to a maximum of 10 % of the annual turnover of the legal person in the business year preceding the judgment or decision.		
PL	Environmental crimes are fined between EUR 250 and 1,250,000, but not higher than 3% of the yearly income of the entity		In case of serious infringements: a fine of five times the value of fishery products
SE			<ul style="list-style-type: none"> - Fine of up to SEK 500,000 (EUR 48,600) - Special fee based on the market value or the selling price of the catch, depending on which is higher
SK		Confiscation of a sum of money in amount of €800 - 1 660 000 Euro. When determining the amount of money to be confiscated the court shall consider seriousness of the committed criminal offence, scope of the offence, gained benefit, damage arisen, circumstances of the commission of the	

Member State	Sanctions under national environmental criminal law and administrative fines in MS ²⁵⁹	Sanctions under national administrative law in scope of Article 3 ²⁶⁰	Fisheries legislation in MS ²⁶¹
		criminal offence and consequences for the legal person	

2.4. IMPROVING THE IMPLEMENTATION AND ENFORCEMENT OF THE DIRECTIVE

The lack of implementation and enforcement of environmental crime legislation is mentioned as a key limitation and threat to businesses in the stakeholder consultation. Therefore, improvements are expected to have positive impacts on legitimate businesses.

Better enforcement of environmental crimes across the EU is considered essential for legal certainty by stakeholders in interviews. The varying level of implementation and enforcement is described to create an uneven playing field. Non-compliant and high-risk or damaging operations can be set up in countries with low enforcement of environmental criminal law, which creates cheap, even though illegal, competition to legitimate businesses. The main benefit for legitimate businesses would thus be that illegal activities face higher risks, become less profitable and, consequently, decrease in occurrence. Legitimate activities would then see larger markets for their operations.

Higher costs for compliance activities do not arise for businesses, as was indicated by the stakeholders participating in the workshop organised by the Commission. Costs for compliance monitoring and due diligence are driven by sectoral, administrative legislation and not by environmental criminal law.

2.5. IMPACTS ON SMES

Environmental criminal law also applies to small and medium sized enterprises (SMEs). In studies and reports, specific impacts on SMEs are not quantified or described. It is generally found that administrative requirements and the processes they require are relatively more burdensome for SMEs than they are for larger businesses. However, as mentioned above, the

driving factors for due diligence investments and processes to limit environmental impacts lie in administrative sectoral law, rather than criminal law. Therefore, only in cases where SMEs would be subject to lower emissions or safety requirements under administrative law, would expanded criminal law result in higher costs. Such different levels of standards could not be found in key legislation included in the current Annex or in areas considered to be included in the revised scope of the Directive.

In interviews²⁶², stakeholders express two main considerations for impacts on SMEs. On the one hand, two interviewees express concerns about the higher risks that SMEs face in their overall economic existence. Legal capacity is described as generally lower, and fines may threaten a business completely. This is in particular mentioned in relation to the approach in which criminal environmental law is decoupled from administrative law. Here, fines could be imposed without wrongdoing under sectoral law according to the interviewees, with higher impacts for SMEs with their limited legal and due diligence capacity. However, sanctions such as fines linked to the profit of a crime or the economic situation of a business would take into account the smaller size of SMEs and ensure that fines reflect this parameter.

On the other hand, one interviewee mentions that SMEs, as part of the entirety of legitimate businesses, would benefit from the reduced illegal market.

In conclusion, a strengthened Directive would likely have positive impacts on SMEs. This however depends on the exact design of the revisions as risks for SMEs may increase from a decoupling, but also the benefits increase from sanctions linked to the economic situation.

3. TYPES OF ENVIRONMENTAL CRIME AND THEIR ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACTS

3.1. ILLEGAL LOGGING AND TIMBER TRADE

Forestry crimes refer to the process consisting of illegal activities from pre-logging (getting permits), illegal logging, illegal transportation and illegal processing. According to INTERPOL's 2018 World Atlas of Illicit Financial Flows²⁶³, forestry crimes have been reported as the most significant environmental crime with respect to volume of criminal gains. In 2018 alone, the total cost of forestry crime and illegal logging was estimated at **USD 51-152 billion**²⁶⁴. The issue seems to have worsened over time, as UNEPT estimated the cost of this crime at USD 30-100 billion per year before 2014²⁶⁵. Illegal logging accounts for as much

²⁶² It should be noted that all stakeholder consultation activities received little attention from organisations representing specifically SMEs. With three EU-level SME organisations contacted for an interview, no interview could be scheduled in time for this report due to lacking responses.

²⁶³ UNEP (2018), The State of Knowledge of Crimes That Have Serious Impacts on the Environment.

²⁶⁴ Nellemann, C.; Henriksen, R., Pravettoni, R., Stewart, D., Kotsovou, M., Schlingemann, Shaw, M. and Reitano, T. (Eds). 2018. World atlas of illicit flows. A RHIPTO-INTERPOL-GI Assessment. RHIPTO -Norwegian Center for Global Analyses, INTERPOL and the Global Initiative Against Transnational Organized crime.

²⁶⁵ UNEP and Interpol, 2016.

as **10-30% of the total logging** worldwide, with some estimates as high as 20-50%²⁶⁶ when laundering of illegal wood is included. According to a WWF report²⁶⁷, the EU is responsible for almost **EUR 3 billion of losses** due to illegal logging, with an import of around **20 million cubic meters of illegal timber** every year.

In 2013, the EU Timber Regulation (EUTR)²⁶⁸ entered into force, having the aim of ensuring that timber and timber-related products on the European market are legal, by prohibiting imports of illegally harvested timber and products. A study by the WWF published in 2019²⁶⁹ found that there were **significant enforcement gaps** in this area. Maximum fines vary greatly among Member States, ranging from EUR 2 500 to EUR 24 000 000, often remaining well below the maximum limits. Sanctions were also often only applied in cases of repeated shortcomings and warnings²⁷⁰.

3.1.1. CURRENT STATUS IN THE EU

Although illegal logging and timber trade primarily impact regions most at risk of large-scale deforestation (e.g. the Amazon, Borneo, the Congo Basin, the Greater Mekong, New Guinea and Sumatra), it is also a threat within the EU itself, including some of Europe's last remaining old-growth forests²⁷¹. Specifically, **illegal logging affects the ancient forests of Central and South East Europe**. In **Bulgaria**, illegal operations made up around a quarter of all logging in 2006-2013, generating hidden revenue of over EUR 50 million per year. In **Romania**, significant progress has been made in recent years to address illegal logging practices, but the issue remains a challenge because the country holds around 60% of Europe's remaining old-growth forests, which are home to more large mammals, including brown bear, wolves and lynx, than are found in the rest of the EU combined²⁷². In 2020, the Commission started an infringement procedure against Romania, arguing that national authorities have been unable to effectively check the operators and apply appropriate sanctions and that inconsistencies in the national legislation do not allow them to check large

²⁶⁶ Nellemann, C. (Editor in Chief); Henriksen, R., Kreilhuber, A., Stewart, D., Kotsovou, M., Raxter, P., Mrema, E., and Barrat, S. (Eds). 2016. The Rise of Environmental Crime – A Growing Threat To Natural Resources Peace, Development And Security. A UNEP INTERPOL Rapid Response Assessment. United Nations Environment Programme and RHIPTO Rapid Response–Norwegian Center for Global Analyses.

²⁶⁷ WWF, 2016. Failing the Forests Europe's illegal timber trade. Available at: <https://wwfeu.awsassets.panda.org/downloads/failingforests.pdf>.

²⁶⁸ Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (Text with EEA relevance).

²⁶⁹ WWF (2019), WWF Enforcement Review of the EU Timber Regulation (EUTR), EU Synthesis Report. The Member States studied are: Austria, Belgium, Bulgaria, Croatia, Denmark, France, Germany, Hungary, Italy, the Netherlands, Portugal, Romania, Slovakia, Spain, Sweden and the UK.

²⁷⁰ WWF, 2019. WWF Enforcement Review of the EU Timber Regulation (EUTR), EU Synthesis Report, page 3.

²⁷¹ WWF, 2015. Illegal timber in the EU: Why the EU Timber Regulation should be improved.

²⁷² Ibid.

amounts of illegally harvested timber²⁷³. The evaluation of the ECD also found that this type of crime is particularly common in **Hungary, Latvia and Lithuania**²⁷⁴.

All of these countries have gaps in terms of the degree to which their national legislation provides for penalties in response to breaches of the regulation²⁷⁵.

As reported by the Commission²⁷⁶, throughout the EU, there are 9 countries where infringements can be both administrative and criminal, 11 where they can be only administrative, and 7 where they can be only criminal. In all Member States except for Italy, notices of remedial action or similar (all reporting countries except Italy) can be issued where shortcomings are detected. These allow operators to adjust their due diligence system prior to being re-checked. They can be combined with interim measures such as seizure of timber or prohibition to place it on the internal market. As for fines applicable to infringements of the EUTR, there was a large range from as little as EUR 50 to unlimited fines.

- Up to EUR 100 000: Austria, Bulgaria, Croatia, Greece, Hungary, Italy, Lithuania, Malta, Portugal, Romania and Slovenia;
- Up to EUR 1 000 000: Czech Republic, France, Ireland, Italy, Latvia, Luxembourg, Netherlands, Poland, Slovakia and Spain;
- Above EUR 1 000 000: Belgium, Estonia.
- No limit: Denmark, Finland, Sweden, Germany (criminal fines for breaches of prohibition).

Breaches of the EUTR are punishable by imprisonment in 17 countries, with 10 years being the longest potential maximum sentence (Greece).

3.1.2. ENVIRONMENTAL IMPACTS

Illegal logging and illegal trade in timber contribute to deforestation, habitat destruction and biodiversity decline²⁷⁷. This in turn leads to the loss of important environmental services such as soil quality, water retention and the stability of local climate systems. The increase in flood risk, landslides, as well as the erosion of coastal zones has also been related to these types of crimes²⁷⁸.

²⁷³ Infringement decisions, February 2020. Available at: https://ec.europa.eu/commission/presscorner/detail/en/inf_20_202 (last accessed 14 June 2021).

²⁷⁴ European Commission, 2020. Commission staff working document – Evaluation of the Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through. Available at: https://ec.europa.eu/info/sites/info/files/evaluation_-_swd2020259_-_part_1_0.pdf.

²⁷⁵ UN WCMC, 2020. Key obligations and practical aspects of the application of the EUTR – 2019. Available at: https://ec.europa.eu/environment/forests/pdf/30092020_EUTR%20MS%20Key%20obligations%20and%20practical%20aspects%20of%20implementation%20and%20enforcement%202019.pdf.

²⁷⁶ European Commission, 2020. EUTR Biennial report for the period March 2017 - February 2019, COM/2020/629 final.

²⁷⁷ World Bank Group, 2019.

²⁷⁸ UNEP, 2018.

Moreover, forests are carbon sinks, and therefore their depletion can impact climate change²⁷⁹. Climate change is also affected by the greenhouse gases created by the clearing and burning of trees, which has recently been seen in a number of tropical forest basins²⁸⁰. EU forests absorb the equivalence of 8.9% of total EU greenhouse gas emissions yearly, consequently playing an important role in achieving Carbon neutrality²⁸¹.

3.1.3. SOCIAL IMPACTS

Illegal logging and trade in timber can have impacts on human health, such as the cause of spread of diseases from animals to humans²⁸². According to UNEP²⁸³, examples of this include the transmission of Ebola and Lyme disease which can be attributed to land use change and deforestation.

In addition, according to the World Bank Group²⁸⁴, the failure to protect a community's rights to forests threatens the rights and livelihoods of residents, which can result in conflict. Deforestation also damages the aesthetic and cultural value of forests. Corruption, which is often closely associated with illegal forestry, also leads to weakened governance and rule of law, as well as resulting in regional instability and migration.

These social impacts are less directly associated with illegal logging in the EU, but by importing illegal timber from (developing) countries, the EU's Member States might contribute to these problems elsewhere.

3.1.4. ECONOMIC IMPACTS

Illegal forestry depletes natural resources and deprives nations of revenues. In 2017 it was reported that between USD 6 121 million and USD 8 987 million across 56 countries was lost in tax revenue due to illegal logging.²⁸⁵ The loss in tax revenue stifles economic growth in the source country and increases development risks and vulnerabilities in other regions.

²⁷⁹ European Commission, 2016. What are the environmental, economic, social and criminal impacts of wildlife trafficking and illegal logging? Available at: https://ec.europa.eu/environment/legal/law/4/pdf/environmental_economic_social_criminal_impacts.pdf.

²⁸⁰ World Bank Group, 2019.

²⁸¹ European Parliament, 2020. Sustainable forestry: Parliament's work to fight deforestation. Available at: <https://www.europarl.europa.eu/news/en/headlines/eu-affairs/20201015STO89416/sustainable-forestry-parliament-s-work-to-fight-deforestation>.

²⁸² UNEP, 2018.

²⁸³ UNEP, 2014. UNEP YEAR BOOK 2014: EMERGING ISSUES IN OUR GLOBAL ENVIRONMENT Available at: <https://wedocs.unep.org/handle/20.500.11822/9240>.

²⁸⁴ World Bank Group, 2019.

²⁸⁵ Blundell, A.G., E.W. Harwell, E.T. Niesten, and M. Wolosin. 2018. *The Economic Impact at the National Level of the Illegal Conversion of Forests for Export-Driven Industrial Agriculture*. Washington, DC: Climate Advisers, Natural Capital Advisors, and Forest Climate Analytics.

A substantial part of the economic losses associated with illegal logging relate to the loss of ecosystem services, which are not currently priced by the market²⁸⁶.

Box 2. Example – Illegal logging in Romania

Example – Illegal logging in Romania

Illegal logging in Romania is widespread. Although some debates exist regarding the actual extent of it, claims have been made that as much as 20 million m³ of wood is illegally harvested every year²⁸⁷.

Romania is home to two-thirds of Europe's last remaining virgin forests and large populations of bears, wolves and lynx. Based on an analysis of data by Greenpeace together with the university of Maryland, it was concluded that in the period 2000 – 2014, Romania had lost as much as 280 000 hectares of forest with almost half of this area represented by protected areas and national parks.²⁸⁸ The Romanian national forest inventory reported that 49% of the timber cut down during the period 2008-2014 was done illegally²⁸⁹.

In 2020, the European Commission announced that it would pursue legal action against Romanian Authorities for their failure to address the issue. Among other things the Commission found that protected forest habitats within the Natura 2000 sites in breach of the Habitats and Birds Directive²⁹⁰.

In addition, illegal logging in Romania has strong links to organised crime and corruption. Workers attempting to protect the trees have been killed, causing protestors in the capital to call for action from the government^{291,292}.

3.2. CRIMES OCCURRING IN THE FISHERIES SECTOR, INCLUDING IN ASSOCIATION WITH IUU FISHING

Illegal, unreported and unregulated (IUU) fishing is a broad term that captures a wide variety of fishing and fishing related activities, such as fishing without a valid license, fishing in a restricted area, or fishing in a way non-consistent with national laws or international obligations²⁹³. It concerns all aspects and stages of the capture and utilisation of fish. IUU fishing shall be distinguished from fishery crimes or offences, including those having a transnational nature, which are connected with fishing operations, such as the trade of catches fished illegally, or human rights violations on board fishing vessels, which may however also

²⁸⁶ World Bank Group, 2019.

²⁸⁷ GreenPeace, 2018. ILLEGAL LOGGING IN ROMANIA'S FORESTS 2018 REPORT Available at: <https://www.greenpeace.org/static/planet4-romania-stateless/2019/11/5cbe6848-greenpeace-illegal-logging-report-2018.pdf>.

²⁸⁸ GreenPeace, 2018.

²⁸⁹ EIA, 2016. Saving Europe's last virgin forests. Available at: <https://eia-global.org/subinitiatives/romania>.

²⁹⁰ European Commission, 2020. February infringements package: key decisions. Available at: https://ec.europa.eu/commission/presscorner/detail/en/inf_20_202.

²⁹¹ BBC, 2019. Romanians protest over illegal logging and murders. Available at: <https://www.bbc.com/news/world-europe-50287999>

²⁹² Euronews, 2020. Romania's virgin forests ravaged by 'wood mafia'. Available at: <https://www.euronews.com/2020/03/13/romania-s-virgin-forests-ravaged-by-wood-mafia>.

²⁹³ A comprehensive definition of IUU fishing is provided in the FAO International Plan of Action. Available at: <http://www.fao.org/3/Y3536E/y3536e04.htm>.

constitute a criminal offence. Only offences related to environmental damage would fall in the scope of being criminalised under this Directive.

It should be noted that data on IUU fishing and related activities is very sparse and often several years old. Therefore, existing estimations have to be treated with care, keeping these limitations in mind. However, these data and estimations are presented below in order to indicate the magnitude.

According to information material of the European Commission²⁹⁴, based on 2009 estimations, IUU fishing practices represent approximately **11-19% of the reported value** of catches worldwide. There are a number of estimates of the annual loss of resources from such IUU fishing practices. UNEP and Interpol²⁹⁵ reported in 2016 an economic loss of around USD **11- 30 billion** a year worldwide based on data from 2003-2009. Other estimates of IUU fishing includes an annual **10–26 million metric tonnes of fish**, with a value of up to USD 10 billion to USD 23 billion, and 12–28 million metric tonnes of fish at a value of USD 16–37 billion.²⁹⁶ While the mentioned limitations apply, this shows that environmental damage related to IUU fishing is an issue of global scale.

The EU has taken action to limit and counteract illicit fishing with strong regulations. The Common Fisheries Policy (CFP) has been in place for several decades and it has undergone a series of amendments in recent years. In particular, a Regulation on IUU fishing entered into force in January 2010, based on Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, implemented by Commission Regulation (EC) No 1010/2009. The IUU Regulation includes a harmonised system of proportionate and dissuasive sanctions for serious infringements, which is complemented by the provisions of Council Regulation (EC) 1224/2009 of 20 November 2009 establishing a Union control system for ensuring compliance with the rules of the CFP (Controls Regulation). The relevant EU legislation entered into force after the ECD adoption in 2008. None of the CFP legislative acts is listed in the current Annex of the Environmental Crime Directive.

3.2.1. CURRENT STATUS IN THE EU

Unfortunately, there are no robust estimates of the degree of involvement of EU vessels in IUU fishing, primarily because of the secretive nature of IUU activities²⁹⁷. There is however evidence to suggest that this does take place²⁹⁸. In the past, the OECD²⁹⁹ has reported on

²⁹⁴ European Commission, 2021. Tackling illegal, unreported and unregulated (IUU) fishing. Available at: [Illegal fishing \(europa.eu\)](https://ec.europa.eu/euipo/illegal-fishing/).

²⁹⁵ UNEP and Interpol, 2016. The Rise of Environmental Crime – A Growing Threat To Natural Resources Peace, Development And Security. Available at: <https://wedocs.unep.org/handle/20.500.11822/7662>.

²⁹⁶ World Bank Group, 2019. Illegal logging, fishing, and wildlife trade: the costs and how to combat it. Available at: [Illegal-Logging-Fishing-and-Wildlife-Trade-The-Costs-and-How-to-Combat-it \(1\).pdf](https://www.worldbank.org/en/publication/illegal-logging-fishing-and-wildlife-trade-the-costs-and-how-to-combat-it-1).

²⁹⁷ European Parliament, 2014. Illegal, Unreported and Unregulated Fishing: Sanctions in the EU.

²⁹⁸ Member States keep registries of CFP violations and report these to the Commission on a 5-year basis. However, this data is not publicly available.

examples of ships flying multiple flags with the motivation of avoiding rules and operating freely in different areas. The Regulation on the sustainable management of external fishing fleets³⁰⁰ (SMEFF Regulation), as part of the CFP legislation, provides a legal framework for flagging and fishing authorisations.

That being said, the EU has taken steps with the objective to reduce the occurrence of crimes related to the fisheries sector within and beyond its borders through the three pillars of CFP legislation (IUU regulation, Controls Regulation and SMEFF Regulation). Looking at the trade of non-certified catches, for instance, in October 2018, a police operation coordinated by Europol led to the arrest of 79 people involved in the traffic of illegally caught Bluefin tuna. The fish were caught illegally in **Italian** and **Maltese** waters and exported to **Spain** through **French** ports. It is believed that the value of this traffic represented more than **EUR 12 million a year**³⁰¹.

The IUU Regulation sets sanctions for serious infringements of its provisions that can amount to five or eight (in case of repeated action) times the value of fishery products obtained through the infringement³⁰². A recent review of sanctions under the EU Common Fisheries Policy by Milieu identified that almost all Member States (all except Ireland, Lithuania and Poland) provide for both administrative and criminal sanctions in their national laws. The others have only criminal sanctions (Ireland) or administrative sanctions (Lithuania, Poland, Slovenia). However, in practice, administrative sanctions are much more commonly used in almost all Member States (all except Belgium, Ireland, Malta and the Netherlands where criminal sanctions are more common)³⁰³.

The study conducted by Milieu also underlined the advantages of relying on administrative sanctions for CFP violations. In fact, unlike criminal sanctions, administrative sanctions can be imposed and enforced more rapidly (without any risk of prescription due to the length of proceedings), and require a lower standard of proof for sanctioning fisheries offences. The same study also noted how “an administrative sanctioning system does not necessarily imply [...] the application of lighter sanctions”,³⁰⁴ providing examples (Spain, and Cyprus) where the levels of administrative sanctions overtake those set out under criminal law. This goes in

²⁹⁹ OECD, 2006. Closing the net: Stopping illegal fishing in the high seas. Available at: <http://www.oecd.org/sd-roundtable/papersandpublications/39375276.pdf>.

³⁰⁰ Regulation (EU) 2017/2403 of the European Parliament and of the Council of 12 December 2017 on the sustainable management of external fishing fleets, and repealing Council Regulation (EC) No 1006/2008.

³⁰¹ <https://www.europol.europa.eu/newsroom/news/how-illegal-bluefin-tuna-market-made-over-eur-12-million-year-selling-fish-in-spain>.

³⁰² Article 44 of Council Regulation (EC) No 1005/2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Regulations (EEC) No 2847/93, (EC) No 1936/2001 and (EC) No 601/2004 and repealing Regulations (EC) No 1093/94 and (EC) No 1447/1999.

³⁰³ Milieu Consulting, 2021. Study on the sanctioning systems of Member States for infringements to the rules of the Common Fisheries Policy.

³⁰⁴ Ibid., p. 208.

the same direction of the 2018 Commission proposal for a revised fisheries control system,³⁰⁵ which at Articles 89 and 89a would require Member States to lay down administrative measures and sanctions to punish the breaching of CFP rules.

A report from the European Commission describes the progress made in combatting IUU fishing as a result of the IUU Regulation. However, the report concludes that the control system could be improved. A 2018 report³⁰⁶ identified declines in imports across the EU, except for a few variations³⁰⁷. It should be noted, however, that only an identification of a country as non-cooperating (“red card”) followed by a listing results in a ban of imports from that country. “Yellow cards” (pre-identification of a country as non-cooperating) does not have this same consequence.

3.2.2. ENVIRONMENTAL IMPACTS

Reducing or stopping illicit fishing activities in the EU, would contribute to fighting over-harvesting and pressuring fish stocks, which may already be under pressure from unsustainable rates of legal fishing activities. It can thereby contribute to preventing the depletion of fish stocks. Illegal fishing activities directly affect their target fish species. Moreover, reducing illegal fishing activities also benefit directly and indirectly non-target commercial species and nonmarketable fish, as well as protected and vulnerable species and their habitats. In general, IUU fishing threatens marine biodiversity and can have serious detrimental impacts on marine ecosystems and the services that these provide³⁰⁸, which can be alleviated from further action to reduce crimes related to illicit fishing.

IUU fishing can also cause additional indirect environmental impacts, as it can be the source of pollution from the discharge of organic waste from the processing of catches, non-biodegradable litter such as lost nets, emissions of carbon dioxide and other greenhouse gases, and the alteration of tropic structure and function through targeting low tropic level fish and

³⁰⁵ European Commission, 2018. Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Council Regulation (EC) No 1224/2009, and amending Council Regulations (EC) No 768/2005, (EC) No 1967/2006, (EC) No 1005/2008, and Regulation (EU) No 2016/1139 of the European Parliament and of the Council as regards fisheries control. COM/2018/368 final. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1529594401208&uri=CELEX:52018PC0368>.

³⁰⁶ Mundy, V. 2018. The impact of the EU IUU Regulation on seafood trade flows: Identification of intra-EU shifts in import trends related to the catch certification scheme and third country carding process. Environmental Justice Foundation, Oceana, The Pew Charitable Trusts, WWF. Brussels, Belgium.

³⁰⁷ For instance, Italy reported sudden increases or random peaks in trade that coincided with the yellow carding decisions for eight out of the 13 carded countries authorised to export seafood to the EU during the period 2005-2016. Trade anomalies primarily concerned tuna (frozen, whole; fillets/meat; prepared and preserved) and swordfish (fresh/chilled and frozen, whole; fillets/meat). The Netherlands and France also reported increased imports or peaks in trade following the Regulation’s entry into force or around certain carding decisions, e.g. the Netherlands for prepared and preserved tuna from Ghana and Thailand, and France for frozen swordfish/shark from Belize, frozen yellowfin tuna from the Philippines and fresh/ chilled yellowfin tuna from Sri Lanka. Random peaks in trade and other trade anomalies were reported by Member States that were not considered major importers of seafood in the EU, e.g. Austria, Belgium, Bulgaria, Croatia, Czech Republic, Latvia, Lithuania and Poland.

³⁰⁸ EFFACE, 2015. Report on Illegal Fishing.

discarding³⁰⁹. Furthermore, IUU fishing obstructs fisheries managers from effectively managing fish stocks in a sustainable manner; because of the uncertainty associated with estimates of IUU catches will impede stock assessments³¹⁰. These impacts could be reduced, with stronger prevention of crimes related to IUU fishing.

In the EU, this affects mostly coastal Member States, notably those bordering the Atlantic Ocean and the Mediterranean Sea.

3.2.3. SOCIAL IMPACTS

Actions to further reduce environmental offences related to IUU fishing also have social benefits. Through the additional pressure it exerts on depleting fish stocks, IUU fishing reduces the resources available for legitimate fishing activities, thereby negatively effecting legal employment opportunities in the sector³¹¹. According to Eurostat³¹², the primary fisheries industry in the EU-27 employed approximately 163 000 workers in 2018, where three quarters was centred in Spain, Italy, Greece, France and Portugal. The reduction of fishing resources due to IUU fishing can lead to reduced profits and potentially unemployment.

The EU is a net importer of fish and seafood products³¹³. A significant proportion of imports to the EU originates from developing countries³¹⁴, making the effects of IUU fishing on poorer populations and developing countries relevant also in an EU context. A publication by the World Bank Group³¹⁵ reports that the depletion of fish stocks and loss of ecosystem function and services associated with illegal fishing negatively affects poor populations and their future development opportunities. The reduction in fish stocks brought by illegal fishing can also threaten food security for certain communities³¹⁶. This practice particularly affects small-scale fishing communities in developing countries, with significant negative implications for their development and livelihoods³¹⁷. Although not directly applicable to the EU context, it is an important impact nonetheless.

In addition to this, some international organised crime groups have been identified as also involved in IUU fishing, leading these practices to be associated with serious crimes such as

³⁰⁹ EFFACE, 2015. Report on Illegal Fishing.

³¹⁰ Watson, R. and Pauly, D., 2001. Systematic distortions in world fisheries catch trends. *Nature*, 414(6863), pp.534-536.

³¹¹ EFFACE, 2015. Report on Illegal Fishing.

³¹² Eurostat, 2020. Agriculture, forestry and fishery statistics, 2020 Edition. <https://ec.europa.eu/eurostat/documents/3217494/12069644/KS-FK-20-001-EN-N.pdf/a7439b01-671b-80ce-85e4-4d803c44340a?t=1608139005821>.

³¹³ European Commission, 2015. The EU fish market, 2015 edition. https://trade.ec.europa.eu/doclib/docs/2016/february/tradoc_154321.pdf.

³¹⁴ European Commission, 2018. The EU fish Market, 2018 Edition. https://www.eumofa.eu/documents/20178/132648/EN_The+EU+fish+market+2018.pdf.

³¹⁵ World Bank Group, 2019. Illegal logging, fishing, and wildlife trade: the costs and how to combat it.

³¹⁶ UNEP, 2018. The State of Knowledge of Crimes that have Serious Impacts on the Environment. Available at: <https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment>.

³¹⁷ EFFACE, 2015. Report on Illegal Fishing.

the trafficking in persons, drugs and arms, smuggling of migrants and terrorism. For instance, forced labour can take place on IUU fishing vessels³¹⁸.

3.2.4. ECONOMIC IMPACTS

Similarly to environmental and social ones, economic impacts from environmental offences related to IUU fishing can also be mitigated. As it is not compliant with regulations, IUU fishing reduces profits for the legal fishing sector and its ancillary industries and produces losses of fishing licence fees, taxes and levies for nation states. In addition, IUU fishing can disrupt the market by creating higher supplies, which may lower the price of legally captured, harvested or farmed fish, thus further affecting the incomes of legitimate fishers³¹⁹.

Considering all effects, including non-environmental ones, the economic loss caused by illegal fishing is estimated at USD 9 to USD 15 billion annually for developing countries, USD 1 billion of which is from African countries alone³²⁰. As mentioned above, illegal and unreported caught fish has been reported to account for as much as 19 percent of reported catches worldwide, generating an annual amount of 12–28 million metric tonnes of fish at a value of USD 16–37 billion³²¹. No estimates are available for the economic loss suffered in the EU alone.

Focusing specifically on the costs of the destruction of ecosystems and the services they provide (e.g. carbon sinks, generation of food stocks, etc.), environmental damages linked to the fisheries sector have been estimated to cause an annual natural capital loss of USD 17 million (calculated as Net Present Value with 30 years and three percent discount rate)³²². A significant part of this loss can be attributed to the destruction of coral reefs and the ecosystems services they provide in the form of coastal protection, tourism and recreation, biodiversity and fisheries³²³.

Box 3. Example – Illegal fishing and trade of Bluefin tuna

<p>Example – Illegal fishing and trade of Bluefin tuna</p> <p>In 2018, Spanish authorities arrested 80 persons for their involvement in the illegal fishing and trade of bluefin tuna in Italian and Maltese waters. Their illegal catches of bluefin tuna entering the EU market were reported to generate an annual profit of EUR 12.5 million³²⁴.</p> <p>Bluefin Tuna was in the beginning of the 1990s at risk of extinction after significant overfishing in the 1980s.</p>
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³¹⁸ EFFACE, 2015. Report on Illegal Fishing.
³¹⁹ EFFACE, 2014. Understanding the damages of environmental crime - Review of the availability of data: Annexes. Available at: https://www.ecologic.eu/sites/default/files/news/2015/efface_3.1_annexes_final.pdf.
³²⁰ Stimson, 2015. Environmental Crime. Defining the Challenge as a Global Security Issue and Setting the Stage for Integrated Collaborative Solutions. Available at: <http://www.stimson.org/enviro-crime/>.
³²¹ World Bank Group, 2019. Illegal logging, fishing, and wildlife trade: the costs and how to combat it. Available at: [Illegal-Logging-Fishing-and-Wildlife-Trade-The-Costs-and-How-to-Combat-it \(1\).pdf](#).
³²² World Bank Group, 2019.
³²³ World Bank Group, 2019.
³²⁴ WWF, 2018. EUR 12.5 million illegal bluefin tuna trade exposes threat to sustainable fisheries in Europe. Available at: <https://wwf.panda.org/3336830/125-million-illegal-bluefin-tuna-trade-exposes-threat-to-sustainable-fisheries-in-Europe>.

Since then, recovery plans and other measures have been put in place to ensure the recovery and survival of the species. Illegal trade and fishing threaten the recovery of the stocks, in addition to creating competition for the legal market and financing further illegal activity³²⁵.

3.3. POACHING / WILDLIFE CRIMES

As presented in a key guidance from the EU Commission, wildlife crimes concern a wide range of offences defined by EU legislation³²⁶. The current Directive criminalises trading (supplying, selling or trafficking), importing, exporting, processing, possessing, obtaining and consumption of protected wild fauna and flora as well as deteriorations of protected habitats. Protected species and habitats relate to ones with protection status within the EU (e.g. Birds and Habitats directives) or outside of it (e.g. CITES Regulation implementing the international convention). As a potential revision, its scope could include the use in any kind of habitats of poison, poisoned baits, explosives or any other instrument with similar destructive capacity or non-selective effectiveness for wildlife.

A study from UNEP estimates that the annual loss resources from the illegal trade in wildlife and plants revolves around **USD 7-23 billion a year** worldwide³²⁷. UNODC reported that around **20 762 seizures of wildlife occurred in 2018 alone**, and that nearly 6 000 species have been seized between 1999-2018 worldwide³²⁸. The EU is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (**CITES**), which aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. It accords varying degrees of protection to more than 30 000 species of animals and plants. CITES is implemented in the EU through a set of Regulations known as the EU Wildlife Trade Regulations³²⁹. Additionally, the EU legislation on nature protection and conservation provides protection status of different level to species as well. Although the EU Wildlife Trade Regulations are directly applicable in all EU Member States, the necessary enforcement provisions must be transferred into national legislation and supplemented with national laws, and Member States must ensure that infractions are punished in an appropriate

³²⁵ MSC, 2020. Recent history of Atlantic bluefin tuna. Available at: <https://www.msc.org/species/tuna/recent-history-of-bluefin-tuna>.

³²⁶ European Commission, 2021. Combating environmental crimes and related infringements.

³²⁷ UNEP and Interpol, 2016. The Rise of Environmental Crime – A Growing Threat to Natural Resources Peace, Development And Security. Available at: <https://wedocs.unep.org/handle/20.500.11822/7662>.

³²⁸ UNODC, 2020. World Wildlife Crime Report: Trafficking in protected species. Available at: https://www.unodc.org/documents/data-and-analysis/wildlife/2020/World_Wildlife_Report_2020_9July.pdf.

³²⁹ Currently these are Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein (the Basic Regulation), Commission Regulation (EC) No 865/2006 (as amended by Commission Regulation (EC) No 100/2008, Commission Regulation (EU) No 791/2012 and Commission Implementing Regulation (EU) No 792/2012) laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97 (the Implementing Regulation), and Commission Implementing Regulation (EU) No 792/2012 of 23 August 2012 laying down rules for the design of permits, certificates and other documents provided for in Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating the trade therein and amending Regulation (EC) No 865/2006 (the Permit Regulation).

manner. Wildlife trafficking was recognised in 2017 as a priority under the EU fight against transnational organised crime, which led to more resources devoted to it at the EU and Member State levels for the period 2018-2021³³⁰. Major cross-border investigations and seizures of illegally traded wildlife products have been carried out throughout the EU, with the active involvement of Europol, Eurojust and many law enforcement agencies from different Member States and other countries.

In addition to the aspect of trafficking, the EU Habitats Directive³³¹ and Birds Directive³³² (also known as the ‘Nature Directives’) ensure the conservation of a wide range of rare, threatened or endemic animal and plant species. Some 200 rare and characteristic habitat types are also targeted for conservation in their own right, along with the 500 wild bird species naturally occurring in the EU.

A decoupling of the criminal provisions from breach of existing administrative (environmental) law in the framework of an updated ECD could potentially extend the wildlife currently covered beyond those species that are protected under the abovementioned pieces of legislation.

3.3.1. CURRENT STATUS IN THE EU

In the EU, CITES-related seizures show an upward trend since 2011. In 2016, the competent authorities of EU Member States reported to the European Commission a total of 2 268 significant seizures of wildlife commodities, 63% of them at external EU borders. More than two tonnes of ivory were seized in 2016, destined for the Asian market. In 2016-17, 48 persons were arrested, and 4 000 kg of live juvenile eels seized; the eels were intercepted as they were being exported to Asia and their total value was approximately EUR 4 million³³³. 5 644 seizure records were reported by Member States in 2017; 6 012 in 2018; and 6 441 in 2019.³³⁴ Most of these seizures occurred in **France, Germany**, the United Kingdom, **Spain** and the **Netherlands**. The reported trade value of illegal wildlife trade was a minimum of **EUR 2.3 million** in 2018 in the EU, representing an increase from 2017 when this value was at EUR 1.8 million. 60% of the seizure records for which a destination was reported were *en route* to EU Member States. The main types of traded commodities were medicinals (both plant- and animal-derived), corals and reptile bodies, parts and derivatives³³⁵.

³³⁰ European Commission, 2018. Progress report on the implementation of the EU Action Plan against Wildlife Trafficking, COM(2018) 711 final.

³³¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

³³² Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

³³³ European Commission, 2018. Progress report on the implementation of the EU Action Plan against Wildlife Trafficking, COM(2018) 711 final.

³³⁴ Annual overviews of seizures of CITES-listed wildlife in the European Union, 2017-2019. Available at: https://ec.europa.eu/environment/cites/reports_en.htm#seizures_annual_illegal.

³³⁵ European Commission, 2018. An overview of seizures: CITES-LISTED WILDLIFE IN THE EUROPEAN UNION Available at: <https://www.impel.eu/wp-content/uploads/2020/04/eu-seizures-report-2020-final-web.pdf>.

A 2018 study by a group of NGOs found that 67% of the EU Member States had satisfactorily transposed the Nature Directives into national law but failed to implement them properly³³⁶. There are clear differences in the laws applied in each country. Some examples, taken from a 2016 ENEC study covering 18 Member States³³⁷, include:

- All Member States analysed have included negligence in the definition of criminal offences. In some of them, negligence needs to be considered serious for the offence to be sanctioned as a criminal offence (Czechia, Germany, Spain, Netherlands). Others do not distinguish between serious or not serious negligence or do not explicitly require serious negligence (Greece, Italy, Portugal, Sweden).
- All Member States have a list of protected species in their national legislation, except for the Netherlands where the killing or taking of all birds is prohibited unless specifically excepted; Sweden where all birds are protected in the Game Law (though hunting seasons for birds are constructed as derogations from this general rule); and Malta where the law protects all species of avifauna naturally occurring in the wild state in the European territory of EU Member States, as well as all species of wild birds naturally occurring outside of such territory.
- At least 10 countries (Bulgaria, Greece, Hungary, Italy, Lithuania, Malta, Portugal, Spain, Sweden) consider the illegal use of poisoned baits as a criminal offense and punish with criminal penalties, with notable differences in type and severity.
- Liability is established for legal entities in Bulgaria, Czechia, Greece, Lithuania, Luxembourg, Portugal, Spain, and Sweden. Spain has implemented administrative sanction procedures.
- Regarding the use of rodenticides, 9 Member States include legal limitations for their use or marketing (Czechia, Greece, Hungary, Italy, Lithuania, Malta, the Netherlands, Spain, and Sweden)
- The negligent destruction of habitats is criminalized in Bulgaria, Greece, Hungary, Lithuania, Malta, Portugal, the Netherlands, Spain and Sweden. No information is available for other Member States.

³³⁶ BirdLife, WWF, EEB and FoEE, 2018. The State of Implementation of the Birds and Habitats Directives in the EU: An analysis by national environmental NGOs in 18 Member States.

³³⁷ Study on the implementation of Directive 2008/99/econ the Protection of the Environment Through Criminal Law. Available at: https://www.eufje.org/images/docPDF/Study-on-the-implementation-of-Directive-2008_99_ENEC_SEO_BirdLife_May2016.pdf. The countries covered are: Bulgaria, Czech Republic, Germany, Greece, Hungary, Italy, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Spain, Sweden and the UK.

3.3.2. ENVIRONMENTAL IMPACTS

Illegal trade in wildlife is a threat to biodiversity and contributes to the endangerment and extinction of species in source countries. This practice can also lead to the introduction of invasive species and pathogen pollution in import countries³³⁸.

3.3.3. SOCIAL IMPACTS

Wildlife crimes can increase poverty and negatively impact food security and public health³³⁹.

In addition to this, illegal wildlife trade can have broader consequences for specific countries, as it can erode state authority, fuel civil conflict and threaten national stability and international security³⁴⁰. This is because organized crime and terrorist groups can use illegal wildlife trafficking to destabilize countries and und arm deals. In source countries, indigenous people and rangers protecting biodiversity might also suffer threats of violence³⁴¹.

3.3.4. ECONOMIC IMPACTS

Wildlife crimes undermine legal global wildlife trade, and employment opportunities thereof, as well as they deprive governments of revenues and taxes from legal activities³⁴². In addition to this, wildlife crimes particularly impact communities living near endangered species as they are robbed of potential sources of income through wildlife tourism³⁴³.

3.4. FOREST FIRE CRIMES (MAN-MADE FOREST FIRES)

Forest fire crime refers to the wilful and malicious burning of forests, and is distinguished from fires which are spontaneously or naturally caused. According to the WWF³⁴⁴, **as little as 4% of forest fires worldwide are naturally caused** (for example by lightning strikes, volcanic eruptions and weather events such as drought or high temperatures), whereas the remainder are caused by humans either intentionally by fire clearing or arson, or by careless behaviour.

³³⁸ <https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment>.

³³⁹ EFFACE, 2015. Report on Illegal Wildlife Trafficking.

³⁴⁰ EFFACE, 2015. Report on Illegal Wildlife Trafficking.

³⁴¹ Maher J., Sollund R., 2016. Wildlife Trafficking: Harms and Victimization. In: Sollund R., Stefes C., Germani A. (eds) Fighting Environmental Crime in Europe and Beyond. Palgrave Studies in Green Criminology. Palgrave Macmillan, London. https://doi-org.ezproxy.its.uu.se/10.1057/978-1-349-95085-0_5.

³⁴² European commission, 2016. What are the environmental, economic, social and criminal impacts of wildlife trafficking and illegal logging? Available at: https://ec.europa.eu/environment/legal/law/4/pdf/environmental_economic_social_criminal_impacts.pdf.

³⁴³ UNEP, 2018. The State of Knowledge of Crimes that have Serious Impacts on the Environment. Available at: <https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment>.

³⁴⁴ WWF, 2017.

3.4.1. *CURRENT STATUS IN THE EU*

According to a report by EFFACE, in the period 2003-2012, human-induced forest fires burned a total area of **1 535 572.41 hectares** in the EU Member State countries³⁴⁵. **Spain, Italy and Portugal, Greece and France** were the European countries most affected by forest fire crimes during the same period³⁴⁶.

Social, environmental and economic damages caused by man-made forest fires are dependent on a multitude of factors including the geographical location, fire size and fire intensity. Some European Member States are worse affected than others. Southern European states such as **Spain and Italy** are particularly hard hit, both because of metrological conditions and the frequency of fire crimes being committed³⁴⁷.

3.4.2. *ENVIRONMENTAL IMPACTS*

According to a report by EFFACE³⁴⁸, environmental impacts of man-made forest fires include effects on climate change due to GHG emissions. In addition to their release of carbon dioxide, forest fires account for 32% of global carbon monoxide, 10% of methane emissions and 86% of soot emissions.³⁴⁹

Impacts moreover include damages to vegetation, peat and soils, and the destruction of habitats for wildlife³⁵⁰. Depending on the scale and location of the fire, effects also include damage to endangered animal and plant species³⁵¹. Moreover, fires directly impact benefits and resources derived from forests, including flood and drought regulation, nutrient recycling, and water and food provision.

3.4.3. *SOCIAL IMPACTS*

Social impacts include negative health impacts caused by the smoke released from the fires. According to the European Commission³⁵², 611 people in the EU died as a direct result of forest fires in the period 2000-2017 (including both firefighters and civilians). Given that 96% of forest fires worldwide are human induced, a meaningful proportion of these deaths can be attributed to forest fire crimes³⁵³.

In addition to fatalities, the indirect impacts are significant. According to the WHO³⁵⁴, forest fires cause health impacts related to the resulting smoke, ashes, and mercury released during

³⁴⁵EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.

³⁴⁶Ibid.

³⁴⁷Ibid.

³⁴⁸Ibid.

³⁴⁹ WWF, 2017. FORESTS ABLAZE: Causes and effects of global forest fires. Available at: <https://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/WWF-Study-Forests-Ablaze.pdf>.

³⁵⁰ EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.

³⁵¹ WWF, 2017.

³⁵² European Forest Fire Information System (EFFIS), EC PESETA II project report.

³⁵³ WWF, 2017.

³⁵⁴ WHO, 2021. Wildfires. Available at: https://www.who.int/health-topics/wildfires/#tab=tab_2.

the fire. This includes for example lung related diseases such as bronchitis, and cardiovascular diseases such as heart failure. The effects of smoke have been shown to be particularly damaging to elderly and small children, as well as people with respiratory and cardiovascular diseases, due to their containing of toxic substances like carbon monoxide, fine dust, formaldehyde and polycyclic aromatic hydrocarbons³⁵⁵. The health effects of mercury include impairment of speech, hearing and walking³⁵⁶. A quantification of these effects in terms of the number of people effected does not exist at EU level, however they are likely to be significant.

Additional effects include costs which are difficult to quantify, such as the emotional stress and damage caused by the destruction of homes and property, loss of livelihoods, and damages to cultural and historical sites³⁵⁷.

3.4.4. ECONOMIC IMPACTS

Economic impacts include costs for fire suppression, damages to infrastructure and private properties, loss of income from land, loss of jobs, and damages to industries such as tourism. No Europe-wide estimate exists of the costs associated with forest fire crimes, however, estimates of monetary costs from specific forest fire crimes can give an indication of the significance of the monetary impact. EFFACE³⁵⁸ estimated the costs of three forest fire crimes in Italy as one of the European countries most effected by forest fire crimes (see Box 4).

To note here is that despite only a small proportion of the damages caused by man-made fires are reflected in market prices, as the most substantial effects are on ecosystems and the services they provide³⁵⁹.

Box 4. Example – Forest fires in Italy

Example – Forest fires in Italy

A forest fire in Morfasso in the province of Piacenza, Italy in 2010 destroyed an area of 8.5 ha of woodland. The cause of the fire was determined to be negligence on the part of workers performing forest-cleaning operations in the area. Costs of fire extinction alone were estimated at EUR 100 504.54. With additional estimates of the environmental damages, the total monetary impact of the fire was determined at EUR 117 089.

Additional examples include the forest fire in Monte della Croce in 2011, where 1.49 ha of woodland was burnt, costing an estimated EUR 48 452; or the fire in Rocca Romana in 2003, affecting an area of 22 ha and costing an estimated EUR 202 353.

³⁵⁵ WWF, 2017.
³⁵⁶ WHO, 2021.
³⁵⁷ EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.
³⁵⁸ EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.
³⁵⁹ WWF, 2017.

3.5. WASTE-RELATED CRIMES

Waste related crimes include the improper collection, transport, recovery and disposal of waste. The criminal actions can be of very differing nature and impact depending on the waste stream. For example, criminal non-compliance around hazardous waste can cause severe and long-lasting damages, while illegal shipments may cause important impacts in other places, including outside of the EU³⁶⁰. Getting a clear and up-to-date view of the magnitude of waste related crimes is a challenging task, as only limited information is available.

3.5.1. CURRENT STATUS IN THE EU

According to IMPEL³⁶¹, illegal trafficking in waste accounts for **20% of all the waste shipments** in the EU. The evaluation of the ECD³⁶² estimated that in the EU, annual revenues from illicit trafficking of non-hazardous waste range **between EUR 1.3 billion and EUR 10.3 billion** a year, and that for hazardous waste **between EUR 1.5 billion and EUR 1.8 billion**. Between 2010 and 2015, around **700-1000 illegal waste shipments** were detected by Member States authorities, the majority of which was intra-EU (77% in the years 2014-2015). Notably, it is unlikely that these numbers reflect adequately the current situation, as many cases still go undetected³⁶³.

Regarding e-waste in particular, a study on illegal e-waste trade³⁶⁴ found that EU Member States exported **1.3 million tonnes** of e-waste and these transits were undocumented. In 2012, **4.65 million tonnes** of electronic waste alone were not properly managed or illegally traded within the EU.

3.5.2. ENVIRONMENTAL IMPACTS

Waste related crimes result in the contamination of air, land, water systems and can pose a threat to local ecosystems, affecting animals and plants. The inappropriate disposal and processing of e-waste in particular leads to the release of large amounts of contaminants into the local environment, including heavy metals³⁶⁵.

³⁶⁰ European Commission, 2021. Combating environmental crimes and related infringements.

³⁶¹ EnviCrimeNet, 2016. Report on Environmental Crime. Available at: <http://www.envicrimenet.eu/images/docs/envicrimenet%20report%20on%20environmental%20crime.pdf>.

³⁶² European Commission, 2020. COMMISSION STAFF WORKING DOCUMENT EVALUATION of the 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 (ENVIRONMENTAL CRIME DIRECTIVE) Available at: https://ec.europa.eu/info/sites/info/files/evaluation_-_swd2020259_-_part_1_0.pdf.

³⁶³ European Commission, 2020.

³⁶⁴ Huisman et al, 2015. Countering WEEE Illegal Trade (CWIT) Summary Report, Market Assessment, Legal Analysis, Crime Analysis and Recommendations Roadmap. Lyon, France Available at: <https://www.cwitproject.eu/wp-content/uploads/2015/09/CWIT-Final-Report.pdf>.

³⁶⁵ Illés and Geeraerts, 2016. Illegal Shipments of E-waste from the EU to China. In: Sollund R., Stefes C., Germani A. (eds) Fighting Environmental Crime in Europe and Beyond. Palgrave Studies in Green Criminology. Palgrave Macmillan, London. https://doi-org.ezproxy.its.uu.se/10.1057/978-1-349-95085-0_6.

In addition to this, the illegal and inappropriate disposal of waste also brings a loss of valuable materials that could have instead been recycled or recovered³⁶⁶. As pointed out by an interviewed stakeholder, this can take place both as dispersed small-scale contaminations originating from improper household waste management and from large-scale organised violations of waste management legislation.

3.5.3. SOCIAL IMPACTS

Waste related crimes, where associated with the release of contaminants into the environment (e.g. including affecting drinking water and food chains), can threaten human health. In particular, the illegal disposal of e-waste can lead to the emergence of physical injuries or chronic diseases for people involved in the inappropriate disposal (e.g. breathing difficulties, respiratory irritation, coughing, choking, pneumonia, tremors, neuropsychiatric problems, convulsions, coma or even death, asthma, skin diseases, eye irritations, stomach disease, inflammatory response, oxidative stress, DNA damage)³⁶⁷.

3.5.4. ECONOMIC IMPACTS

Illegal disposal of (e-)waste can generate revenue for operators that process this waste, but also constitutes an economic loss for countries that generate the (e-)waste, as they miss out on the gains related to recycling it³⁶⁸. In an interview, a stakeholder of hazardous waste management pointed out that organised crime plays an important role in the sector because of little enforcement and low penalties. According to the same stakeholder, waste crimes are often deprioritised by prosecutors, who may also have low awareness of the environmental legislation and criminal status. This is described as creating a compelling business case for organised crime groups.

In addition, legitimate businesses experience negative effects from the bad image of the (hazardous) waste management sector that is created by violations of legislation and the resulting scandals (Box 5 below gives an example). This bad reputation is mentioned as an important negative economic impact by the stakeholders due to lacking credibility in societal and political discussions as well as the attractiveness of the industry to skilled workers.

Box 5. Example – Dumping of hazardous waste in Italy

Example – Dumping of hazardous waste in Italy
An area north of Naples, Italy has been subject to illegal dumping for years, and as much as 11.6 million

³⁶⁶UNEP, 2018. The State of Knowledge of Crimes that have Serious Impacts on the Environment. Available at: <https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment>.

³⁶⁷ UNEP, 2018.

³⁶⁸ EFFACE, 2015. Illegal shipment of e-waste from the EU. Available at: https://efface.eu/sites/default/files/EFFACE_Illegal%20shipment%20of%20e%20waste%20from%20the%20EU.pdf.

tonnes of toxic waste has been reported to be buried in the area. The waste contains highly toxic substances such as arsenic, and dioxin, subjecting communities in the area to serious health risks³⁶⁹. One study indicated substantially increased levels of cancer in the area surrounding the waste dump³⁷⁰. Reports have also been made that toxins from the waste dump effects the fruits and vegetables grown in the area, thus also affecting other nations within the EU who import these goods³⁷¹.

As reported in many similar cases, the waste dump can be linked to the Italian Mafia, who offer industrial companies cheap and easy ways to dispose of their hazardous waste.

3.6. CRIMES RELATED TO CHEMICALS

The main environmental crimes related to chemicals includes the production, importation, exportation, marketing or use of ozone-depleting substances and other chemicals not authorised in the EU (e.g. in the areas of pharmaceuticals, cosmetics, endocrine disruptors, fluorinated greenhouse gases, or pesticides).

One key area of environmental crime related to chemicals is the *trade in unauthorised and counterfeit pesticides*. Counterfeit pesticides are fake products often produced and packaged to look like the genuine article. The widespread availability of technology needed to produce counterfeit and unauthorised pesticides, coupled with the lack of enforcement of existing laws and legislative loopholes all contribute to facilitate the trade of counterfeit products. As found by a Europol study in 2011, the trade in illegal and counterfeit pesticides is worth **EUR 4.4 billion per year** globally³⁷². The illegal trade in unauthorised or counterfeit pesticides represents over **10% of the worldwide market**, with an end-to-end value of **EUR 44 billion**.

Another highly relevant area of illegal trade in chemicals is linked to the *trade in ozone-depleting substances* (ODS). Almost ten years ago, the illegal trade in ODS had already been estimated as representing **between 10 and 20% of legitimate trade**, which is **between 7 000 and 14 000 tonnes per year**, for an approximate annual value **between USD 25 million and USD 60 million**³⁷³. More recent studies have shown that this trend is increasing at the global level. For example, the illegal trade in ODS from East Asia and Pacific countries now amounts to **USD 67.7 million per year**³⁷⁴. However, in the EU, the impact of illegal trade

³⁶⁹ Aljazeera, 2016. The toxic wasteland of Italy's 'Campania Felix'. Available at: <https://www.aljazeera.com/gallery/2016/1/28/the-toxic-wasteland-of-italys-campania-felix>.

³⁷⁰ Senior and Mazza, 2004. Italian "Triangle of death" linked to waste crisis. Available at: <https://www.thelancet.com/pdfs/journals/lanonc/PIIS147020450401561X.pdf>.

³⁷¹ Aljazeera, 2016.

³⁷² Europol, 2011. OC-SCAN Policy Brief 011-2011.

³⁷³ Chatham House, EIA (2006) ODS Tracking. Feasibility study on developing a system for monitoring the transboundary movement of controlled ozone-depleting substances between the Parties. Report produced according to the terms of reference of Decision XVII/16, p. 5.

³⁷⁴ UNODC (2013) Transnational Organized Crime in East Asia and the Pacific, cit., p. 119.

activities related to ODS is found to be of lower concern, as the ODS Regulation³⁷⁵ proves to be effective³⁷⁶. Quantitative estimations of the impacts in Europe are not available, though.

3.6.1. *CURRENT STATUS IN THE EU*

The 2011 Europol study estimates that more than 25% of the pesticides in circulation in some EU Member States, notably those in North East Europe, originate from illegal pesticides trade³⁷⁷. The large north-western European seaports of Antwerp (**Belgium**), Hamburg (**Germany**) and Rotterdam (the **Netherlands**) are the main points of identified entry of illegal pesticides, though not the only ones.³⁷⁸

Several studies have found that especially in the area of chemical pollution, national authorities struggle with criminal investigations. There is a need for a particularly high level of specialist knowledge to successfully detect, investigate and prosecute crime involving chemical pollution, creating an obvious challenge for law enforcement and judicial authorities³⁷⁹. According to an EnviCrimeNet study, officials from a Central European Member State reported that chemical analysis of suspicious substances is very expensive and that, depending on the type of analysis needed, one case can easily exceed their annual budget for examinations³⁸⁰.

3.6.2. *ENVIRONMENTAL IMPACTS*

The trade in ODS leads to a progressive depletion of the earth's ozone layer. This can have negative impacts on ecosystems. UV-B can significantly impair reproductive capacity and early developmental stages of aquatic organisms, and increased exposure to UV light in terrestrial plants results in reductions in height, decreased shoot mass and reductions in foliage area³⁸¹. It also contributes to global warming as ozone depleting substances such as chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) are generally potent greenhouse gases³⁸².

3.6.3. *SOCIAL IMPACTS*

A study by EUIPO in 2017 estimated that as a result of lost sales from legitimate pesticides, the trade in counterfeit pesticides led to employment losses in the legitimate pesticides

³⁷⁵ Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

³⁷⁶ European Commission, 2020. SWD(2019) 406 final/2. Evaluation of Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

³⁷⁷ Europol, 2011. OC-SCAN Policy Brief 011-2011.

³⁷⁸ European Commission, DG SANTE, 2015. Ad-hoc study on the trade of illegal and counterfeit pesticides in the EU, p. iii.

³⁷⁹ EUROJUST, 2014. Strategic Project on Environmental Crime Report, page 21. Available at: <https://www.eurojust.europa.eu/strategic-project-environment-crime>.

³⁸⁰ EnviCrimeNet, 2014. Intelligence Project on Environmental Crime: Preliminary Report on Environmental Crime in Europe, p. 21. Available at: http://www.envicrimenet.eu/images/docs/ipec_report_on_environmental_crime_in_europe.pdf.

³⁸¹ EIA (2014) New Trends in ODS Smuggling. EIA Briefing to the 26th Meeting of the Montreal Protocol, p. 1.

³⁸² EFFACE (2014), Understanding the damages of environmental crime: Review of the availability of data.

industry, resulting in a total of 2 600 lost jobs across the EU³⁸³. Indirectly, if losses in the supplier sectors are added to the direct employment loss in the pesticides industry, the total employment loss resulting from counterfeiting is estimated at 11 700 jobs³⁸⁴. In addition, because these types of products are usually neither tested nor authorised, they can contain toxic substances which are harmful for farmers' health and for that of the end-users of treated agricultural products³⁸⁵. Farmers face potentially irreversible damage to their crops, fields and livelihoods, with large scale losses increasing poverty.

The trade in ODS can significantly impact human health. The progressive depletion of the ozone layer allows increasing amounts of UV radiation to reach our planet's surface, which dramatically increases the risks of certain human health conditions, such as suppression of the immunity system, photo-aging of the skin, cataracts and skin cancer³⁸⁶.

In more general terms, illegal trade in chemicals are also linked to dangerous work environments where employment and safety laws tend to be ignored. For example, employees may be working with hazardous chemicals without adequate protection or without adequate training or equipment in logging operations³⁸⁷.

3.6.4. *ECONOMIC IMPACTS*

The 2017 EUIPO study found that for the EU as a whole, the estimated total sales lost by legitimate manufacturers of pesticides in the EU due to counterfeiting amounted to 13.8% of sales or EUR 1.3 billion each year³⁸⁸. The loss was particularly high in Germany (EUR 299 million per year), France (EUR 240 million per year) and Italy (EUR 185 million per year). As an indirect economic impact, i.e. resulting from lost sales in other sectors as well, the study estimated an additional annual loss of EUR 1.5 billion³⁸⁹. In addition, the trade in illicit pesticides impacts government revenue as well (household income taxes, social security contributions and corporate income taxes), which were roughly estimated at EUR 238 million³⁹⁰.

Box 6. Example – Illegal trade in Ozone-depleting substances in Spain

Example – Illegal trade in Ozone-depleting substances in Spain

In 2019, an organised crime group and a company were caught illegally exporting ozone-depleting substances. The crime involved the repackaging and illegal trade of the refrigerant gas R-22. The smuggled

³⁸³ European Union Intellectual Property Office (2017). The Economic Cost of IPR Infringement in the Pesticides Sector, p. 15.

³⁸⁴ Ibid., p. 16.

³⁸⁵ Europol (2011), OC-SCAN Policy Brief 011-2011.

³⁸⁶ EIA (2014) New Trends in ODS Smuggling. EIA Briefing to the 26th Meeting of the Montreal Protocol, p. 1.

³⁸⁷ EFFACE, 2014. Understanding the damages of environmental crime: Review of the availability of data.

³⁸⁸ European Union Intellectual Property Office (2017). The Economic Cost of IPR Infringement in the Pesticides Sector, p. 13: https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/resources/research-and-studies/ip_infringement/study10/pesticides_sector_en.pdf.

³⁸⁹ Ibid., p. 16.

³⁹⁰ Ibid., p. 17.

gas generated a profit of between EUR 500 000 and EUR 1 million. The investigation by the Spanish Civil Guard revealed that, if not caught, the gas would have released as much as 17 000 tonnes of CO₂ into the atmosphere³⁹¹.

3.7. POLLUTION CRIMES AFFECTING SOIL, WATER AND AIR

Pollution crimes refer to the illegal disposal of contaminants, endangering the air we breathe, our water and soil.

3.7.1. CURRENT STATUS IN THE EU

Pollution is a common threat for the environment affecting soil, water and air. In the EU, noise pollution is also included in this context³⁹². There is a large degree of overlap between pollution crimes and all of those discussed in the previous sections. For instance, illegal trafficking in waste or illegal smuggling of ODS, among other adverse effects, obviously contributes to the pollution of the environment. The volume of pollution in the EU is difficult to estimate for this reason.

The EU has taken action to criminalize some polluting activities such as the discharge of polluting substances from ships into maritime waters. The Directive on ship source pollution³⁹³ obliges Member States to introduce criminal sanction for such activities. The impacts of this criminalization, which was introduced in 2009, have not been systematically assessed to this point.

3.7.2. ENVIRONMENTAL IMPACTS

Soil degradation can contribute to the process of irreversible climate change. In the EU the soil carbon stocks are around 75 billion tonnes of carbon and it has been stated that “the most effective option to manage soil carbon in order to mitigate climate change is to preserve existing stocks in soils, and especially the large stocks in peat and other soils with a high content of organic matter”³⁹⁴.

Soil degradation also contributes to *air pollution*, which most of the time occurs through the effects of CO₂ and similar emissions into the atmosphere. These substances are known to speed up the process of global warming. Toxic pollutants in the air, or deposited on soils or

³⁹¹ Europol, 2019. How a company earned up to EUR 1 million illegally trading ten tons of ozone-depleting substances. Available at: <https://www.europol.europa.eu/newsroom/news/how-company-earned-to-%E2%82%AC1-million-illegally-trading-ten-tons-of-ozone-depleting-substances>.

³⁹² As evidenced by the Environmental Noise Directive (2002/49/EC).

³⁹³ 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, including criminal penalties, for pollution offences, amended by Directive 2009/123/EC.

³⁹⁴ Climate Change. Soil Carbon (CLIMSOIL), 2008. Review of existing information on the interrelations between soil and climate change, p. 13.

surface waters, can impact wildlife in a number of ways. For instance, air toxics are contributing to birth defects, reproductive failure, and disease in animals³⁹⁵.

Water pollution, e.g. caused by dumping waste or other materials in the sea, poses serious threats for marine ecosystems. Human activities, especially agriculture, have led to large increases in the levels of nitrogen and phosphorus in the environment. In water, this can fuel the excessive growth of phytoplankton and algae, which can kill fish, marine mammals and seabirds as well as harm humans. Additionally, plastics and other marine debris can persist in the oceans for years, traveling the currents. This litter can distribute toxic chemicals throughout the oceans, snag and tear corals, and harm animals if they ingest pieces of plastic or become entangled in the debris³⁹⁶.

3.7.3. *SOCIAL IMPACTS*

Pollution is a serious threat for human health. For instance, water and soil pollution can contaminate drinking water and food supplies, which can lead to a range of illnesses. Clean drinking water is an essential ingredient for a healthy human life, but 1.1 billion people lack access to water and 2.4 billion do not have adequate sanitation due to pollution from toxic substances dumped or washed into streams and waterways and the discharge of sewage and industrial waste³⁹⁷.

Noise pollution has been found to cause sleep disturbance, cardiovascular diseases, annoyance (a feeling of discomfort affecting general well-being), cognitive impairment and mental health problems. It can also cause direct effects such as tinnitus³⁹⁸.

The social consequences of air pollution are quite dramatic as well – the WHO estimated that, across the world, around 7 million people have died as a result of air pollution exposure in 2012³⁹⁹.

3.7.4. *ECONOMIC IMPACTS*

Pollution has obvious consequences for social and economic systems through its impact on human health, but also causes unfair competition, declines in property prices and local businesses in areas massively polluted⁴⁰⁰.

Box 7. Example – Burning of waste in Romania

³⁹⁵ MassDEP, Health & Environmental Effects of Air Pollution. Available at: <https://www.mass.gov/doc/health-environmental-effects-of-air-pollution/download>.

³⁹⁶ WWF, Pollution. <https://www.worldwildlife.org/threats/pollution> (last accessed 25/05/2021).

³⁹⁷ WWF, Pollution. <https://www.worldwildlife.org/threats/pollution> (last accessed 25/05/2021).

³⁹⁸ European commission. Noise. https://ec.europa.eu/environment/noise/index_en.htm.

³⁹⁹ WHO, 2014. 7 million premature deaths annually linked to air pollution. Available at: <http://www.who.int/mediacentre/news/releases/2014/air-pollution/en/>.

⁴⁰⁰ Watkins, E, 2015. A case study on illegal localised pollution incidents in the EU. A study compiled as part of the EFFACE project. London: IEEP.

Example – Burning of waste in Romania

Less than 16 km outside of Bucharest, waste is being illegally burnt for the extraction of metals to be sold. The burning of the waste causes significant air pollution due to the toxic chemical components released, effecting not only the communities in close proximity to the burning but also the air quality of the Romanian capital. The burning is largely carried out by the poverty-stricken Roma community who are reportedly caught in mafia structures in situations which can be likened to modern slavery⁴⁰¹.

⁴⁰¹ ABC news, 2021. In Romania, 'modern slaves' burn noxious trash for a living. Available at: <https://abcnews.go.com/Health/wireStory/romania-modern-slaves-burn-noxious-trash-living-77236071>.

4. OVERVIEW OF MAGNITUDE AND IMPACT PER CRIME TYPE

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
Forestry crimes	<p>USD 51-152 billion per year (worldwide)</p> <p>Illegal logging accounts for 10-30% of total logging worldwide (or 20-50% when laundering of illegal wood is included)</p> <p>EU responsible for almost EUR 3 billion of losses due to illegal logging, with an import of around 20 million cubic meters of illegal timber every year</p>	<p>Deforestation, habitat destruction and biodiversity decline</p> <p>Loss of important environmental services such as soil quality, water retention and the stability of local climate systems</p> <p>Increased flood risk, landslides, erosion of coastal zones</p> <p>Impact on climate change through depletion of carbon sinks and GHG emissions resulting from deforestation activities</p>	<p>Impact on human health (e.g. spread of Lyme disease)</p> <p>Threatened livelihoods of local communities</p> <p>Damage to aesthetic and cultural value of forests</p> <p>Link to corruption which in turn can lead to weakened governance and rule of law</p>	<p>Loss of tax revenue (USD 6-9 million per year worldwide)</p> <p>Loss in tax revenue stifles economic growth in the source country and increases development risks and vulnerabilities</p> <p>Economic losses from the loss of ecosystem services</p>	<p>Central and South East Europe where ancient forests exist (Bulgaria, Romania, Hungary, Latvia, Lithuania)</p>
Fishery crimes ⁴⁰²	<p>USD 11-30 billion per year (worldwide)</p> <p>IUU fishing practices represent approx. 19% of the reported value of</p>	<p>Over-harvesting and potential depletion of fish stocks that are already under pressure (directly and indirectly)</p> <p>Threat to marine biodiversity,</p>	<p>Reduced resources for legitimate fishing activities, thereby negatively effecting legal employment opportunities</p>	<p>Reduced profits for the legal fishing sector and its ancillary industries</p> <p>Losses of landing fees, taxes and levies for EU Member</p>	<p>Coastal countries, notably bordering the Atlantic Ocean and Mediterranean Sea (Netherlands, Spain, France, Ireland, Malta,</p>

⁴⁰² It should be noted that most available data is from 2003-2009.

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
	catches worldwide EU is responsible for importing EUR 1.1 billion of illegally fished products every year	serious detrimental impacts on marine ecosystems and the services they provide Pollution from the discharge of organic waste from the processing of catches, non-biodegradable litter, emissions of carbon dioxide and other GHG Annual natural capital loss of USD 17 million from destruction of coral reefs and the ecosystems services they provide in the form of coastal protection, tourism and recreation, biodiversity and fisheries	Negative effects on developing countries from which EU is importing illegally caught fish Threat to food security for certain communities (e.g. small-scale fishing communities in developing countries) International organised crime and associated other illegal activities (e.g. trafficking in persons, drugs and arms, smuggling of migrants and terrorism)	States Potential to disrupt the market and lower the price of legally captured, harvested or farmed fish, thus further affecting the incomes of legitimate fishers	Italy, Spain, Portugal, Greece)
Wildlife crimes	USD 7-23 billion per year (worldwide) 6 441 seizures in the EU in 2019 EUR 2.3 million illegal wildlife trade value in the EU in 2018	Threat to biodiversity Endangerment and extinction of species Potential introduction of invasive species and pathogen pollution	Potential increase in poverty Negative impact on food security and public health Detrimental impacts on governance and corruption, threats of violence in developing countries	Undermined legal global wildlife trade, and employment opportunities thereof Loss of government revenues and taxes from legal activities Potential loss of income, particularly on communities living near endangered species as they are robbed of potential sources of income	Member States with varied wildlife (Northern Europe, Central and Eastern Europe), as well as Member States that are key points of entry for illegal trade (Netherlands, Germany, Belgium, France)

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
				through wildlife tourism	
Forest fire crimes	<p>Up to 96% of all forest fires are man-made</p> <p>1 535 572.41 hectares of forest burned in the EU between 200-2012</p> <p><i>No estimate available of total costs, but individual events in the EU cost between EUR 50 000 and EUR 200 000 (sample of 3 fires in Italy)</i></p>	<p>Effects on climate change due to GHG emissions (forest fires account for 32% of global carbon monoxide, 10% of methane emissions and 86% of soot emissions)</p> <p>Damage to vegetation, peat and soils</p> <p>Destruction of habitats for wildlife</p> <p>Damage to endangered animal and plant species</p> <p>Depletion of benefits and resources derived from forests, e.g. flood and drought regulation, nutrient recycling, and water and food provision</p>	<p>Death (during 200-2017, 611 people died in the EU)</p> <p>Negative health impacts from released smoke, ashes, and mercury released during the fire, e.g. lung related diseases such as bronchitis, and cardiovascular diseases such as heart failure</p> <p>Emotional stress and damage caused by the destruction of homes and property, loss of livelihoods, and damages to cultural and historical sites</p>	<p>Costs for fire suppression</p> <p>Costs resulting from damages to infrastructure and private properties</p> <p>Loss of income from land and loss of jobs</p> <p>Damages to industries such as tourism</p>	Depends on land use and meteorological conditions. Spain, Italy and Portugal, Greece, France
Waste crimes	<p>Illegal trafficking in waste accounts for 20% of all the waste shipments in the EU</p> <p>Annual revenues from illicit trafficking of non-hazardous waste between EUR 1.3 billion and EUR 10.3</p>	<p>Contamination of air, land, water systems</p> <p>Treat to local ecosystems, affecting animals and plants</p> <p>Release of heavy metals (e-waste in particular)</p> <p>Loss of valuable materials that could have instead been recycled</p>	<p>Threat to human health through contamination of drinking water and food chains</p> <p>Physical injuries or chronic diseases for people involved in the inappropriate disposal (e.g. breathing difficulties,</p>	<p>Economic loss for countries that generate the waste, as they miss out on the gains related to recycling it</p> <p>Link to organised crime because of little enforcement and low penalties</p> <p>Legitimate businesses experience negative effects</p>	All EU Member States

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
	<p>billion per year in the EU</p> <p>Annual revenues from illicit trafficking of hazardous waste between EUR 1.5 billion and EUR 1.8 billion</p>	<p>or recovered</p>	<p>respiratory irritation, coughing, choking, pneumonia, tremors, neuropsychiatric problems, convulsions, coma or even death, asthma, skin diseases, eye irritations, stomach disease, inflammatory response, oxidative stress, DNA damage)</p>	<p>from the bad image of the (hazardous) waste management sector, affecting credibility in societal and political discussions and attractiveness of the industry to skilled workers</p>	
<p>Crimes related to chemicals</p>	<p>Trade in illegal and counterfeit <i>pesticides</i> is worth EUR 4.4 billion per year (worldwide)</p> <p>Illegal trade in <i>pesticides</i> represents over 10% of the worldwide market</p> <p>Trade in <i>ODS</i> represents between 10 and 20% of legitimate trade, which is between 7 000 and 14 000 tonnes per year (worldwide)</p> <p>Trade in <i>ODS</i> represents an approximate annual value between USD 25 million and USD 60</p>	<p>Progressive depletion of the earth's ozone layer, which negatively impacts ecosystems (e.g. impaired reproductive capacity and early developmental stages of aquatic organisms, reductions in height, decreased shoot mass and reductions in foliage area of terrestrial plants)</p> <p>Contributes to global warming through GHG emissions</p>	<p>Employment losses in the legitimate pesticides industry (2 600 direct lost jobs in the EU in 2017, 11 700 jobs lost when considering supplier sectors)</p> <p>Products are usually neither tested nor authorised and can contain toxic substances which are harmful for human health</p> <p>Risks of certain human health conditions resulting from depletion of the ozone layer, e.g. suppression of the immunity system, photo-aging of the skin,</p>	<p>Lost sales from legitimate channels (13.8% of sales or EUR 1.3 billion each year for pesticides in the EU)</p> <p>Indirect economic impact resulting from lost sales in ancillary sectors (EUR 1.5 billion per year in the EU)</p> <p>Loss of government revenue from household income taxes, social security contributions and corporate income taxes (EUR 238 million per year in the EU)</p>	<p>All Member States (notably those with more farmland (pesticides), and large points of entry for illegal trade)</p>

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
	million (worldwide)		<p>cataracts and skin cancer</p> <p>Dangerous work environments where employment and safety laws tend to be ignored</p>		
Pollution crimes	<i>No estimate available, as highly influenced by all other types of environmental crime</i>	<p>Soil degradation, which can contribute to climate change and air pollution</p> <p>Toxic pollutants in the air, or deposited on soils or surface waters, can impact wildlife, e.g. air toxics contributing to birth defects, reproductive failure, and disease in animals</p> <p>Water pollution poses serious threats for marine ecosystems, e.g. by fuelling excessive growth of phytoplankton and algae, which can kill fish, marine mammals and seabirds as well as harm humans</p> <p>Plastics and other marine debris can persist in the oceans for years, and can distribute toxic chemicals throughout the oceans, snag and tear corals, and harm animals</p>	<p>Threat for human health, e.g. through contamination of drinking water and food supplies, which can lead to a range of illnesses</p> <p>Noise pollution has been found to cause sleep disturbance, cardiovascular diseases, annoyance, cognitive impairment and mental health problems</p> <p>Air pollution exposure can cause death (7 million deaths per year, worldwide)</p>	<p>Economic impact through human health impact (e.g. medical costs)</p> <p>Unfair competition</p> <p>Declines in property prices and local businesses</p>	All Member States

ANNEX 6: COMPARATIVE TABLE PROVISIONS ON PRACTICAL IMPLEMENTATION

	PIF Directive ⁴⁰³	Market Abuse Directive ⁴⁰⁴	Directive on combating the sexual abuse and sexual exploitation of children and child pornography ⁴⁰⁵	Money Laundering Directive ⁴⁰⁶	Directive on combatting terrorism ⁴⁰⁷	Directive on combating fraud and counterfeiting of non-cash means of payment ⁴⁰⁸	Directive on the protection of the euro and other currencies against counterfeiting by criminal law ⁴⁰⁹	Directive on preventing and combating trafficking in human beings and protecting its victims ⁴¹⁰	Directive on attacks against information systems ⁴¹¹
Reporting/ statistics	Art. 18(2) “Without prejudice to reporting obligations laid down in other Union legal acts,	N/A	N/A	N/A	N/A	Art. 18 – Monitoring and statistics: 1. By 31 August 2019, the Commission	Art. 11 – Statistics: Member States shall, at least every two years, transmit data to the	Art. 19 - National rapporteurs or equivalent mechanisms: Member States shall	Art. 13 Exchange of information 1. For the purpose of exchanging information

⁴⁰³ Directive (EU) 2017/1371 of the European Parliament and of the Council of 5 July 2017 on the fight against fraud to the Union's financial interests by means of criminal law.

⁴⁰⁴ Directive 2014/57/EU of the European Parliament and of the Council of 16 April 2014 on criminal sanctions for market abuse (market abuse directive).

⁴⁰⁵ Directive 2011/93/EU of the European Parliament and of the Council of 13 December 2011 on combating the sexual abuse and sexual exploitation of children and child pornography.

⁴⁰⁶ Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing.

⁴⁰⁷ Directive (EU) 2017/541 of the European Parliament and of the Council of 15 March 2017 on combating terrorism and replacing Council Framework Decision 2002/475/JHA and amending Council Decision 2005/671/JHA.

⁴⁰⁸ Directive (EU) 2019/713 of the European Parliament and of the Council of 17 April 2019 on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA.

⁴⁰⁹ Directive 2014/62/EU of the European Parliament and of the Council of 15 May 2014 on the protection of the euro and other currencies against counterfeiting by criminal law, and replacing Council Framework Decision 2000/383/JHA.

⁴¹⁰ Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA.

⁴¹¹ Directive 2013/40/EU of the European Parliament and of the Council of 12 August 2013 on attacks against information systems and replacing Council Framework Decision 2005/222/JHA.

	<p>Member States shall, on an annual basis, submit the following statistics on the criminal offences referred to in Articles 3, 4 and 5 to the Commission, if they are available at a central level in the Member State concerned:</p> <p>(a) the number of criminal proceedings initiated, dismissed, resulting in an acquittal, resulting in a conviction and ongoing; (b) the amounts recovered following criminal proceedings and the estimated damage.”</p>					<p>shall establish a detailed programme for monitoring the outputs, results and impacts of this Directive. The monitoring programme shall set out the means by which and the intervals at which the necessary data and other evidence will be collected. It shall specify the action to be taken by the Commission and by the Member States in collecting, sharing and analysing the data and other evidence.</p> <p>2. Member States shall ensure that a</p>	<p>Commission on the number of offences laid down in Articles 3 and 4 and the number of persons prosecuted for and convicted of the offences laid down in Articles 3 and 4.</p>	<p>take the necessary measures to establish national rapporteurs or equivalent mechanisms. The tasks of such mechanisms shall include the carrying out of assessments of trends in trafficking in human beings, the measuring of results of anti-trafficking actions, including the gathering of statistics in close cooperation with relevant civil society organisations active in this field, and reporting.</p>	<p>relating to the offences referred to in Articles 3 to 8, Member States shall ensure that they have an operational point of contact and that they make use of the existing network of operational points of contact available 24 hours a day and seven days a week. Member States shall also ensure that they have procedures in place so that for urgent requests for assistance, the competent authority can indicate, within eight hours of receipt, at least whether the request will be</p>
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						<p>system is in place for the recording, production and provision of anonymised statistical data measuring the reporting, investigative and judicial phases involving the offences referred to in Articles 3 to 8.</p> <p>3. The statistical data referred to in paragraph 2 shall, as a minimum, cover existing data on the number of offences referred to in Articles 3 to 8 registered by the Member States and on the number of persons prosecuted for and convicted</p>			<p>answered, and the form and estimated time of such an answer.</p> <p>2. Member States shall inform the Commission of their appointed point of contact referred to in paragraph 1. The Commission shall forward that information to the other Member States and competent specialised Union agencies and bodies.</p> <p>3. Member States shall take the necessary measures to ensure that appropriate reporting channels are made available in order to facilitate the</p>
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						<p>of the offences referred to in Articles 3 to 7.</p> <p>4. Member States shall transmit the data collected pursuant to paragraphs 1, 2 and 3 to the Commission on an annual basis. The Commission shall ensure that a consolidated review of the statistical reports is published each year and submitted to the competent specialised Union agencies and bodies.</p>			<p>reporting of the offences referred to in Article 3 to 6 to the competent national authorities without undue delay.</p> <p>Art. 14 - Monitoring and statistics 1. Member States shall ensure that a system is in place for the recording, production and provision of statistical data on the offences referred to in Articles 3 to 7. 2. The statistical data referred to in paragraph 1 shall, as a minimum, cover existing data on the number of offences</p>
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									<p>referred to in Articles 3 to 7 registered by the Member States, and the number of persons prosecuted for and convicted of the offences referred to in Articles 3 to 7.</p> <p>3. Member States shall transmit the data collected pursuant to this Article to the Commission. The Commission shall ensure that a consolidated review of the statistical reports is published and submitted to the competent specialised Union agencies and bodies.</p>
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Training	N/A	<p>Art. 11 – Training: Without prejudice to judicial independence and differences in the organisation of the judiciary across the Union, Member States shall request those responsible for the training of judges, prosecutors, police, judicial and those competent authorities’ staff involved in criminal proceedings and investigations to provide appropriate training with respect to the objectives of this Directive.</p>	<p>Art. 23(3): Member States shall promote regular training for officials likely to come into contact with child victims of sexual abuse or exploitation, including front-line police officers, aimed at enabling them to identify and deal with child victims and potential child victims of sexual abuse or exploitation.</p>	N/A	N/A	N/A	N/A	<p>Art. 9(3): Member States shall take the necessary measures to ensure that persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 2 and 3 are trained accordingly.</p> <p>Art. 18(3): Member States shall promote regular training for officials likely to come into contact with victims or potential victims of trafficking in human beings, including front-line police officers,</p>	N/A
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									aimed at enabling them to identify and deal with victims and potential victims of trafficking in human beings.
Administrative sanctions	Art. 7(4) – Sanctions with regard to natural persons: “Where a criminal offence referred to in point (a), (b) or (c) of Article 3(2) or in Article 4 involves damage of less than EUR 10 000 or an advantage of less than EUR 10 000, Member States may provide for sanctions other than criminal sanctions ” Art. 9 – Sanctions with regard to legal	Art. 9 – Sanctions for legal persons Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 8 is subject to effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions , such as:	Art. 13 – sanctions on legal persons Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 12(1) is punishable by effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions , such as:	Art. 8 – Sanctions for legal persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 7 is punishable by effective, proportionate and dissuasive sanctions, which shall include criminal fines and may include other sanctions, such as: (a) exclusion from entitlement to public	Art. 18 – Sanctions for legal persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 17 is punishable by effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions, such as:	Art. 11: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 10(1) or (2) is subject to effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and which may include other sanctions,	Art. 7 – Sanctions for legal persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 6 is subject to effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions such as	Art. 6 – Sanctions on legal persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 5(1) or (2) is subject to effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions,	Art. 11 – Sanctions against legal persons: 1. Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 10(1) is punishable by effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and which may include other sanctions,

	<p>persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 6 is subject to effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions, such as: (a) exclusion from entitlement to public benefits or aid; (b) temporary or permanent exclusion from public tender procedures; (c) temporary or permanent disqualification from the practice of commercial activities; (d)</p>	<p>(a) exclusion from entitlement to public benefits or aid; (b) temporary or permanent disqualification from the practice of commercial activities; (c) placing under judicial supervision; (d) judicial winding-up; (e) temporary or permanent closure of establishments which have been used for committing the offence.</p>	<p>(a) exclusion from entitlement to public benefits or aid; (b) temporary or permanent disqualification from the practice of commercial activities; (c) placing under judicial supervision; (d) judicial winding-up; or (e) temporary or permanent closure of establishments which have been used for committing the offence.</p> <p>2. Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 12(2) is punishable by</p>	<p>benefits or aid; (b) temporary or permanent exclusion from access to public funding, including tender procedures, grants and concessions; (c) temporary or permanent disqualification from the practice of commercial activities; (d) placing under judicial supervision; (e) a judicial winding-up order; (f) temporary or permanent closure of establishments which have been used for committing the offence.</p>	<p>(a) exclusion from entitlement to public benefits or aid; (b) temporary or permanent disqualification from the practice of commercial activities; (c) placing under judicial supervision; (d) a judicial winding-up order; (e) temporary or permanent closure of establishments which have been used for committing the offence.</p>	<p>such as (...).</p>		<p>such as (...)</p>	<p>such as (...) 2. Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 10(2) is punishable by effective, proportionate and dissuasive sanctions or other measures.</p>
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	placing under judicial supervision; (e) judicial winding-up; (f) temporary or permanent closure of establishments which have been used for committing the criminal offence.		sanctions or measures which are effective, proportionate and dissuasive.						
Prevention	N/A	N/A	Article 21 Measures against advertising abuse opportunities and child sex tourism: Member States shall take appropriate measures to prevent or prohibit: (a) the dissemination of material advertising the opportunity to commit any of the offences referred to in Articles 3 to 6;	N/A	Art. 21 - Measures against public provocation content online: 1. Member States shall take the necessary measures to ensure the prompt removal of online content constituting a public provocation to commit a terrorist offence, as referred to in Article 5, that is hosted in	Art. 17 – prevention: Member States shall take appropriate action, including through the internet, such as information and awareness-raising campaigns and research and education programmes, aimed to reduce overall fraud, raise awareness and reduce the risk	N/A	Art. 18 – Prevention: 1. Member States shall take appropriate measures, such as education and training, to discourage and reduce the demand that fosters all forms of exploitation related to trafficking in human beings. 2. Member States shall take appropriate	N/A

			<p>and (b) the organisation for others, whether or not for commercial purposes, of travel arrangements with the purpose of committing any of the offences referred to in Articles 3 to 5.</p> <p>Art. 22 Preventive intervention programmes or measures: Member States shall take the necessary measures to ensure that persons who fear that they might commit any of the offences referred to in Articles 3 to 7 may have access, where</p>		<p>their territory. They shall also endeavour to obtain the removal of such content hosted outside their territory.</p> <p>2. Member States may, when removal of the content referred to in paragraph 1 at its source is not feasible, take measures to block access to such content towards the internet users within their territory.</p> <p>3. Measures of removal and blocking must be set following transparent procedures and provide adequate safeguards, in particular to ensure that</p>	<p>of becoming a victim of fraud. Where appropriate, Member States shall act in cooperation with stakeholders.</p>		<p>action, including through the Internet, such as information and awareness-raising campaigns, research and education programmes, where appropriate in cooperation with relevant civil society organisations and other stakeholders, aimed at raising awareness and reducing the risk of people, especially children, becoming victims of trafficking in human beings.</p> <p>3. Member States shall promote regular</p>	
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			<p>appropriate, to effective intervention programmes or measures designed to evaluate and prevent the risk of such offences being committed.</p> <p>Art. 23 Prevention: 1. Member States shall take appropriate measures, such as education and training, to discourage and reduce the demand that fosters all forms of sexual exploitation of children. 2. Member States shall take appropriate action, including through the Internet, such as information</p>		<p>those measures are limited to what is necessary and proportionate and that users are informed of the reason for those measures. Safeguards relating to removal or blocking shall also include the possibility of judicial redress.</p>			<p>training for officials likely to come into contact with victims or potential victims of trafficking in human beings, including front-line police officers, aimed at enabling them to identify and deal with victims and potential victims of trafficking in human beings. 4. In order to make the preventing and combating of trafficking in human beings more effective by discouraging demand, Member States shall consider taking</p>	
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			<p>and awareness-raising campaigns, research and education programmes, where appropriate in cooperation with relevant civil society organisations and other stakeholders, aimed at raising awareness and reducing the risk of children, becoming victims of sexual abuse or exploitation.</p> <p>Article 25 Measures against websites containing or disseminating child pornography: 1. Member States shall take the necessary</p>					<p>measures to establish as a criminal offence the use of services which are the objects of exploitation as referred to in Article 2, with the knowledge that the person is a victim of an offence referred to in Article 2.</p>	
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			<p>measures to ensure the prompt removal of web pages containing or disseminating child pornography hosted in their territory and to endeavour to obtain the removal of such pages hosted outside of their territory.</p> <p>2. Member States may take measures to block access to web pages containing or disseminating child pornography towards the Internet users within their territory. These measures must be set by transparent procedures and provide adequate</p>						
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			safeguards, in particular to ensure that the restriction is limited to what is necessary and proportionate, and that users are informed of the reason for the restriction. Those safeguards shall also include the possibility of judicial redress.						
Victims	N/A	N/A	Art. 14: Non-prosecution or non-application of penalties to the victim Art. 18: General provisions on assistance, support and protection measures for child victims Art. 19: Assistance and support to victims	N/A	Art. 24: Assistance and support to victims of terrorism Art. 25: Protection of victims of terrorism Art. 26: Rights of victims of terrorism resident in another Member State	Article 16 - Assistance and support to victims: 1. Member States shall ensure that natural and legal persons who have suffered harm as a result of any of the offences referred to in Articles 3 to 8 being committed by misusing	N/A	Art. 11: Assistance and support for victims of trafficking in human beings Art. 12: Protection of victims of trafficking in human beings in criminal investigation and proceedings Art. 13: General provisions on	N/A

			<p>Art. 20: Protection of child victims in criminal investigations and proceedings</p>			<p>personal data, are:</p> <p>(a) offered specific information and advice on how to protect themselves against the negative consequences of the offences, such as reputational damage; and</p> <p>(b) provided with a list of dedicated institutions that deal with different aspects of identity-related crime and victim support.</p> <p>2. Member States are encouraged to set up single national online information tools to facilitate</p>		<p>assistance, support and protection measures for child victims of trafficking in human beings</p> <p>Art. 14: Assistance and support to child victims</p> <p>Art. 15: Protection of child victims of trafficking in human beings in criminal investigations and proceedings</p> <p>Art. 16: Assistance, support and protection for unaccompanied child victims of trafficking in human beings</p>	
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						<p>access to assistance and support for natural or legal persons who have suffered harm as a result of the offences referred to in Articles 3 to 8 being committed by misusing personal data.</p> <p>3. Member States shall ensure that legal persons that are victims of the offences referred to in Articles 3 to 8 of this Directive are offered the following information without undue delay after their first contact with a competent</p>		Art. 17: Compensation to victims	
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						authority: (a) the procedures for making complaints with regard to the offence and the victim's role in such procedures; (b) the right to receive information about the case in accordance with national law; (c) the available procedures for making complaints if the competent authority does not respect the victim's rights in the course of criminal proceedings; (d) the contact details for communications about their case.			
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Investigative tools	N/A	N/A	<p>Art. 11 - Seizure and confiscation: Member States shall take the necessary measures to ensure that their competent authorities are entitled to seize and confiscate instrumentalities and proceeds from the offences referred to in Articles 3, 4 and 5.</p> <p>Art. 15(3): "Member States shall take the necessary measures to ensure that effective investigative tools, such as those which are used in organised crime or other serious crime cases are available to</p>	<p>Art. 11: Member States shall take the necessary measures to ensure that effective investigative tools, such as those used in combating organised crime or other serious crimes are available to the persons, units or services responsible for investigating or prosecuting the offences referred to in Article 3(1) and (5) and Article 4.</p>	<p>Art. 20 - Investigative tools and confiscation: 1. Member States shall take the necessary measures to ensure that effective investigative tools, such as those which are used in organised crime or other serious crime cases, are available to persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 3 to 12.</p> <p>2. Member States shall take the necessary measures to ensure that</p>	<p>Art. 13(1) - Effective investigations and cooperation: 1. Member States shall take the necessary measures to ensure that investigative tools, such as those which are used in countering organised crime or in other serious crime cases, are effective, proportionate to the crime committed and available to the persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 3 to 8.</p>	<p>Art. 9: Member States shall take the necessary measures to ensure that effective investigative tools, such as those which are used in organised crime or other serious crime cases, are available to persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 3 and 4.</p>	<p>Art. 9(4): Member States shall take the necessary measures to ensure that effective investigative tools, such as those which are used in organised crime or other serious crime cases are available to persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 2 and 3.</p>	N/A
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			persons, units or services responsible for investigating or prosecuting offences referred to in Articles 3 to 7” (4) Member States shall take the necessary measures to enable investigative units or services to attempt to identify the victims of the offences referred to in Articles 3 to 7		their competent authorities freeze or confiscate, as appropriate, in accordance with Directive 2014/42/EU of the European Parliament and of the Council (1), the proceeds derived from and instrumentalities used or intended to be used in the commission or contribution to the commission of any of the offences referred to in this Directive				
Investigation, prosecution and courts	Art. 10: Freezing and confiscation Member States shall take the necessary measures to	N/A	Art. 15 – Investigation and prosecution: (1) Member States shall take the necessary	Art. 9 Confiscation: Member States shall take the necessary measures to ensure, as	N/A	Art. 13(2): Member States shall take the necessary measures to ensure that,	Art. 10 - Obligation to transmit counterfeit euro notes and coins for analysis and detection of	Art. 8 – Non-prosecution or non-application of penalties to the victim Member	N/A

	<p>enable the freezing and confiscation of instrumentalities and proceeds from the criminal offences referred to in Articles 3, 4 and 5. Member States bound by Directive 2014/42/EU of the European Parliament and of the Council (1) shall do so in accordance with that Directive.</p> <p>Art. 12 - Limitation periods for criminal offences affecting the Union's financial interests</p> <p>Art. 13: Recovery</p>		<p>measures to ensure that investigations into or the prosecution of the offences referred to in Articles 3 to 7 are not dependent on a report or accusation being made by the victim or by his or her representative, and that criminal proceedings may continue even if that person has withdrawn his or her statements.</p> <p>2. Member States shall take the necessary measures to enable the prosecution of any of the offences referred to in Article 3,</p>	<p>appropriate, that their competent authorities freeze or confiscate, in accordance with Directive 2014/42/EU, the proceeds derived from and instrumentalities used or intended to be used in the commission or contribution to the commission of the offences as referred to in this Directive.</p>		<p>where national law obliges natural and legal persons to submit information regarding offences referred to in Articles 3 to 8, such information reaches the authorities investigating or prosecuting those offences without undue delay.</p> <p>Art. 15 – reporting of crime: 1. Member States shall take the necessary measures to ensure that appropriate reporting channels are made available in order to</p>	<p>counterfeits: Member States shall ensure that during criminal proceedings the examination by the National Analysis Centre and Coin National Analysis Centre of suspected counterfeit euro notes and coins for analysis, identification and detection of further counterfeits is permitted without delay. The competent authorities shall transmit the necessary samples without any delay, and at the latest once a final decision concerning the criminal proceedings has been reached.</p>	<p>States shall, in accordance with the basic principles of their legal systems, take the necessary measures to ensure that competent national authorities are entitled not to prosecute or impose penalties on victims of trafficking in human beings for their involvement in criminal activities which they have been compelled to commit as a direct consequence of being subjected to any of the acts referred to in Article 2.</p>	
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			<p>Article 4(2), (3), (5), (6) and (7) and of any serious offences referred to in Article 5(6) when child pornography as referred to in Article 2(c)(i) and (ii) has been used, for a sufficient period of time after the victim has reached the age of majority and which is commensurate with the gravity of the offence concerned.</p> <p>Art. 16 Reporting suspicion of sexual abuse or sexual exploitation: 1. Member States shall take the necessary measures to ensure that the confidentiality</p>			<p>facilitate reporting of the offences referred to in Articles 3 to 8 to law enforcement authorities and other competent national authorities without undue delay. 2. Member States shall take the necessary measures to encourage financial institutions and other legal persons operating in their territory to report suspected fraud to law enforcement authorities and other competent authorities without undue</p>		<p>Art. 9 – Investigation and prosecution: 1. Member States shall ensure that investigation into or prosecution of offences referred to in Articles 2 and 3 is not dependent on reporting or accusation by a victim and that criminal proceedings may continue even if the victim has withdrawn his or her statement. 2. Member States shall take the necessary measures to enable, where the nature of the act calls for it, the</p>	
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			<p>rules imposed by national law on certain professionals whose main duty is to work with children do not constitute an obstacle to the possibility, for those professionals, of their reporting to the services responsible for child protection any situation where they have reasonable grounds for believing that a child is the victim of offences referred to in Articles 3 to 7.</p> <p>2. Member States shall take the necessary measures to encourage any person who</p>			<p>delay, for the purpose of detecting, preventing, investigating or prosecuting offences referred to in Articles 3 to 8</p>		<p>prosecution of an offence referred to in Articles 2 and 3 for a sufficient period of time after the victim has reached the age of majority.</p> <p>Art. 10 - Jurisdiction</p>	
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			<p>knows about or suspects, in good faith that any of the offences referred to in Articles 3 to 7 have been committed, to report this to the competent services.</p> <p>Article 17 Jurisdiction and coordination of prosecution</p> <p>Article 24: Intervention programmes or measures on a voluntary basis in the course of or after criminal proceedings</p>						
Cooperation with coordination bodies	Art. 15 - Cooperation between the Member States and the Commission (OLAF) and other Union	N/A	N/A	Art. 10(3)- Jurisdiction: Where an offence referred to in Articles 3 and 4 falls within the jurisdiction of	Art. 19(3) – Jurisdiction and prosecution: When an offence falls within the jurisdiction of	Art. 14 Exchange of information 1. For the purpose of exchanging information relating to the	N/A	Art. 20 - Coordination of the Union strategy against trafficking in human beings: In order to	N/A

	<p>institutions, bodies, offices or agencies: 1. Without prejudice to the rules on cross-border cooperation and mutual legal assistance in criminal matters, the Member States, Eurojust, the European Public Prosecutor's Office and the Commission shall, within their respective competences, cooperate with each other in the fight against the criminal offences referred to in Articles 3, 4 and 5. To that end the Commission, and where appropriate, Eurojust, shall provide such technical and</p>			<p>more than one Member State and where any of the Member States concerned can validly prosecute on the basis of the same facts, the Member States concerned shall cooperate in order to decide which of them will prosecute the offender, with the aim of centralising proceedings in a single Member State. Account shall be taken of the following factors: (a) the territory of the Member State on which the offence was committed; (b) the nationality or residency of the offender; (c) the country of origin of the victim or victims; and (d)</p>	<p>more than one Member State and when any of the Member States concerned can validly prosecute on the basis of the same facts, the Member States concerned shall cooperate in order to decide which of them will prosecute the offenders with the aim, if possible, of centralising proceedings in a single Member State. To this end, the Member States may have recourse to Eurojust in order to facilitate cooperation between their judicial authorities and</p>	<p>offences referred to in Articles 3 to 8, Member States shall ensure that they have an operational national point of contact available 24 hours a day, seven days a week. Member States shall also ensure that they have procedures in place so that urgent requests for assistance are promptly dealt with and the competent authority replies within eight hours of receipt, by at least indicating whether the request will be answered and</p>		<p>contribute to a coordinated and consolidated Union strategy against trafficking in human beings, Member States shall facilitate the tasks of an anti-trafficking coordinator (ATC). In particular, Member States shall transmit to the ATC the information referred to in Article 19, on the basis of which the ATC shall contribute to reporting carried out by the Commission every two years on the progress made</p>	
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	<p>operational assistance as the competent national authorities need to facilitate coordination of their investigations.</p> <p>2.The competent authorities in the Member States may, within their competences, exchange information with the Commission so as to make it easier to establish the facts and to ensure effective action against the criminal offences referred to in Articles 3, 4 and 5. The Commission and the competent national authorities shall take into account in each specific case the requirements of</p>			<p>the territory on which the offender was found. The matter shall, where appropriate and in accordance with Article 12 of Framework Decision 2009/948/JHA, be referred to Eurojust.</p>	<p>the coordination of their action. Account shall be taken of the following factors:</p> <p>(a) the Member State shall be that in the territory of which the offence was committed;</p> <p>(b) the Member State shall be that of which the offender is a national or resident;</p> <p>(c) the Member State shall be the country of origin of the victims;</p> <p>(d) the Member State shall be that in the territory of which the offender was found</p>	<p>the form of such an answer and the estimated time within which it will be sent.</p> <p>Member States may decide to make use of the existing networks of operational points of contact.</p> <p>2. Member States shall inform the Commission, Europol and Eurojust of their appointed point of contact referred to in paragraph 1. They shall update that information as necessary. The Commission shall forward that</p>		<p>in the fight against trafficking in human beings.</p>	
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	<p>confidentiality and the rules on data protection. Without prejudice to national law on access to information, a Member State may, to that end, when supplying information to the Commission, set specific conditions covering the use of information, whether by the Commission or by another Member State to which the information is passed. 3.The Court of Auditors and auditors responsible for auditing the budgets of the Union institutions, bodies, offices and agencies established</p>					<p>information to the other Member States</p> <p>Art. 18(4): Member States shall transmit the data collected pursuant to paragraphs 1, 2 and 3 to the Commission on an annual basis. The Commission shall ensure that a consolidated review of the statistical reports is published each year and submitted to the competent specialised Union agencies and bodies.</p>			
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	<p>pursuant to the Treaties, and the budgets managed and audited by the institutions, shall disclose to OLAF and to other competent authorities any fact of which they become aware when carrying out their duties, which could be qualified as a criminal offence referred to in Article 3, 4 or 5. Member States shall ensure that national audit bodies do the same.</p>								
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Improving environmental protection through criminal law

Online public consultation – Summary report

1. INTRODUCTION

The public consultation on the revision of Directive 2008/99/EC on the protection of the environment through criminal law (Environmental Crime Directive, ECD) was launched on 8 February and ran through 3 May 2021. The objective of this consultation is to contribute to an impact assessment of possible options to address the challenges identified during the 2020 evaluation of the ECD. It feeds into the design of potential regulatory and non-regulatory measures to help improve the effectiveness of the ECD. The consultation was open to all interested stakeholders, including the general public. The questionnaire was available on the European Commission's 'Have your say' website and respondents could reply in any of the 24 official EU languages.

This document provides a question-by-question analysis of the responses received to the public consultation. In the case of open-ended questions or questions where respondents could add written comments, the responses were reviewed and coded into common categories. The purpose of the coding is to capture the common themes that emerge from these responses and provide an overview.

2. OVERVIEW OF RESPONDENTS

In total, 492 responses were received to the online public consultation. Two responses – one duplicate and one blank – were removed, so the total sample is 490 responses. Just over two-thirds of respondents listed France, Germany, Italy, the Netherlands or Spain as their country of origin. Figure 1 provides a breakdown of all respondents by listed country of origin.

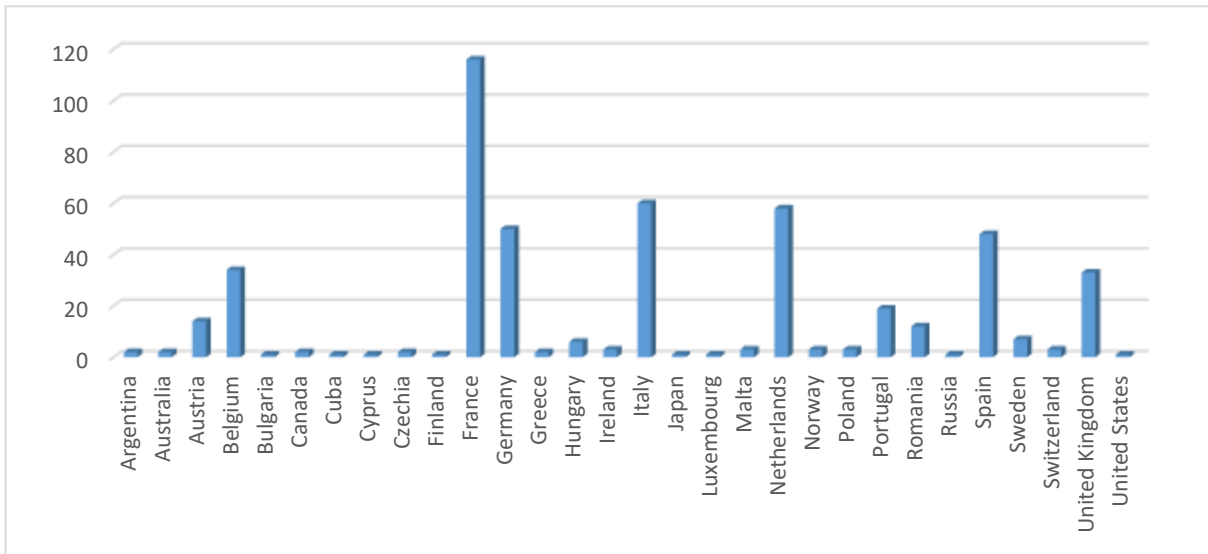
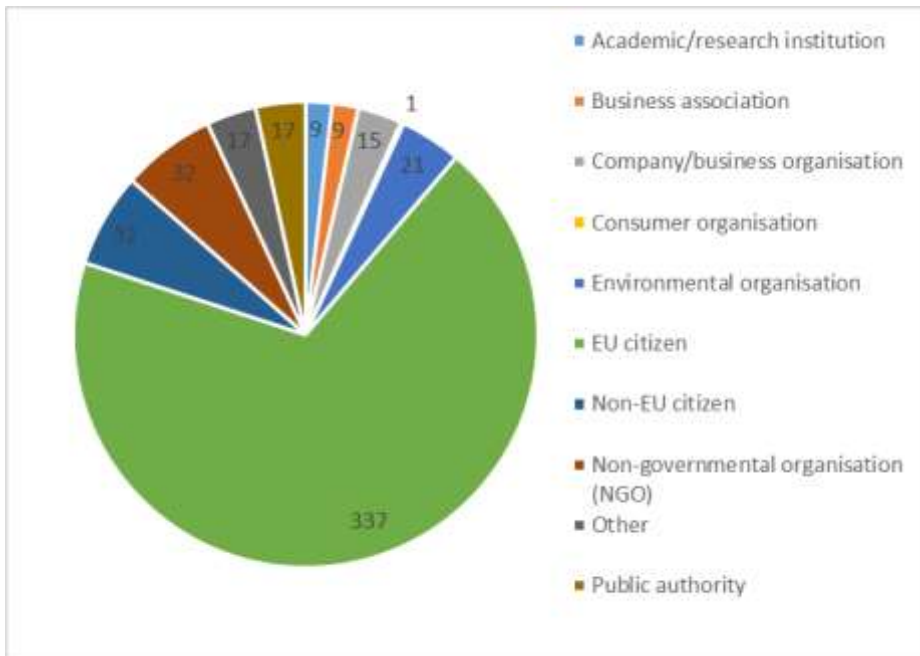


Figure 3: Country of origin of respondents

Respondents were asked two questions were asked regarding their identity. The first follows the public consultation template in EU survey and asks respondents in what capacity they give their contribution. The majority of these (75.3%) identify as ‘EU citizen’ (68.7%) or non-EU citizen (6.5%). The breakdown of all respondents is provided in Figure 2.

Figure 4: Stakeholder type per EU Survey template - ‘I am giving my contribution as...’



In a follow-up question asking respondents to be more precise about their role, the majority (60.8%) identified themselves as ‘private individuals’ (60.8%). Other notable groups were NGOs (9.2%) and business/industry (4.9%). The full breakdown is provided in Figure 3 and Table 1 and this more detailed breakdown has been used for further analysis of responses, as discussed in the following section.

Figure 5: Follow-up question on stakeholder role

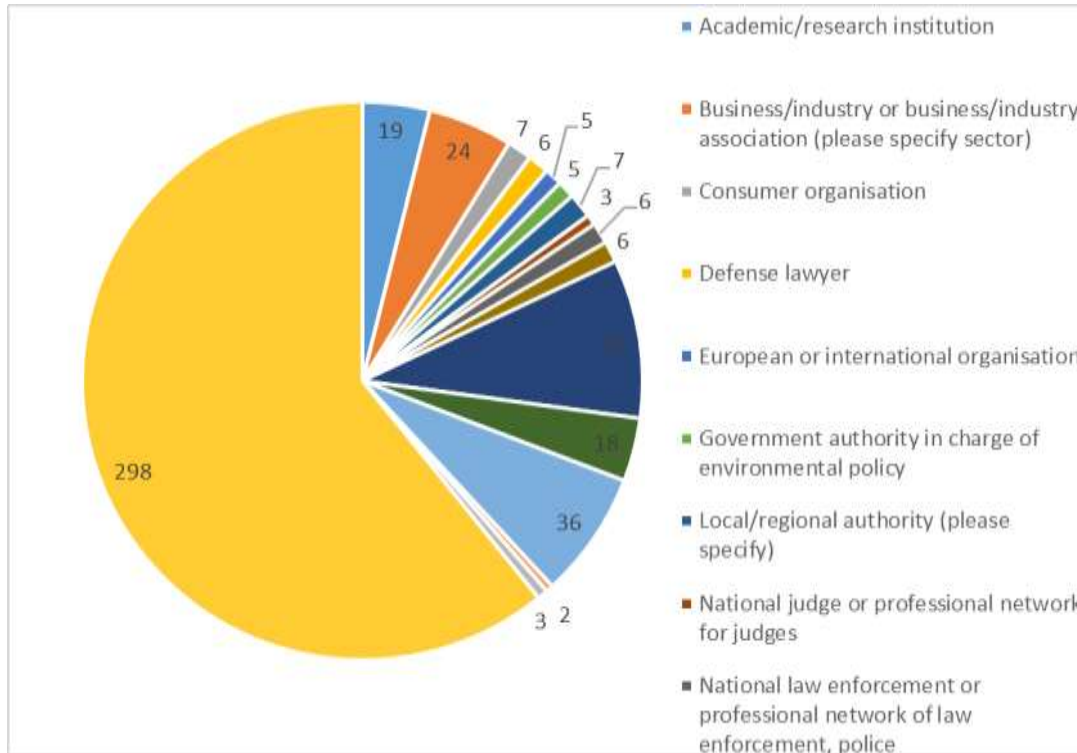


Table 21: Number and percentage of respondents according to their more precise role

More precise role	Count	%
Academic/research institution	19	3.9%
Business/industry or business/industry association (please specify sector)	24	4.9%
Consumer organisation	7	1.4%
Defense lawyer	6	1.2%
European or international organisation	5	1.0%
Government authority in charge of environmental policy	5	1.0%
Local/regional authority (please specify)	7	1.4%
National judge or professional network for judges	3	0.6%
National law enforcement or professional network of law enforcement, police	6	1.2%
National prosecution or professional network for prosecutors	6	1.2%
Non-governmental organisation (NGO)	45	9.2%
Not mentioned	18	3.7%
Other	36	7.3%

Other interest organisations (hunters/farmers)	2	0.4%
Other Public authority	3	0.6%
Private individual	298	60.8%
Grand Total	490	100%

3. GENERAL TRENDS AND APPROACH TO THE ANALYSIS

The questionnaire first asked respondents to consider broadly whether the EU should act on environmental crime and if so, how. It then asked respondents to evaluate several options that could address key issues identified with the performance of the Directive. Overall, the respondents to this questionnaire were in favour of EU action on environmental crime. In most cases, the majority of respondents – roughly 70 – 90% - favoured the more ambitious options that seemed likely to deliver better outcomes in terms of prevention and deterrence of environmental crime in the EU. The options proposed in the questionnaire were not mutually exclusive or outright alternatives. Respondents evaluated each proposed option independently - they were not asked to rank options or to select a preferred option. Nevertheless, the level of support for different approaches could in some cases be distinguished by the relative percentage of respondents selecting the response ‘very useful’ versus the response ‘useful’.

An important element of public consultation is understanding the relative positions of different stakeholders. For this reason, three key stakeholder groups were analysed more closely:

- **Business:** 24 respondents identifying as ‘business/industry’ or ‘business/industry association’
- **Practitioners:** 15 total respondents identifying as ‘National judge or professional network for judges’, ‘National law enforcement or professional network of law enforcement, police’, or ‘National prosecution or professional network for prosecutors’
- **NGOs:** 45 respondents identifying as ‘Non-governmental organisation (NGO)’

These three groups were the most well-represented in the overall breakdown of respondents who did not identify as private citizens (see Table 1).

Because stakeholders overall largely agreed in their responses to this questionnaire, efforts were made to understand the identity of those who disagreed with the majority – i.e., those who felt that EU action in this area should be more limited and were less likely to support further legislative obligations on Member States, stricter sanctions, or other requirements that would potentially increase enforcement and criminalisation of acts harming the environment.

In most cases, the proportion of business respondents amongst those reacting more negatively to increased EU action was much higher than share of such respondents in the sample overall,

indicating a trend of business to reply in this manner. Far fewer discernible trends were discovered for the Practitioner and NGO groups.

10.110.1 10.1 Evidence of coordinated responses

Responses provided to some of the open-ended questions suggest that a coordination campaign has taken place with regard to the issue of ecocide. This can be identified through the open answers to question 3 on options to improve the scope of the Directive – a total of 168 contain identical wording (in part or in full) of a statement urging the recognition of ecocide as a crime either within the scope of the Directive or through separate legislation. The language also refers to work being done by the Stop Ecocide Foundation. The breakdown of respondents by stakeholder group using all or part of this specific text in their responses largely mirrors that of the overall sample, indicating that no particular group was targeted by the campaign. The answers to the closed questions from amongst this group differ, suggesting that the campaign primarily aimed at getting this language into the open text replies.

4. ANALYSIS OF RESPONSES TO GENERAL QUESTIONS

Two general questions addressed the overall need to act in the area of environmental protection and if so, which areas should be addressed by a revised ECD.

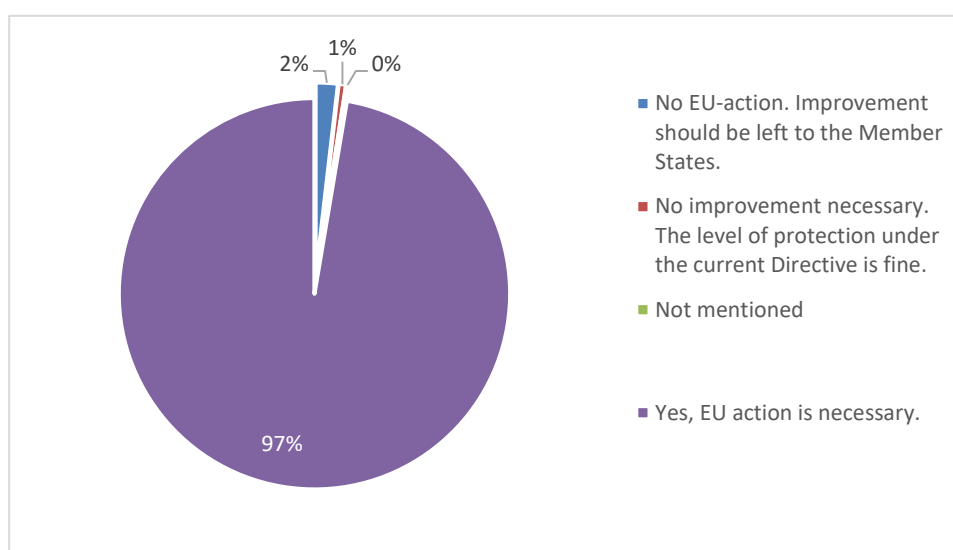
10.210.2 10.2 Question 1: Do you think the EU should act to improve environmental protection through criminal law in the Member States?

The vast majority (97%) of respondents generally believe that EU action is necessary in this area. It is worth noting that eight of the 12 (or just over 66%) respondents who are opposed to action or felt no further improvement is necessary identify as business/industry association.

Table 22: Number and percentage of replies to question 1

Option	Count	%
No EU-action. Improvement should be left to the Member States.	9	2%
No improvement necessary. The level of protection under the current Directive is fine.	3	1%
Not mentioned	1	0%
Yes, EU action is necessary.	477	97%
Grand Total	490	100%

Figure 6: Do you think the EU should act to improve environmental protection through criminal law in the Member States?



States?

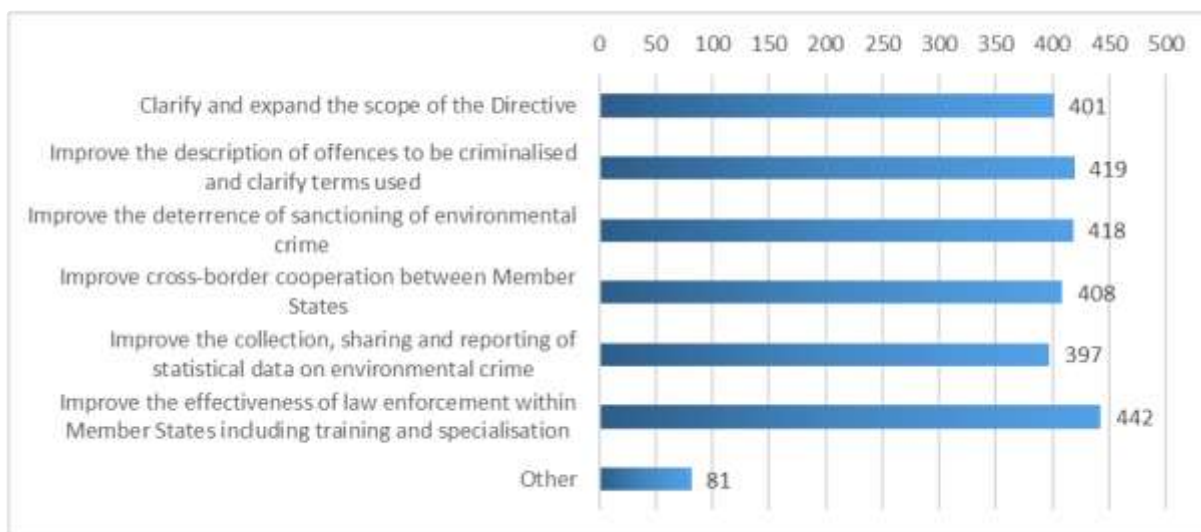
10.3 10.3 10.3 Question 2: If you consider that EU action is necessary, what should be addressed by a revised Environmental Crime Directive? (Several answers are possible)

For this question respondents could select multiple answers and the majority of respondents indicated their support for all of the possible ways that the ECD could be revised. The option most often selected (90%) is to ‘improve the effectiveness of law enforcement within the Member States including training and specialisation’; however, all other options were also selected by over 80% of respondents.

Table 23: Number and percentage of replies to question 2

Option	Total selections	% [n=490]
Clarify and expand the scope of the Directive	401	82%
Improve the description of offences to be criminalised and clarify terms used	419	86%
Improve the deterrence of sanctioning of environmental crime	418	85%
Improve cross-border cooperation between Member States	409	83%
Improve the collection, sharing and reporting of statistical data on environmental crime	397	81%
Improve the effectiveness of law enforcement within Member States including training and specialisation	442	90%
Other	81	17%

Figure 7: What should be addressed by a revised Environmental Crime Directive?



Respondents were asked to specify their answer if they selected ‘other’. However, as more respondents answered the question than chose ‘other’, and some repeated issues already provided in the multiple-choice responses, it can be inferred that some chose to elaborate on their selection regardless. The most cited area was ecocide, a point made in roughly one-third of the answers. Other themes that a revised ECD should address include compliance and enforcement, new environmental areas (e.g. wildlife trade and animal welfare) as well as the knowledge and qualification of authorities and practitioners or training.

Table 24: Main themes addressed in open replies to question 2

Main themes identified	Total references (n=86)	
	Count	Percentage
Ecocide	34	37%
Compliance and enforcement	9	10%
New environmental areas	9	10%
Knowledge and qualification of relevant authorities and practitioners/training	6	7%
Awareness raising	4	4%
Clarification of some terms or requirements	4	4%
Harmonisation of the application across MS/jurisdictions and MS cooperation	4	4%
Environmental crimes outside the EU	3	3%
Involvement of civil society	3	3%
Specialised units	3	3%
Access to justice/Aarhus Convention	2	2%
Any environmental degradation/harm	2	2%
Conflicts of interest	2	2%
Repair of environmental damages	2	2%

Main themes identified	Total references (n=86)	
Data collection	2	2%
Other	3	3%

5. ANALYSIS OF RESPONSES TO QUESTIONS ON OPTIONS TO IMPROVE THE DIRECTIVE

A series of questions was posed concerning ways in which the ECD could be modified to improve its performance. Respondents were asked to indicate the relative usefulness of several proposed options and were given the opportunity to expand upon their choices in open-text boxes. The length of the text boxes was unlimited.

10.4.10.4 10.4 Question 3: Options to improve the approach to define the scope of the Directive

The majority of the respondents (80%) find the option of no action as ‘not useful’. Eight out of the 41 who would support no action identify as business/industry and nine out of the 24 who would not change the current approach are also business. NGOs and practitioners represent only a small percentage of those who would support no action, with 5% and 10% respectively.

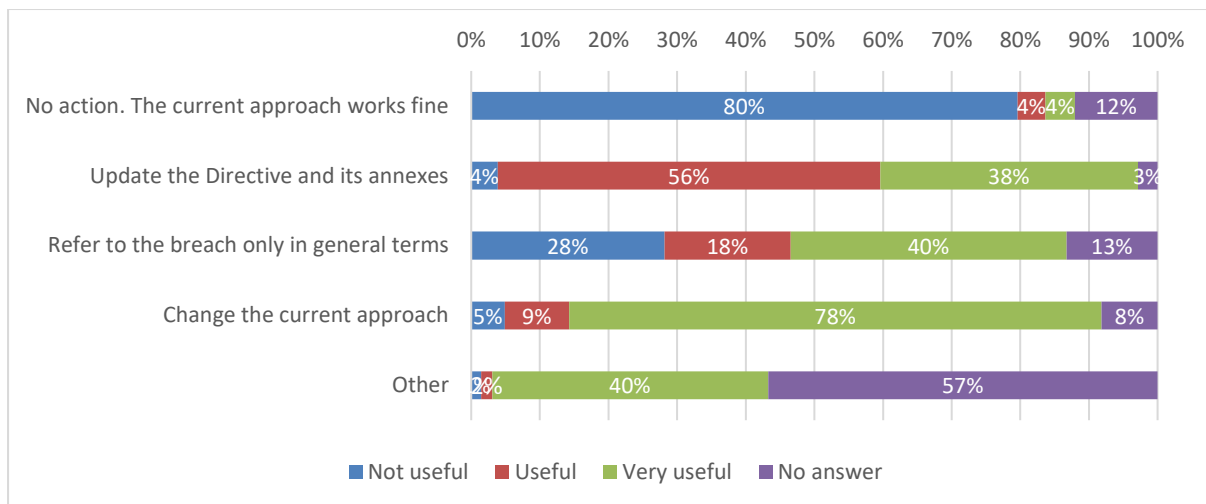
With regard to the active options, there appears to be a preference for changing the current approach and defining environmental crime independently from administrative law: a total of 380 or 78% of respondents would consider this approach ‘very useful’. Of those who claim the approach would not be useful (24 respondents or 5%), just over one-third or 9 of them identify as business. The remainder are a mix of other stakeholders. Further to this, a relatively large number of respondents (138 or 28%) stated that the option to remove the annexes and refer to breach of administrative obligations only generally would not be useful, implying their preference for a more targeted approach.

Table 25: Number and percentage of replies to question 3

Option	Not useful	Useful	Very useful	No answer
No action. The current approach (description of offences to be criminalised in Article 3, definition of unlawfulness in Article 2 and the list of relevant legislation in annexes) works fine.	390 80%	20 4%	21 38%	59 12%
Update the Directive and its annexes and include new environmental areas or legislation that is currently not covered but should be covered.	19 4%	273 56%	184 38%	14 3%
Refer to the breach of related administrative obligations only in general terms without listing the relevant legislation explicitly in annexes (i.e. remove the annexes).	138 28%	90 18%	197 40%	65 13%

Option	Not useful	Useful	Very useful	No answer
Change the current approach: define environmental crime independently of a breach of environmental administrative law.	24 5%	46 9%	380 78%	40 8%
Other	7 1%	8 2%	197 40%	278 57%

Figure 8: Options to improve the approach to define the scope of the Directive



The open-ended follow up question was the one for which the coordinated answers on Ecocide provided pre-written text as discussed in Section 3 above – the majority of responses here pointed to the recognition of ecocide as an environmental crime within the scope of the Directive. Otherwise, the most frequent responses reinforce the preference towards the definition of environmental crimes independently from administrative breach and/or for updating the annexes to the Directive. Several respondents also highlight the importance of improving compliance and enforcement here.

One national practitioner network in its document submitted with the consultation response emphasised the need to broaden the understanding of serious crime by establishing links with other crimes such as organised crime, corruption and document fraud. A document submitted by a governmental authority in charge of environmental policy supported the establishing an independent definition of environmental crime, but stressed that such a provision must exclude acts that have been permitted by the competent authorities.

Table 26: Main themes addressed in open replies to question 3

Main themes identified	Total (n=229)	references
Recognition of ecocide as a crime	192	81%

Independent definition of 'environmental crime'	13	5%
Update and inclusion of new environmental areas in Annexes	9	4%
Improving compliance and enforcement	4	2%
Clarification on the breach of administrative law	3	1%
System for monitoring and reporting	3	1%
General reference to environmental law	2	1%
Inclusion of climate change	2	1%
Other	9	4%

10.5 10.5 10.5 Question 4: Legislation not covered by the Environmental Crime Directive

Under this open-ended question respondents could suggest which environmental area or specific legislation currently not covered by the ECD should be covered. In total, 339 respondents (or 69% of the whole sample) completed this question, some of whom mentioned multiple environmental areas or legislation as relevant. The answers were grouped by emerging themes as summarised in the following table. Here again ecocide is mentioned in the majority of the answers (around half of the answers) as an area that should be covered by the ECD. Other areas or legislation, which respondents consider should be covered by the ECD, include: biodiversity/habitats conservation even outside protected areas; wildlife trade and more broadly animal welfare; illegal logging, illegal timber trade and deforestation; chemicals and especially pesticides and plastics; and climate change. Eleven respondents also noted here that the coverage of the ECD is sufficient and no additions are needed - seven of these respondents indicate business/industry as their role and one identifies as a practitioner.

One NGO, in its submitted document, argues that the geographical scope of the Directive should be addressed with further clarity, in particularly to address companies from outside the EU that operate within the EU territory and EU companies that cause environmental harm abroad.

Table 27: Main themes addressed in open replies to question 4

Main themes identified	Total references (n=339)	
Ecocide	173	49%
Biodiversity/ habitats (incl. outside protected areas)	21	6%
Wildlife trade & animal welfare	17	5%
Illegal logging & timber trade/ deforestation	16	5%
Chemicals (esp. pesticides, plastics)	15	4%
Climate change	15	4%
Land use change/ construction & energy production	12	3%
Pollution (e.g. air, noise, electromagnetic)	12	3%
Coverage is sufficient	11	3%

Illegal extraction in general (e.g. logging, fishing, hunting)	9	3%
Renewable energy (esp. biomass, geothermal)	8	2%
Intensive farming practices	7	2%
Water and marine management	7	2%
All environmental areas	5	1%
Environmental crimes outside the EU/ along supply chain	5	1%
Waste management or shipment	4	1%
Any environmental damage	2	1%
Compliance/ enforcement	2	1%
Conflicts of interest/ corruption	2	1%
Illegal trade of HFCs	2	1%
Invasive species	2	1%
Other	6	2%

10.6 10.6 10.6 Question 5: Options regarding vague terms in the definitions of environmental crime

The majority of respondents believe that action on defining vague terms is necessary and consider options such as no action or no action at the EU level as ‘not useful’. Of the eight respondents that did state that no action to revise terms in the Directive is necessary, two are businesses and the rest a mix of private individuals and others. Likewise, no significant trends could be found across the 69 who did not answer the no action option. The case was similar for those who did not rule out the option of ‘no EU action but leaving the interpretation to Member States and courts’.

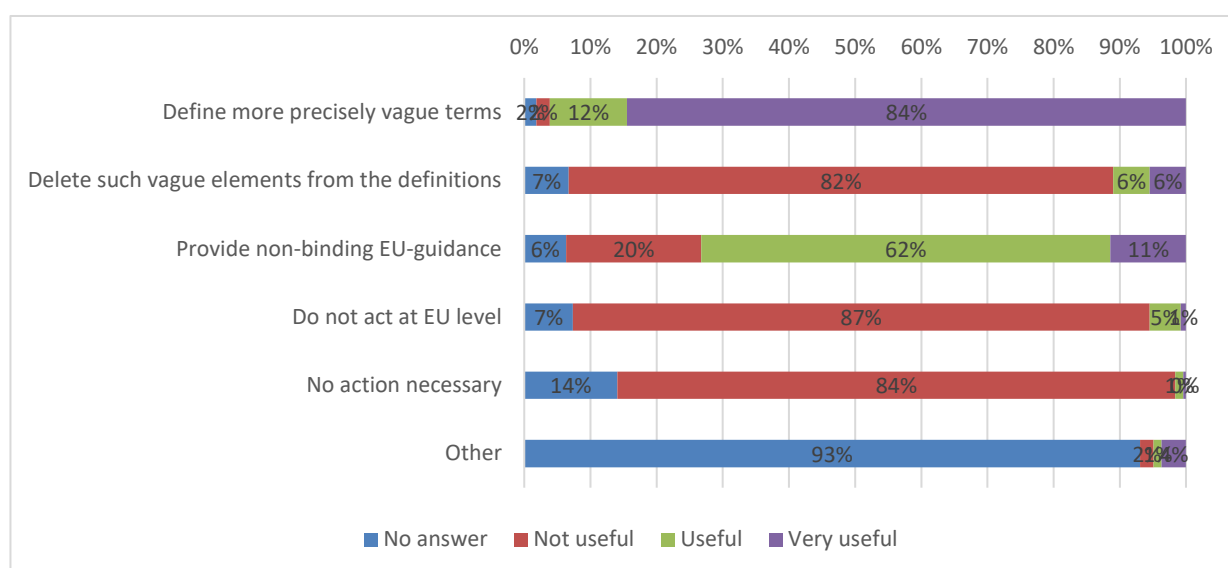
The option to retain terms in the Directive but define them more precisely is viewed as ‘very useful’ by most respondents (84%). Likewise, 82% of respondents stated that it would not be useful to delete such elements from the Directive; however a quarter (6 of 24) businesses agreed with the option to delete the terms. The option of non-binding EU guidance was met with mixed results; it might be assumed that respondents chose ‘very useful’ for their preferred options and ‘useful’ for a less preferred but still acceptable option.

Table 28: Number and percentage of replies to question 5

Option	Not useful	Useful	Very useful	No answer
Define more precisely vague terms (e.g. 'substantial damage', 'negligible' or 'non-negligible' quantities) in the Directive.	10 2%	57 12%	414 84%	9 2%
Delete such vague elements from the definitions and leave it to the national authorities to decide whether a particular incident is severe enough to be prosecuted.	403 82%	27 6%	27 6%	33 7%

Option	Not useful	Useful	Very useful	No answer
Provide non-binding EU-guidance on the interpretation of vague elements in the definitions.	100 20%	303 63%	56 11%	31 6%
Do not act at EU level but leave the interpretation of vague terms in the Directive to Member States and national courts.	427 87%	23 5%	4 1%	36 7%
No action necessary. The elements in Article 3 of the Directive are clear enough.	413 84%	6 1%	2 1%	69 14%
Other	10 2%	6 1%	18 4%	456 93%

Figure 9: Options regarding vague terms in the definitions of environmental crime



In terms of improving definitions linked to environmental crime, the standout suggestion made was a general one: to define terms more precisely in order to minimise the misuse of ambiguity when defining environmental crime. Similarly, nine respondents find that EU legislation should be more harmonised, and binding guidance was recommended by 12 respondents. In addition, the need for further enforcement of laws and punishments, along with the recognition of ecocide as a crime are also amongst the proposed measures.

Table 29: Main themes addressed in open replies to question 5

Main themes identified	Total references (n=86)	
Clearer definition of terms	32	36%
Binding guidance	12	14%
Harmonised EU legislation	9	10%
Stronger enforcement of laws and punishment	9	10%

Recognition of ecocide as a crime	6	7%
Clearer definition of laws	6	7%
Non-binding guidance	4	5%
Introduce new regulation and/or legislation	4	5%
Quantify damage	4	5%
Updating outdated regulation	2	2%

10.7 10.7 Question 6: Measures to foster a more deterrent criminal sanctioning system with regard to environmental crime

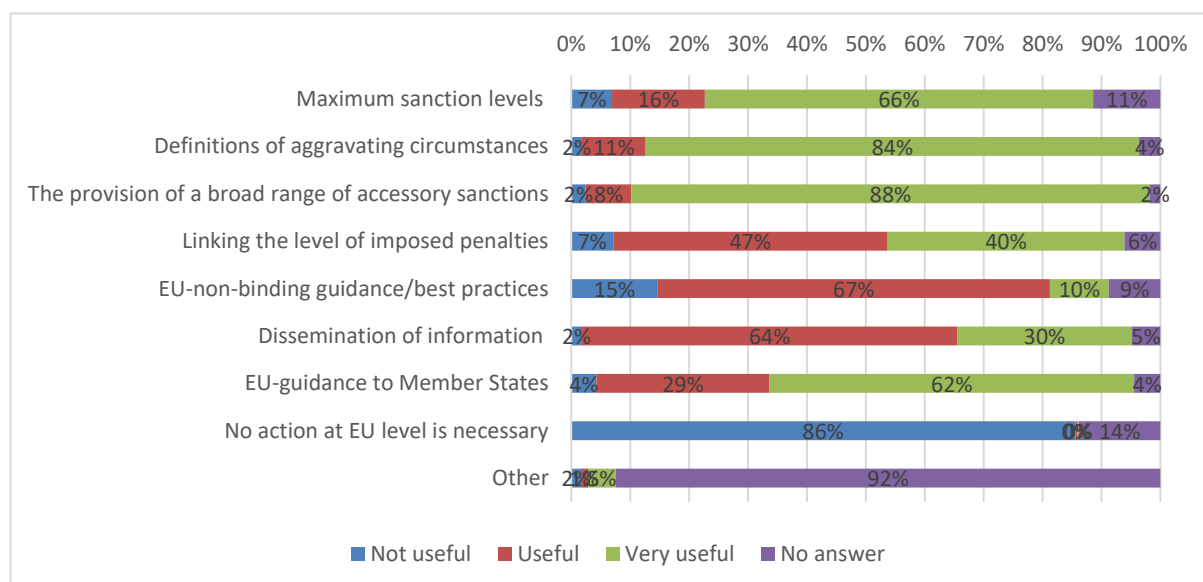
Most respondents (86%) support EU action; only three in total reacted positively to the concept of no EU action (however 68 or 14% did not answer the question). With regard to legislative approaches, most of those proposed were considered as ‘very useful’ by the majority of respondents. Support was slightly lower for maximum sanctions, as opposed to defining aggravating circumstances and the provision of accessory sanctions (66%, 84% and 88% respectively). The option of linking penalty levels to crime profits and/or the financial situation of businesses was perceived somewhat less positively than the others. In this case a larger number of respondents selected ‘useful’ as opposed to ‘very useful’ (47% and 40% respectively). However, only 35 respondents (7%) rejected the option outright as not useful, including 7 of the total 24 business respondents. The same can be said for the two options relating to non-binding guidance and dissemination of information about sanctioning practices across the Member States – they received less ‘very useful’ than ‘useful’ responses, in contrast to the result for the more binding options. Finally, EU guidance on coordinating administrative and criminal sanctioning systems received a higher amount (303 or 62%) of ‘very useful’ answers.

Table 30: Number and percentage of replies to question 6

Option	Not useful	Useful	Very useful	No answer
Maximum sanction levels that must be available to judges (for example at least 4 years of imprisonment).	34 7%	77 16%	323 66%	56 11%
Definitions of aggravating circumstances (for example for environmental crimes committed in the context of organised crime, the severity of the damage caused, actions of the offender to obstruct administrative controls and inspection) that should lead to higher sanction levels to be imposed in practice.	9 2%	53 11%	410 84%	18 4%
The provision of a broad range of accessory sanctions such as restoration of damage, exclusion from public procurement procedures, unwinding of a company, shutting down production- or other sites used	12 2%	38 8%	431 88%	9 2%

Option	Not useful	Useful	Very useful	No answer
for the crime committed, seizure of profits and material used to commit the crime.				
Linking the level of imposed penalties to the profits expected or generated and to the financial situation of businesses involved in committing the crime.	35 7%	228 47%	197 40%	30 6%
EU-non-binding guidance/best practices regarding sanction practices in the Member States.	72 15%	326 67%	49 10%	43 9%
Dissemination of information on sanction practices and imposed sanctions with regard to environmental crime among Member States.	9 2%	312 64%	145 30%	24 5%
EU-guidance to Member States to better coordinate their administrative and criminal sanctioning systems.	21 4%	144 29%	303 62%	22 4%
No action at EU level is necessary.	419 86%	2 <1%	1 <1%	68 14%
Other	8 2%	6 1%	23 5%	453 92%

Figure 10: measures to foster a more deterrent sanctioning system



The 86 written responses provided to this question were diverse. Fourteen respondents argued broadly that the penalties of environmental crime should be increased. In addition, the harmonisation of sanctions, increased transparency as well as cooperation between EU Member States are prominent topics, hinting at the importance of mutual effort across the EU.

In a submitted document, one business/industry respondent stressed the importance of effective enforcement and compliance with EU (administrative) environmental legislation as a critical condition for a level-playing field across the EU, and that appropriate sanctions should be determined on a case-by-case basis taking into account a range of criteria. The document also highlighted that any double sanctions arising from the Directive and existing administrative law should be avoided. In another document, an NGO stressed the need for strong penalties, especially for high-level traffickers that play pivotal roles in criminal networks.

Table 31: Main themes addressed in open replies to question 6

Main themes identified	Total (n=86)	references
Increase penalties for committing environmental crime	14	16%
Harmonisation of sanctions	13	15%
Recognition of ecocide as a crime	8	9%
Increased law implementation	8	9%
Binding guidance	6	7%
Focusing on repairing damage caused	6	7%
Increasing cooperation between EU member states	4	5%
Increasing control on local and national level	4	5%
Increasing public awareness	4	5%
Minimum sanction level	4	5%
Increasing transparency	3	3%
Linking penalties to financial situation of perpetrator	3	3%
Redefining infringements	3	3%
Shifting policies to cover all actors involved in environmental crime	3	3%
Clarifying guidelines	3	3%

10.8 10.8 10.8 Question 7: Measures to improve cross-border cooperation

With regard to cooperation, most respondents were positive regarding possible legal provisions that would require cooperation via common investigative tools in all Member States (78% ‘very useful’) and via the relevant EU agencies (82% ‘very useful’). A good amount of those against the proposed legislative provisions on cooperation were business (8 out of 19 on investigative tools and 6 out of 10 on EU agencies). A proposal to require Member States to provide training also received positive results, albeit slightly less so (73% ‘very useful’).

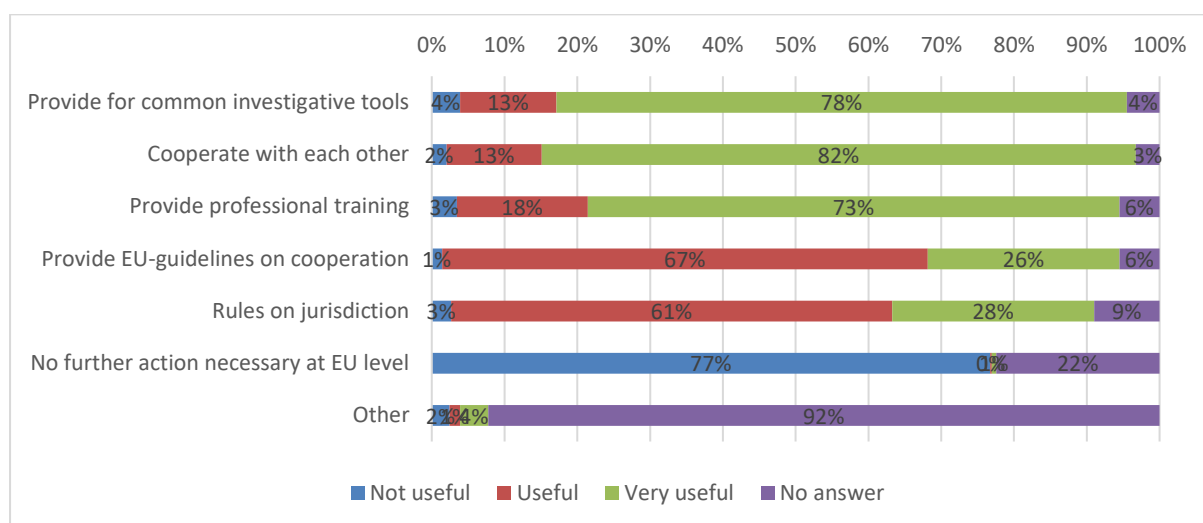
As with the previous questions, options for providing guidance on cooperation received a lower proportion of ‘very useful’ responses (23%), but were still generally considered useful (67%), indicating that this could be perceived as a less-preferred option if compared to a legislative approach. With regard to rules on jurisdiction and cross-border environmental

crimes, most responses were positive, although only 28% chose ‘very useful’ while 61% replied ‘useful’. Six of the ten ‘not useful’ replies here were from business.

Table 32: Number and percentage of replies to question 7

Option	No t use ful	U se f ul	Ve ry use ful	No ans we r
Include a provision in the Directive to require Member States to provide for common investigative tools that should be available in all Member States to investigate environmental crimes (e.g. wire tapping, surveillance, etc.).	19 4%	6 5 1 3 %	384 78 %	22 4%
Include a provision in the Directive to require Member State authorities to cooperate with each other and with EU-agencies mandated with facilitating cross-border cooperation such as Europol, OLAF and Eurojust.	10 2%	6 4 1 3 %	400 82 %	16 3%
Include a provision in the Directive to oblige Member States to provide professional training on cross-border cooperation.	17 3%	8 8 1 8 %	358 73 %	27 6%
Provide EU-guidelines on cooperation between Member States and how to make use of EU agencies such as Eurojust, Europol and OLAF.	7 1%	3 2 7 6 7 %	129 26 %	27 6%
Include a provision in the Directive on rules on jurisdiction with regard to cross-border environmental crimes in the Directive.	13 3%	2 9 7 6 1 %	136 28 %	44 9%
No further action necessary at EU level.	37 6 77 %	1 < 1 %	3 1%	11 0 22 %
Other	12 2%	7 1 %	19 4%	45 2 92 %

Figure 11: measures to improve cross-border cooperation



The open answers touched a wide range of different areas for improving cross-border cooperation. The areas most commonly mentioned concern improving the use of EU agencies such as Eurojust and Europol by Member States and increasing funding for these agencies, and the importance of making it obligatory for Member States to set up specialised units harmonised across the EU. Other subjects mentioned by at least four respondents include wildlife cybercrime, greater EU guidance on cross-border cooperation and ecocide.

In a submitted document, one governmental authority in charge of environmental policy pointed out that an overall coherent understanding of the Directive could improve cross-border cooperation.

Table 33: Main themes addressed in open replies to question 7

Main themes identified	Total (n=49)	references
More funding for and greater MS use of EU agencies (Eurojust, Europol etc.)	9	18%
Obligation to set up specialised units that are harmonised across the EU	8	16%
Provision to cover wildlife cybercrime	4	8%
EU guidelines on cross-border cooperation	4	8%
Ecocide	4	8%
Improved information exchange through a digital platform	3	6%
Establishment of a focal point in every MS	3	6%
Establishment of an EU investigative authority	3	6%
Relations with non-EU countries	2	4%
Cross-border prosecution	2	4%
Increase budget for fighting environmental crime	2	4%
Simplify procedures to improve efficiency	2	4%
Clearer definitions in the Directive	2	4%

Stricter oversight of use of EU funds	2	4%
More awareness raising	2	4%
Other	10	20%

10.9 10.9 10.9 Question 8: Options to foster the practical implementation of the Directive

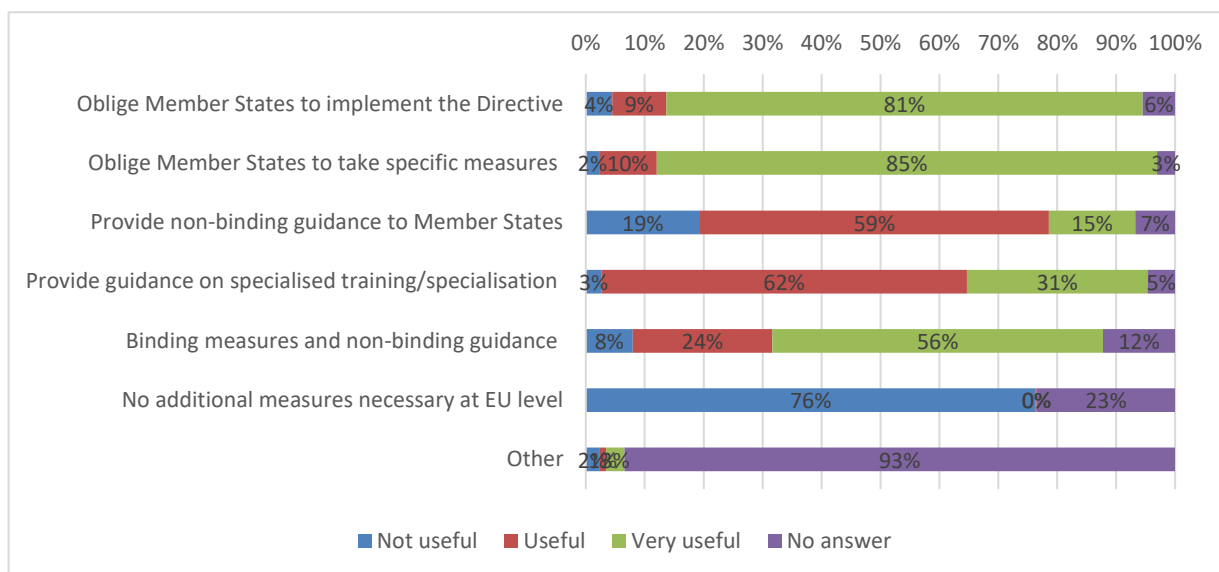
Most of the respondents consider EU action necessary to foster the practical implementation of the Directive – only one respondent opposed this – however 115 or 23% of respondents chose not to answer this question. Most respondents support legislative provisions on better implementation and a proportionately higher amount of the business respondents have marked these options as ‘not useful’ (8 out of 22 on the general provision and 7 out of 11 on the practical implementation). With regard to the guidance options, there is again a tendency to consider these more ‘useful’ than ‘very useful’ indicating that these are less-preferred than the more binding approaches.

Table 34: Number and percentage of replies to question 8

Option	Not useful	Useful	Very useful	No answer
Include in the Directive a general provision to oblige Member States to implement the Directive.	22 4%	45 9%	396 81%	27 6%
Include in the Directive provisions to oblige Member States to take specific measures to foster practical implementation such as the provision of training or the set up specialised units, to oblige relevant national law-enforcing authorities to exchange information and cooperate with each other, to oblige national authorities to cooperate with other national authorities, to take measures to raise public awareness of the harmfulness of environmental crime.	11 2%	48 10%	416 85%	15 3%
Provide non-binding guidance to Member States on the establishment of overarching national enforcement strategies involving all levels of the enforcement chain (administrative controls and monitoring, tax authorities, police, prosecution, judiciary).	95 19%	290 59%	72 15%	33 7%
Provide guidance to Member States on specialised training/specialisation of law enforcement officials, criminal judges and prosecutors with regard to environmental crime issues.	13 3%	304 62%	150 31%	23 5%

Option	Not useful	Useful	Very useful	No answer
A combination of binding measures and non-binding guidance (as outlined above)	39 8%	116 24%	275 56%	60 12%
No additional measures necessary at EU level.	374 76%	1 <1%	0 0%	115 23%
Other	11 2%	6 1%	15 3%	458 93%

Figure 12: options to foster the implementation of the Directive



Concerning open responses, the most referenced subject is the need for training and capacity building. Another is the importance of increasing the number of specialised units. Five respondents call for greater cooperation with civil society, in particular cooperating with NGOs and recognising their contribution and expertise, including through the Aarhus Convention.

One NGO in its submitted document proposed the use of anti-money laundering mechanisms to tackle environmental crime.

Table 35: Main themes addressed in open replies to question 8

Main themes identified	Total references [n=39]	
Improve funding for training, capacity building and specialisation	10	26%
Greater specialisation of units	8	21%
Greater cooperation with civil society including through Aarhus	5	13%
Binding measures are needed	4	10%

Main themes identified	Total references [n=39]	
	Promotion of cooperation on enforcement, inspection and implementation	4
A regulation should be used rather than a directive	3	8%
A provision obliging Member States to implement the Directive is redundant	3	8%
The Directive must combine binding and non-binding measures	2	5%
Availability of an online platform for sharing information	2	5%
Establishment of focal points in each MS	2	5%
Implementation should be reviewed regularly	2	5%
Non-binding measures should be preferred	1	3%
Ecocide	1	3%
Other	9	23%

10.10.10.10 10.10 Question 9: Measures to foster and improve the collection of statistical data on environmental crime.

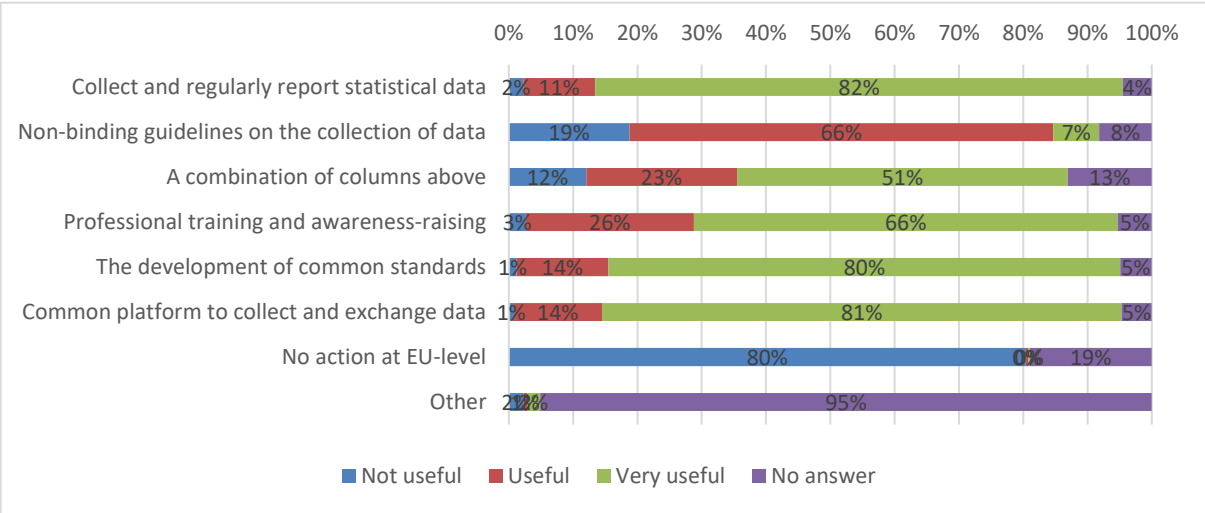
Most respondents would support a legal obligation to require Member States to collect and report statistical data on environmental crime – 82% regarded this option as very useful. Many also agree that this could be supported via the development of EU-level common standards for data collection (80% ‘very useful’) and the provision of a common platform for reporting (81% ‘very useful’). The option of non-binding guidelines in this regard received a less-favourable response – 92 or 19% of respondents consider this not-useful – these are a mix of different types of stakeholders, with only three representing business. Interestingly, only 51% considered the combination of a legal obligation with non-binding guidelines to be ‘very useful’, with 23% considering it ‘useful’ and 12% considering it ‘not useful’. It is not clear why respondents would be in favour of an obligation but then against guidelines supporting that obligation, indicating a possible misunderstanding of the question. The concept of professional-training and awareness raising was also mostly considered positively (26% ‘useful’ and 66% ‘very useful’).

Table 36: Number and percentage of replies to question 9

Option	Not useful	Useful	Very useful	No answer
Oblige Member States to collect and regularly report to the Commission statistical data related to environmental crime.	11 2%	55 11%	402 82%	22 4%
Non-binding guidelines of the Commission on the collection of statistical data related to environmental crime.	92 19%	323 66%	35 7%	40 8%
A combination of the two previous options	59 12%	115 23%	252 51%	64 13%

Option	Not useful	Useful	Very useful	No answer
Professional training and awareness-raising for national law enforcement authorities regarding the importance of collecting, processing and sharing of statistical data, fostered by the Commission.	13 3%	128 26%	323 66%	26 5%
The development at EU-level of common standards on the collection of statistical data on environmental crime proceedings.	6 1%	70 14%	390 80%	24 5%
The provision of a common platform to collect and exchange statistical data at EU-level.	4 1%	67 14%	396 81%	23 5%
No action at EU-level.	394 80%	2 <1%	1 <1%	93 19%
Other	11 2%	3 1%	10 2%	466 95%

Figure 13: measures to foster and improve the collection of data



Only 43 respondents provided a written follow-up response to this question. The most common open response is that measures on collection of statistical data should be binding, which is in line with the findings from the closed questions. The second most common comment is that guidance and training should be provided to ensure that data collected is comparable between Member States and training given on how to use the data effectively. Also mentioned by several respondents is the importance of building on existing statistical infrastructure to avoid duplication of work for Member States and the value of ensuring that data is available to the public.

Table 37: Main themes addressed in open replies to question 9

Main themes identified	Total references [n=43]	
Make measures binding	13	30%
Give guidance and training on using data	7	16%
Build on existing platforms and databases to avoid duplication of MS work	5	12%
Make data available to the public	4	9%
Greater collection of statistics is needed to fight environmental crime	3	7%
Ecocide	3	7%
Conduct wide academic research on environmental crime	2	5%
Ensure that the reporting system is not too much of an administrative burden	2	5%
Use data to increase public communication about environmental crime	2	5%
Prefer non-binding guidelines to binding measures	1	2%
Other	10	23%

10.11 10.11 10.11 Question 10: Do you have any other comment or suggestion? You have the possibility to upload documents with information you want to draw our attention to.

The final question gave respondents the opportunity to submit any additional written comments, as well as to upload documents relevant for the review of the ECD, including targeted position papers. There were 85 written responses providing additional comments. Thirteen additional replies did not contain additional information but referred to the documents they had submitted. The profile of those who took the time to submit final comments was similar to the overall breakdown of profiles across the sample – with a somewhat higher proportion of business and NGOs.

An overview of the main points of these responses is provided in the table below – many underlined their support for options proposed in the questionnaire, such as to improve compliance issues (11%), to publish data on environmental crime (5%) or to provide further clarifications and definitions related to environmental crime (4%).

Other responses re-emphasised other concepts, such as the need to cover environmental crimes outside the EU (9%); to extend coverage to climate change amongst other environmental areas; and to promote participation of civil society (4%).

Four responses stressed that the current provisions are sufficient – all of these responses came from business. Responses from NGOs were mainly focused on ecocide (5 out of 10), with the remainder spread across different issues.

Table 38: Main themes addressed in open replies to question 10

Main themes identified	Total references [n=85]	
Criminalise ecocide	27	32%
Urgent action is needed to protect the environment	10	12%
Improve compliance, enforcement and accountability	9	11%
Cover environmental crimes outside the EU	8	9%
Extend coverage to climate change and other environmental areas	8	9%
The current provisions are sufficient	4	5%
Make data and results public	4	5%
Promote participation of civil society	3	4%
Provide clarifications and definitions	3	4%
Raise awareness and educate	3	4%
Ensure EU funding does not support environmentally harmful projects	2	2%
Other	4	5%

6. OVERVIEW OF THE DOCUMENTS SUBMITTED

As part of the final question respondents could also submit documents and in total 28 respondents submitted documents or referred to a link for their document; one respondent submitted an empty document. Nearly half of the submissions (13) contain very specific examples or points of interest to the respondents that do not directly respond to the questions of the consultation. Four respondents submitted position papers or background information specifically on the topic of ecocide. Eleven of the submissions are directly related to the topic of the public consultation and contain recommendations or propositions on pertinent issues. These eleven submissions come from two academic institutions, two business/industry organisations, three government or practitioner organisations, and four NGOs.

Common themes emerging from the NGOs' papers are the need for clarifications of the vague terms or definition of environmental crime; harmonisation of sanctions and implementation; and cross-border cooperation. One of the NGOs advocates for extension of the Directive's scope to capture environmental crimes committed along the supply chain and outside the EU. The main position of the business organisations is that harmonisation is vital for ensuring a level-playing field. The respondents representing practitioners or academia provide more concrete recommendations and propositions for amendments as summarised in the following table.

Table 39: Overview of all documents submitted

ID	Reference	Role	Overview and comments
1	ERFJ - European Forum for Restorative Justice	Not mentioned	Paper about restorative justice and the potential to apply this concept/process in environmental crimes
2	EU survey	Private individual	Copy of the survey response but not readable
3	LETTERA	Other	Examples of Italian legal cases and issues on asbestos
4	Four Paws	NGO	Propositions by an NGO focused on covering wildlife trafficking, cooperation, enforcement and data collection. The position highlights the international aspect of wildlife crime. It asks for making wildlife crime a serious crime and applying maximum penalties with a deterrent effect. It also asks for the establishment of national task forces and cooperation across MS, between MS and EU agencies and NGOs. It is proposed that wildlife special prosecutors and police units are established in MS. It is encouraged that common EU standards on data collection are established to collect data on court cases, proceedings and sanctions, supported by training to national authorities. The NGO also calls for a registration system for legal wildlife trade and national action plans for the management of confiscated wild animals.
5	ENPE - European Network of Prosecutors for the Environment	National prosecution or professional network for prosecutors	A detailed copy of the questionnaire with comments and recommendations; The recommendations by ENPE are: 1: The EU should revise the Environmental Crime Directive (2008/99) to foster greater protection of the environment in Member States (inclusion of climate change is mentioned). 2a ENPE recommends that The Commission should remove reference to vague notions within the Directive to the extent possible and where this cannot be achieved should provide greater clarity and definition of terms. Where possible these should be aligned with terms and definitions used in other international instruments and EU Directives.

ID	Reference	Role	Overview and comments
			<p>2b ENPE recommends that thresholds for criminalisation of environmental permit breaches and offences should be lowered or removed to ensure that wider and easier enforcement in the criminal courts is possible.</p> <p>2c ENPE recommends that the opportunity should be taken to include a clear, decisive and purposive requirement in the Directive that Member States should ensure both natural and legal persons can be prosecuted for environmental offences directly, rather than through the act or omission of a third party.</p> <p>2d ENPE recommends that the opportunity should also be taken to clarify the relationship between criminal and administrative sanctions. Systems for administrative sanctions relating to criminal offending should be subject to legislative provision or judicial oversight which ensures that administrative sanctions are applied with high levels of governance and transparency.</p> <p>2e ENPE recommends that to improve the sanctioning of environmental crime, sentencing guidelines or gravity factors should be adopted in line with the recommendations of ENPE report - Sanctioning Environmental Crime (WG4) – Final report, Section V.</p> <p>2f ENPE recommends that Member States should be obliged to participate in a common data collecting regime or system with clear parameters and requirements, for law enforcement agencies involved in environmental crime, which is accessible to them and others for analytical purposes. The Commission should establish a mechanism for external audit or scrutiny.</p> <p>2g ENPE recommends that Member States should be strongly encouraged to promote and adopt measures to ensure specialisation of all participants within the environmental law enforcement chain.</p> <p>2h ENPE recommends that forestry offences should clearly be included within the ambit of the environmental crime directive.</p> <p>3a ENPE recommends favouring retention of annexes to identify some of the most common types of environmental crime which must be capable of being dealt with under criminal law. There should be an additional catch-all definition of environmental crime</p>

ID	Reference	Role	Overview and comments
			<p>to ensure that the requirement to criminalise certain behaviours which have an adverse impact upon regimes designed to protect it, is sufficiently broad.</p> <p>3b ENPE recommends that the Directive should provide that additional requirements may be promptly and easily added by guidance/amendment or similar mechanism by the Commission to reflect new and developing areas of criminal activity</p> <p>5: Certainty in the law is essential. Therefore vague notions and imprecise definitions should be removed from the Directive.</p> <p>6a ENPE recommends that the Commission widen the scope of the Directive to include offences committed by legal persons.</p> <p>6b ENPE recommends that Member States insert the formula ‘effective, proportionate and dissuasive’ as the standard for (criminal) sanctioning in their national legislation.</p> <p>6c ENPE recommends that the Commission provide guidance on the terms ‘effective, proportionate and dissuasive’ in a comprehensive document.</p> <p>6d ENPE recommends that Courts should have sentencing options available to them which deal with the remediation and / or repair of environmental crime.</p> <p>6e ENPE recommends that consideration be given to setting out minimum penalty thresholds for all Member States in the prosecution of environmental crime.</p> <p>7a ENPE recommends that the new version of the ECN imposes an obligation on each Member State to nominate a specialist or specialist at each stage of the environmental enforcement chain and to publish the contact details of those personnel clearly on the website of the national government department responsible for the implementation of the Directive.</p> <p>7b ENPE recommends that the Commission consider allocating additional ‘ring fenced’ funding to EUROJUST so as to allow for the recruitment or secondment of assistant national members to specialise in the cross border enforcement of EU environmental criminal law in conjunction with ENPE.</p> <p>8a ENPE recommends that specialist training is appropriately funded and provided for all levels in the enforcement chain from Inspectors, police, prosecutors, judges and defence lawyers.</p>

ID	Reference	Role	Overview and comments
			<p>8b ENPE recommends that the EU Commission should take all possible steps to urge Member States to participate in the specialist environmental enforcement networks.</p> <p>8c ENPE urges the EU Commission to consider funding ENPE as a valuable enforcement network to be co-located with other enforcement practitioners and prosecutors at EUROJUST. This would significantly assist and facilitate specialist environmental prosecutors to deliver their mandates appropriately. For example, EJM and OLAF are facilitated in a similar manner and we believe ENPE could substantially assist in the pan-European enforcement of environmental crime if given appropriate financial and organisational support.</p> <p>9: ENPE recommends that the new Directive should include a mandatory provision to improve the collection, sharing and reporting of statistical data on environmental crime by Member States.</p> <p>Further explanations and examples are also provided.</p>
6	Petition geotherme	Other	Petition on geothermal energy
7	Moreno Soldado Salvador	Defense lawyer	Examples of Spanish legal cases and issues on power lines and electrocution of birds
8	Une plainte de emposennement	Defense lawyer	News article about a French case on pesticide pollution
9	German organisations	Other interest organisations (hunters/farmers)	Examples of German legislation and issues on hydropower plants
10	Cycle DRE - enseignants et auditeurs du Cycle «Droit répressif de l'environnement»	Academic/research institution	<p>20 propositions for amendments to the ECD by academics. The recommendations include:</p> <p>1. The existence of criminal sanctions, which reflect a qualitatively different disapproval of society than that manifested through administrative sanctions or civil compensation, should be reinforced.</p> <p>2. The provisions of the legislation listed in Annexes A and B must be complemented by criminal law measures that match environmental damage with appropriate criminal</p>

ID	Reference	Role	Overview and comments
			<p>sanctions.</p> <p>3. Whenever legislation or other general or individual environmental standards are adopted, they should specify, where appropriate, that this Directive applies.</p> <p>4. The Union is committed to strengthening the role of the European Court of Auditors, in particular through audits relating to climate change, the environment, natural resources and biodiversity.</p> <p>5. Exchanges and cooperation should be promoted.</p> <p>6. In Article 1 "Subject", create a paragraph 2: Scope (suggestions are provided).</p> <p>7. An ADDITIONAL article is created RELATING TO INQUIRIES AND PROSECUTIONS (suggestions are provided).</p> <p>8. ARTICLE 2, DEFINITIONS, is thus completed, a renumbering of the items appears necessary, and current recitals 5, 6, 7 and 10 should be revised (suggestions are provided).</p> <p>9. ARTICLE 3: INFRINGEMENTS (prefer: "QUALIFICATIONS") (suggestions are provided).</p> <p>10. ADDITIONAL ARTICLE: RISK, PREVENTION AND PRECAUTION is created (suggestions are provided).</p> <p>11. ARTICLE 4, INCENTIVES AND COMPLICITY is revised (suggestions are provided).</p> <p>12. ARTICLE 5, SANCTIONS (prefer "PENALTIES") is revised (suggestions are provided).</p> <p>13. ARTICLE 6: RESPONSIBILITY OF LEGAL PERSONS and ARTICLE 7: SANCTIONS AGAINST LEGAL PERSONS (prefer "PENALTIES") are to be merged into one article (suggestions are provided).</p> <p>14. ADDITIONAL ARTICLE: REPAIR OF DAMAGE is created (suggestions are provided).</p> <p>15. ADDITIONAL ARTICLE: ALTERNATIVES TO CRIMINAL SANCTIONS is created (suggestions are provided).</p> <p>16. ADDITIONAL ARTICLE - ADMINISTRATIVE SANCTIONS is created</p>

ID	Reference	Role	Overview and comments
			(suggestions are provided). 17. PUBLIC PARTICIPATION IN THE PROCEDURES is defined. 18. ADDITIONAL ARTICLE: COOPERATION of Member States with Union bodies is created (suggestions are provided). 19. ADDITIONAL ARTICLE: Cooperation at the expense of the organs and agencies of the Union is created (suggestions are provided). 20. ADDITIONAL ARTICLE: CROSS-BORDER COOPERATION BETWEEN MEMBER STATES is created (suggestions are provided).
11	María Jesús Sanchis Carles	Local/regional authority	Same as document N7; Examples of Spanish legal cases and issues on power lines and electrocution of birds
12	CEFIC	Business/industry or business/industry association	One of the merged responses, only document submitted; Propositions by Cefic focused on sanctions. The position stresses the importance of effective enforcement and compliance as a condition for a level-playing field across the EU. It is understood that effective enforcement depends upon the definition of sanctions and is proposed that MS enforcement strategies should be designed to respond to different types of behaviour with different enforcement tools. It is recommended that appropriate sanctions are based on a case-by-case basis considering: the nature, degree of culpability, frequency, harm caused, previous warnings and seriousness of non-compliance. It highlighted that any double sanctions arising from the ECD and existing administrative law should be avoided.
13	RJT article	National prosecution or professional network for prosecutors	Academic article about ecocide
14	PRE - Plastics Recyclers Europe	Business/industry or business/industry	Propositions by PRE focused on definitions, sanctions and data collection. The position calls for: -clarification of vague legal terms, e.g. through a guidance to the MS;

ID	Reference	Role	Overview and comments
		association	<p>-harmonisation of the sanctions and penalties applied and elaboration of sanctions/penalties associated with each type of environmental offences, e.g. through guidelines and examples of best practices;</p> <p>-measures to compel MS to report data to Eurostat together with EU standards for the collection and reporting of reliable data.</p>
15	SERPONA	National law enforcement or professional network of law enforcement, police	<p>Propositions for amendments to the ECD by the Spanish Nature Protection Service of the Civil Guard - SERPONA. The position proposes:</p> <p>-to broaden the understanding of serious crime by establishing links with other crimes such as organised crime, corruption, document fraud;</p> <p>-to consider aggravated offences;</p> <p>-to include in the ECD a binding provision for the MS to adopt minimum penal sanctions for environmental crimes that allow, according to the national penal procedure, the use of a wide range of investigative techniques and harmonise the investigative tools among MS;</p> <p>-to clarify vague terms (examples are provided)</p>
16	Pays de l'ours ADET	NGO	<p>Propositions by an NGO focused on definitions, clarifications, sanctions and cooperation.</p> <p>The position supports the points proposed by the Commission and specifically:</p> <ul style="list-style-type: none"> - The definition of environmental criminal law as an autonomous concept. - The clarification of certain legal terms used in Article 3 of the Directive as necessary to harmonize environmental criminal law within Member States. - The establishment of minimum quanta for custodial sentences, fines or financial penalties, the establishment of aggravating circumstances, particularly in matters of organized crime, and the introduction of penalties diversified per complementary activities. <p>-Strengthening the cross-border cooperation between Member States.</p>
17	GGA	Other	<p>Example of a Dutch case on monitoring of a Nature Network Netherlands region in a part of North Holland.</p>

ID	Reference	Role	Overview and comments
18	Wildlife Justice Commission	NGO	<p>One of the deleted responses, only document submitted; Propositions by an NGO focused on covering wildlife trafficking, links with criminal networks and money laundering, cooperation and use of special investigative techniques.</p> <p>The position highlights the role played by criminal networks behind the wildlife trafficking. It calls for:</p> <ul style="list-style-type: none"> • Adoption of strong penalties including fines and forfeitures especially for the high-level traffickers that play pivotal roles in the criminal networks. • Harmonisation of sanctions across the EU. • Use of intelligence and of special investigative techniques that facilitate both a global understanding of the problem and cross-border operations. • Common definitions and clarifications in the wording of paragraph 3 in the current Directive e.g. both regarding the scope of the activities pertaining to trafficking in line with updated definitions used by the ICCWC and the types of species protected. • The reference to legal persons is useful especially in view of the existence of a legal wildlife market and the possible involvement of these industries in wildlife trafficking. • Use of anti-money laundering mechanisms to tackle wildlife crime.
19	Consultation Stop Ecocide	Private individual	Copy of the survey used to complete the blank response ID72; Position to criminalise ecocide
20	Spanish NGOs & LIFE Against bird crime	NGO	Two reports with examples of illegal killing of wildlife
21	Ecocide Q&A	NGO	Academic article about ecocide
22	Swedish Government	Government authority in charge of environmental policy	<p>Propositions by Swedish authorities focused on the scope and independent definition of environmental crime.</p> <p>The position supports the clarification of some of the terms used in the Directive and shares the view that a coherent interpretation of the Directive could facilitate cross-border cooperation. Sweden welcomes measures that will increase the minimum requirements of the Directive and supports: criminalising risky behaviour, making</p>

ID	Reference	Role	Overview and comments
			revisions to include also offences committed through negligence that is not considered serious, establishing an autonomous environmental criminal provision for some criminal acts but that such provision must exclude acts that have been permitted by the competent authorities (an example is provided).
23	Essens	Other (academic)	<p>An academic paper summarising case studies from England, Wales, Germany and the Netherlands and focused on enforcement. Recommendations include:</p> <ul style="list-style-type: none"> • It is recommended that the EU does not aim to prescribe a specific system of enforcement, such as criminal enforcement, where it further develops the concept of effective enforcement. It is recommended that development at EU level rather approaches the concept of effective enforcement as system-independent. • Where the EU further develops the concept of effective enforcement, it can be recommended that the EU legislator operationalises the concept of effective enforcement by directing its focus also to the possibilities of reparatory sanctions to achieve effective enforcement. • It is recommended that the concept of effective enforcement can be further operationalised by the EU in the shape of quality standards/requirements for the enforcement organisation that promote its ability to choose the appropriate sanctions for the benefit of effective enforcement. Examples are also provided.
24	EU survey citizen	Other	Copy of the survey response
25	Parents for Future Italia	Not mentioned	NGO's position on the Renewable Energy Directive - guide to sustainability criteria for forest biomass used in energy production
26	Befragung environmental crime	Other	Position to criminalise ecocide
27	NPWJ - No Peace Without Justice	NGO	<p>Propositions by an NGO focused on geographical scope and coverage of supply chain offenses.</p> <p>The position calls for:</p>

ID	Reference	Role	Overview and comments
			<p>-A revision of the Directive should address its geographical scope with further clarity, explicitly expanding it. For instance, to address companies from outside the EU that operate within the EU territory and European companies that cause environmental harm abroad. It is considered essential that the revised Directive includes responsibility for environmental crimes that are committed outside the EU by European companies or legal entities.</p> <p>-The connection between European companies/businesses and governments with the destruction of the environment through supply chains (especially in the case of deforestation) should be addressed by a revised Directive. In this regard, it should be clarified what is understood by 'substantial damages'. Impacts on human rights should also be considered.</p> <p>-It is proposed that the penalties of the Directive should consider the different dimensions of the impact of environmental crimes, including ways of addressing them that go beyond criminal liability, such as reparations. It would be particularly useful if a revision of the Directive encouraged Member States to address reparations for criminal offences related to the environment.</p>
28	ENPE report	Academic/research institution	Document provided as link in text of response to Q10 2017 report by ENPE on 'Environmental prosecution report tackling environmental crime in Europe'
29	Empty file	/	/

Annex 8: Stakeholder consultation –synopsis report

This annex provides a synopsis report of all stakeholder consultation activities undertaken in the context of this impact assessment.

Consultation strategy

In order to ensure that the general public interest of the EU is properly considered in the Commission's approach to the review of the environmental crime Directive, the Commission regards it as a duty to conduct stakeholder consultations, and wishes to consult as widely as possible.

The consultation aimed to enable an evidence-based preparation of the future Commission initiatives to improve the effectiveness of the Environmental Crime Directive and to strengthen the fight against environmental crime with the help of the stakeholders. The aim of the consultation was for the Commission to receive relevant input and the relevant needs of all stakeholders about the six main objectives:

- Clarify and update scope of the environmental crime Directive;
- Clarify legal terms used to determine what is an environmental crime;
- Improve availability of dissuasive and comparable sanction types and levels;
- Improve cross-border cooperation;
- Improve the collection and dissemination of statistical data and
- Improve functioning of the enforcement chain (training, coordination, resources).

To do this, the Commission identified relevant stakeholders and consulted them on an early stage of the development of its draft proposal. The Commission sought views from a wide range of citizens, subject matter experts, practitioners (police services, inspectors, prosecutors and judges), professional networks (IMPEL, ENPE, EUFJE, EnvirCrimeNet), public authorities from Member States (Ministries of Justice and Ministries of Environment), European Agencies (Europol and Eurojust), environmental non-governmental organisations (NGOs), business organisations and individual companies and academics on their expectations and concerns about the review of the Environmental Crime Directive.

During the consultation process, the Commission applied a variety of methods and forms of consultation. They included:

- the consultation on the Inception Impact Assessment and a 12-week Open Public Consultation, which sought views from all interested parties;
- a series of online targeted thematic workshops or expert groups meetings. Dedicated questionnaires or discussion papers were sent out in advance to prepare for the meetings hosted by the Commission;
- a number of online conferences at which the Commission participated and presented its work in this area, gathered feedback on the six main options from other conference participants and invited additional participants in the expert process and the public consultation;
- bilateral online meetings with a wide range of stakeholders organised at the initiative of the Commission or the stakeholders;
- Position papers and analytical papers from European agencies, practitioners, professional networks, industry representatives, public authorities from Member States, non-governmental organisations, civil society and academia.

In total, the dedicated consultation activities lasted more than 6 month, from February 2021 to July 2021.

The consultation was designed to follow the same logical sequence of the impact assessment, starting with the problem definition and allowing for a gradual development of the possible options and their impacts.

The consultation gathered feedback on the problem definition, options and impacts of these options, focused on the legislation to fight against environmental crimes effectively. The aforementioned diversity of perspectives proved valuable in supporting the Commission to ensure that its political options address the needs, and took account of the concerns, of a broad range of stakeholders at national and EU level. Moreover, it allowed the Commission to gather necessary study cases, data, facts and views on the relevance, effectiveness, efficiency, coherence and EU added value of the review of the Directive.

The table below summarises the structure of the consultation strategy for a more effective fight against environmental crime:

		HOW									
		Surveys		Targeted stakeholder consultation with questionnaires or discussion papers							Conferen-ces
		Inception Impact Assessment	Open public consul-tation	Criminal law expert	Forum meeting/ Working group of the Forum	Targeted work-shop	Consultation	Targeted work-shop	Semi-structured Interviews (bilateral)	Written opinions	
WHO	Citizens	✓	✓								✓
	Member States	✓	✓		✓		✓		✓	✓	✓
	Practitioner, professional networks, Eurojust, Europol	✓	✓	✓	✓				✓	✓	✓
	NGOs	✓	✓			✓			✓	✓	✓
	Business	✓	✓					✓	✓	✓	✓
	Academia	✓	✓	✓						✓	✓
	European Union Agency for Fundamental Rights									✓	
		Problem definition, options and impacts		Scope, defini-tions, sanctions and impacts	Problem definition, options and impacts	Problem definition, options and impacts	Scope, definitions, sanctions and impacts	Scope, definitions, sanctions and impacts	Problem definition, options and impacts	Problem definition, options and impacts	Problem definition, options and impacts

	WHAT
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Consultation activities

The consultation was structured as follows:

2.1. Inception Impact Assessment⁴¹²

There was a call for feedback, seeking views from any interested stakeholders, on the basis of the Inception Impact Assessment. The Roadmap has been published with the possibility for comments. The consultation, sought feedback from all interested parties, was open for response from 4 December 2020 to 30 December 2020. Participants of the consultation were able to provide online comments and submit short position papers, if they wished, to provide more background on their views. 17 feedbacks have been received.

2.2. Public Consultation⁴¹³

An Open Public Consultation as part of the consultation strategy for the new legislative proposal was carried from 5 February until 3 May 2021 to achieve transparency and accountability and give any stakeholder the possibility to contribute to the review of the Environmental Crime Directive. 490 responses were collected.

2.3. Stakeholder events

To gather feedback, data and cases studies to support the evidence-based preparation of the reviewed legislation to fight against environmental crime, the Commission organised and participated in various group or bilateral meetings as well as analysed written statements from the stakeholders.

2.3.1. Targeted stakeholder consultation

The targeted stakeholder consultation and in particular the expert process organised by the Commission were an integral part of the consultation activities and were developing the problem definition and the options described in the impact assessment.

In the course of the consultation, the Commission organised targeted stakeholder events that were held on 19 February, 25 March, 27 April, 29 April, 2 June and 24 June 2021. Representatives from the Member States were invited on 25 March and 29 April 2021 respectively.

19 February 2021: Criminal Law Experts Meeting

⁴¹²The Inception Impact Assessment Consultation is available here. All contributions received are publically available.

⁴¹³ The Open Public Consultation is available here. All contributions received are publically available.

On 19 February 2021, the Commission organised a meeting with the Expert Group on EU Criminal Policy. Members of this Expert Group are academics stakeholders and practitioners. The objective of the discussion was to have an exchange of views on key elements of the planned revision, as part of a wider stakeholders' consultation.

25 March 2021 and 2 June 2021: Workshop with the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum and 6th meeting of the Environmental Compliance and Governance Forum

In 2018, as a group of experts, the Environmental Compliance and Governance Forum was founded. Members of the Forum are Member States, European environmental compliance assurance networks (ENPE, EnviCrimeNet, IMPEL and EUFJE), EU bodies (e.g. Europol) and EFTA countries. One task of the Forum is to assist the Commission in the preparation of legislative proposals and policy initiatives.

In 2020, a Working Group was established to support during 2021 and early 2022 the review of the Environmental Crime Directive. On 25 March 2021, the first meeting of the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum organised by the Commission has taken place. Members of the Working Group are inspectorates, police officers, prosecutors and judges and certain Member States (ministries of the Environment). Europol and networks, such as EnviCrimeNet, are also part of the Working Group. The Working Group was provided with a questionnaire about the six main options to improve the effectiveness of the Environmental Crime Directive in advance. Twelve Member States, three law enforcement practitioners or experts, Europol and EnviCrimeNet provided written feedback on this. The objective of this workshop was to bring together experts from the ground to have an exchange of views on the needs for the review of the environmental crime Directive.

The Commission invited to the 6th meeting of the Environmental Compliance and Governance Forum on June 2. The four networks presented the outcomes of their recent joint conference which took place on 21 May 2021 and focussed on the revision of the Environmental Crime Directive. The Commission explained the state-of-play of the environmental Crime Directive revision work and the preliminary outcomes and trends based on the approximately 500 responses to the public consultation.

27 April 2021: Workshop with environmental NGOs

On 27 April 2021, an online workshop with participants of 40 representatives of national and European NGOs in the environmental field was organised by the Commission. Around 30 NGOs were invited to the workshop and received a dedicated questionnaire about the six main options

to improve the effectiveness of the Environmental Crime Directive in advance. Six NGOs responded to the questionnaire. The aim of the workshop was to have an exchange of views to provide a complete picture of the relevant actors at national and EU level.

29 April 2021: Consultation of Member States

The exchange with the Member States on 29 April organised by the Commission serves to complement the information Member States had already provided in the context of the public consultation and the Environmental Compliance and Governance Forum on 25 March 2021. To prepare this meeting, Member States have received a discussion paper on three key issues of the review process (scope of the Directive, definition of environmental crime categories, sanctions). Member States were requested to identify options they could endorse as well as constitutional obstacles they might have with individual options. As part of this early involvement, Member States have provided a preliminary opinion. The meeting regrouped over 60 participants.

24 June 2021: Workshop with business/industry

On June 24, the Commission conducted a workshop with representatives of the Industry. Out of the 25 industry stakeholders who participated in the public consultation, eleven of them who contributed with detailed comments, representing various industry sectors (waste, chemicals, plastics, etc.) and hundreds of individual companies in these sectors, were invited to the workshop. Five of them participated in the workshop. Participants had received a detailed discussion paper regarding the scope of the Directive, the definition of environmental crime, sanctions up-front the meeting. The aim of the workshop was to deepen the discussions and have businesses views on issues, which might be of particular relevance for businesses especially on SMEs.

2.3.2. Conferences

The Commission has used a series of external events to present the current state of play on the revision of the Environmental Crime Directive and the possible options. The conferences were an opportunity to gather the views of the audience and to get feedback from stakeholders in a setting that allows a wide reach.

MEP Maria Toussaint:

- ***Conference on fighting environmental crimes in Europe***

The Commission made use of the online Conference on fighting environmental crimes in Europe organised by the Member of the European Parliament Maria Toussaint on 23 March 2021 to brief the public on its preparatory work and explain the problems, background and potential solutions to the review of the environmental crime Directive. Participants at the conference

included the European Network of Environmental Police (EnviCrimeNet), the European NGO “TRAFFIC” and the Italian NGO “Legambiente”.

- ***Conference on the rights of nature in Europe***

During the Conference on the rights of nature in Europe organised by the Member of the European Parliament Maria Toussaint on 22 April 2021, the Commission has spoken at the conference on the proposed legislation and encouraged participation in the ongoing public consultation.

- ***Roundtable "Legal paradigm shifts for a new environmental law"***

The occasion of the roundtable organised by the Member of the European Parliament Maria Toussaint on 2 June 2021 was the launch of the publication of the study "Legal paradigm shifts for a new environmental law" by Véronique Jaworski and Marie-Pierre Camproux (University of Strasbourg) and to debate together with members of the Civil Society, lawyers and other experts the proposals made by the two researchers. The Commission continued the public dialogue about the review of the environmental crime Directive.

Council of Europe: Working Group on the Environment and Criminal Law

The Commission made also use of the first and second meeting of the Working Group of the Council of Europe on the Environment and Criminal Law on 20/21 April and 15 June 2021 to follow the discussion about the reasons of non-ratification of the 1998 Convention. Although this event was not dedicated to the consultation in the context of the review of the Directive, this meeting included the topic in their agenda to discuss the reasons for the failure of the 1998 Convention and the possible way forward, by assessing whether creating a new Convention or modernizing the existing Convention is feasible and appropriate. That corresponded to the considered autonomous approach addressed by the legislative proposal.

IMPEL: Conference WasteForce

The Commission also made use of the online Conference WasteForce on 7 May 2021 with the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) to present the experts its preparatory work.

European Chemical Industry Council's Legal Forum

The Commission participated in the European Chemical Industry Council's Legal Forum on May 12 2021 and presented the current work on the review of the Directive and possible options.

4 Networks Day (IMPEL, EnviCrimeNet, ENPE and EUFJE)

The 4 Networks Day was held on 21 May 2021. This virtual conference was organized by IMPEL, EnviCrimeNet, ENPE and EUFJE and hosted by LIFE=SATEC project. The overall goal of the event was to bring relevant parties – regulators, inspectors, police officers, prosecutors and judges – together to debate joint efforts to fight environmental crime. The Commission presented the state of play on the review of the Directive and the considered approaches.

Frontex Seminar on environmental Crime

On June 1, the Commission presented its reflections on the revision of the Directive and the different ways to address the problems at the Frontex Seminar on Environmental Crime. Participants of the Frontex Seminar were European Agencies, like FRA, Eurojust, Europol, eu-LISA, Frontex, as well as professional networks (EnviCrimeNet, ENPE), Interpol and UNODC.

2.3.3. Semi-structured interviews and/or written opinions

The consultation included targeted – mainly follow-up – bilateral and multilateral semi-structured interviews with stakeholders for open and in depth discussions. These interviews were conducted from February to July 2021. They included in particular Member states, European Agencies (Europol and Eurojust) and (academic or professional) experts. Following the interviews, but also independently of previous interviews, targeted stakeholders provided written comments on the options. The objective of the oral or written consultation was to:

- gathering information about the possibility to loosen or cancel the link between administrative law and criminal law; exchange with national authorities about existing stand-alone offenses in national law and exploring the practical feasibility;
- deepening the understanding of the current practice with description of practical experience and explanations and with the illustration of cases, concrete examples and facts;
- receiving statistical data;
- gathering recommendations and suggestions in order to improve the effectiveness of the Directive and the fight against environmental crime.

In terms of research and innovation, the structured interviews included:

- French (6 April 2021), German (23 April 2021) and Swedish (20 May 2021) authorities;
- the Judicial Cooperation Advisor of Eurojust on 15 February 2021;
- the lead of ECSA – European Community Shipowners’ Associations on 30 March 2021;

- MEP Antonius Manders, rapporteur for the report on the liability of companies for environmental damage, on 27 May 2021;
- the chairman of the French society of judges and prosecutors for the environment on 3 June 2021;
- the European law Institute on 15 June 2021;
- Véronique Jaworski (University of Strasbourg) on 22 June 2021 on the occasion of her preparation of a discussion paper for the meeting of Working Group of the Council of Europe on the Environment and Criminal Law on 20 April and of her drafting of the joint study from may 2021 “Legal paradigm shifts for a new environmental law” with Marie-Pierre Camproux Duffrène;
- the chair of the Council of Europe’s Working Group on the Environment and Criminal law on 1 July 2021.

Results

The following sections presents a summary of the main results of the consultation activities.

3.1. Reactions on the Inception Impact Assessment

This public consultation received 17 replies from a variety of stakeholders, ranging from public authorities of the Member States, to business associations and non-governmental organisations. All the responses have been published in full online⁴¹⁴. Of these responses, 14 came from EU states and 3 from non-EU states.

By category of respondent:

Non-governmental organisation (NGO): 4 (23.53%)

Public authority: 4 (23.53%)

Business association: 2 (11.76%)

Other: 2 (11.76%)

EU citizen: 2 (11.76%)

Environmental organisation: 1 (5.88%)

Non-EU citizen: 1 (5.88%)

Company/business organisation: 1 (5.88%)

⁴¹⁴ The responses are available at: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12779-Environmental-crime-improving-EU-rules-on-environmental-protection-through-criminal-law_en.

The Inception Impact Assessment aimed to inform citizens and stakeholders about the Commission's plans in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities.

The feedback gathered in reaction to the Inception Impact Assessment showed, that in summary, the initiative enjoys support as the majority of the respondents welcomed the Commission's effort to tackle the environmental crimes. Providing legal clarity and certainty, the need of new specific legislation under the scope of the Directive as well as the inclusion of minimum maximum sanctions are seen as the main positives attributes of the proposal. Some concerns regarding standing-alone offences and bureaucratic burdens arise amongst Member States.

The majority of the respondents favoured the **update** of the Environmental Crime Directive and its annexes as well the **clarification of legal terms**. An NGO welcomes the **criminalization of risky behaviour**. This wording would ensure that those who negligently or intentionally engage in acts of environmental harm are not able to rely on the difficulty of proving beyond a reasonable doubt the likelihood that their actions will cause harm in order to escape criminal sanctions. This is particular important in an increasingly complex context in relation to certain activities, such as the production or use of harmful chemicals.

One Member State stressed that the environmental crime **autonomous** of administrative law should be imperatively excluded because such incriminations impose excessive criminal liability on private actors, including those who comply with existing regulations. On the other hand, this Member States believes that the technical feasibility of such an approach is limited. In contrast, an NGO preferred an environmental crime is a self-standing concept, to avoid a situation where the Directive becomes obsolete as legislation evolves.

Most of the contributions from the non-governmental organisations and the business associations identified environmental areas or specific legislation that the current Environmental Crime Directive is not covered by the current Directive, but **should be covered**. To ensure serious fisheries and seafood market infringements it is important for one NGO to include illegal, unregulated, and unreported (IUU) fishing in the Directive. One organisation recommended to include timber and timber products illegally sourced from a third country as a criminal offence under the Environmental Crime Directive, complementary to EUTR. One NGO demanded that it should be take into consideration the ongoing review of both the FLEGT Regulation and the EU Timber Regulation, combined with the upcoming Commission legislative proposal to address deforestation and forest degradation. One NGO called on the EU to adopt and implement a new legislation that prohibits trade in wildlife, fish and plants that have been illegally taken, possessed, transported or sold in violation of any foreign law. In the view of one business association, the EU Ship Recycling Regulation in the annexes to the Directive should not be

included in the scope of the Environmental Crime Directive because the Member States should remain competent to determine whether administrative or criminal sanctions are the best means to tackle infringements. Another business association considered the Environmental Crime Directive could further enhance the efforts through its horizontal approach across EU measures, including the F-Gas Regulation, to help develop a more coherent and effective framework that better achieves the EU's climate action objectives. Finally, the inclusion of obligations for specialist platforms that sell wildlife on their online platforms was requested.

The majority of the respondents supported the suggestions for **minimal levels for maximum sanctions** and for aggravating circumstances. The inclusion of a provision on confiscation and legislation against legal persons are considered useful in some cases.

Better **collection and transmission of information** by Member states advocated by several parties. Concerns were raised that this implies complex IT adjustments, which is a difficult and lengthy process and puts a heavy administrative burden on law enforcement authorities, the Public Prosecution Office and the judiciary.

3.2. Public Consultation

See Annex 7.

3.3. Targeted stakeholder consultation

3.3.1. Criminal Law Experts Meeting

Regarding **the link between environmental crime and administrative law**, the majority of the Experts group considers this link to be necessary and impossible to do away with. A few however supported decoupling and suggested interesting lines of reflection. The need to decriminalise some offences that are not serious enough was also mentioned.

Regarding the **sanctions**, most expert agreed that more should be done, especially concerning corporations (such as reparations, asset recovery, removing the added value for not complying with obligations). Some believe that the general system of criminal sanctions in EU legislation should be rethought to introduce new categories of sanctions.

Reflection on how to ensure the **enforcement chain** is effective in practice is needed. A choice needs to be made between regulating this in the directive itself or in a soft law instrument.

3.3.2. Workshop with the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum and 6th meeting of the Environmental Compliance and Governance Forum

- **Workshop with the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum**

Regarding the initial question of whether **EU action is necessary** participants deemed harmonization necessary for an effective fight against environmental crime. Some participants illustrate this by pointing to the difficulties prosecution faces when an act is treated as a criminal offense in one Member State only as an administrative relevance in another Member State. Some participants indicated that harmonization should be limited to certain areas where a criminal enforcement is more suitable than administrative enforcement. A high number of the Member States that responded the questionnaire agreed to the requirement of approximation. Approximation and homogeneity were necessary and useful, but should balance with flexibility for the Member States. Some Member States supported approximation only to certain extent. All law enforcement practitioners or experts participating in the survey agreed that approximation is needed. The consensus view was that rules are needed to effectively implement EU policies. Member States should align their national laws.

With regard to measures for **update the Annexes and clarification of offences**, the participants believed that it would be difficult to find a clear and correct definition of certain legal terms like substantial damage at the level of the Directive that covers all conceivable cases in practice. Nevertheless, there is a need for concrete definitions as a prerequisite for an effective enforcement chain. A balance of regulatory density must be found, also in the sense of legal certainty.

A high number of Member States that responded to the questionnaire was in favour of a mix of the introduction of a mechanism for regular updates of the Environmental Crime Directive, the expansion of the scope and defining environmental crimes in the Directive independently of a breach of specified EU legislation. The Directive may evolve and adapt promptly to any new requirements. The majority of networks that responded in writing agreed with continuously updating regulations.

A significant number of Member States was in favour of clarifying the vague legal terms by means of guidance. Non-binding regulations were sufficient. Specific definitions of these legal terms in the Environmental Crime Directive may impose undue problems on national criminal systems and laws. Fixed terms were not useful considering the large number of topics covered. Some Member States supported a legal regulation in Environmental Crime Directive for clarification purposes to avoid ambiguity and to achieve legal certainty and coherence in the detection, prosecution and conviction.

According to the written comments of the practitioners or experts, they fully agreed that is a requirement for clarify legal terms and a common base of definitions, but it may be difficult to

find a clear and correct definition. The practitioners or experts preferred the clarification legal terms and approximation of crimes law, thereby overcoming the lack of definitions or the vague or interpretable definition of technical terms.

Regarding the possible options to **sanctions**, some participants raised questions in regards the competence of the EU to adopt minimum-maximum sanctions and the degree to which this is appropriate in the area of environmental crime. The EU competence and that minimum-maximum sanctions provisions have now been included in many criminal law instruments. Participants support the proposition that profits should be taken into account in determining the sanction level. This is to be distinguished from confiscation of the proceeds of crime in addition to the imposition of penalties.

A significant number of Member States that responded to the survey saw the need for improvements in the area of sanctions through a combination of measures. Partly the status quo was favoured. The networks was unanimously in favour of a combination of EU guidance and binding provision, including minimum levels for maximum sanctions.

In the workshop was a consensus among interveners on the need for more **specialisation through training and the establishment of specialized units**. A majority of Member States participating in the survey agreed an approximation and harmonization through the inclusion of provision about cooperation within and between Member States in the Directive. At the same time, a majority of Member States saw the need for training on use of tools for structured cooperation, investigative tools and cross-border cooperation with the involvement of EU agencies. The networks was in favour of providing training courses and of the strengthening of the cross-border cooperation with the involvement of EU agencies. They supported the inclusion of an obligation for Member States to do so on the basis of a legal provision in the Directive.

To **effective operation of the enforcement chain**, a high number of Member States agreed according to their written comments to a combination of providing EU guidance and the inclusion of obligations to Member States in the directive. The practitioners or experts preferred a corresponding legal obligation of Member States. At the same time, they supported a combination of EU guidance and the inclusion of a provision requires the Member States.

Statistical data should only be collected for strategic analysis and only a few easy to collect data sets should be included, like prosecutions. A common EU platform is the preferred method. A clear approach among Member States towards collecting and disseminating statistics should be found.

The majority of Member States welcomed the option to provide training and awareness raising, develop common EU standards on the collection of statistical data on environmental crime.

Partly were favour of a legal obligation for Member States. Partly strongly supported the establishment of a common platform to collect statistical data. All practitioners or experts demanded to provide training, raise awareness and develop common EU standards on the collection of statistical data on environmental crime. There was a unanimous call for Member States obligation to collect process and share data. This may allow synergies to be exploited.

- **6th meeting of the Environmental Compliance and Governance Forum**

The four professional networks of inspectors, prosecutors, police officers and judges in the environmental area (IMPEL, ENPE, EnviCrimeNet and EUFJE) presented to the Forum the joint statement summarising the main conference conclusions at the 4 networks day on 21 May.

Relating to measures to **strengthen cooperation** it is confirmed that environmental crime is serious, transboundary and often organised. To fight it better, efficient national, regional and international cooperation is necessary.

Regarding fostering effective operation of the **enforcement chain** the four networks stressed that environmental cases should be handled by specialised police officers, inspectors, prosecutors and judges. The specialisation of the actors of the enforcement chain should be anchored into the law. Training of police, inspectors and prosecutors and judges is crucial. Training is only effective when it comes with structural specialisation.

Effective implementation of the Environmental Crime Directive requires more coherence and more coordination between administrative and criminal sanctioning tracks, including punitive and remedial sanctioning possibilities, communication and information transmission rules.

Environmental crime is neither “victimless” nor of minor significance. Environmental crime constitutes a threat for human health and the prospects of future generations, as well as for international and EU internal security.

With regard to the need to improve the **exchange of information and data**, the networks note that there is still a lack of prioritisation for fighting environmental crime, a lack of reliable data and a lack of adequate human resources and equipment across the entire enforcement chain. Data exchange on cases and sanctions both at national and European level should be improved.

Finally, the joint statement of the four networks affirmed the usefulness of using the revision of the Environmental Crime Directive for strengthening **specialisation, coherence** between the administrative and criminal enforcement and international **cooperation**.

3.3.3. Workshop with environmental NGOs

Regarding the **scope** of the Environmental Crime Directive the NGOs confirmed in the workshop and in the written comments that the Annex mechanism in place is at the moment outdated. It should be organized in such a way to allow other crimes to be added to it more easily and on a more regular basis. One approach could be to define environmental crime independent of sectoral legislation.

In parallel, authorities should have sufficient legal certainty – which goes beyond the annex – to allow them to act effectively and promptly. There is a need to better link the revised Environmental Crime Directive to sectoral legislation and to administrative law.

From the point of view of NGOs, there is a need for regulation of online crimes in the Environmental Crime Directive. In addition, a link to trade agreements and regulations (e.g. trade in rare species) and to CITES should be established. The revised Environmental Crime Directive should e.g. better define issues of sale, import, purchase of wildlife and refer to clear lists of species concerned.

Regarding the **definitions of the offences** is unanimously demanded clear definitions for the key terms such as what constitutes substantial damage. Guidance would be useful too, however, they are not binding, so clear definitions of terms in the Directive itself is important. Without these, the Member States (practitioners in general) find it hard to prosecute effectively environmental crimes. Legal clarity is of the utmost importance.

There is a need to define “rules of the game” for EU-based companies operating in non-European territory as there are different legal standards outside of the EU.

One participant suggested the inclusion of Ecocide.

Many NGOs were in favour of introducing **minimum maximum sanction** levels and types. Some were in favour of putting in place a more binding system, avoiding the option of having ranges in the Member States. Sanctions should be proportionate to the environmental harm caused and profit generated by the criminal networks. Often, Member States that have high sanction levels in their national law fail to impose high sanctions in case of environmental damage. This should be considered in the revised Environmental Crime Directive. Better investigations of money laundering is necessary and looking into the profit side.

Better linkage of the revised Directive with civil liability issues, such as with the Environmental Liability Directive, and with civil and administrative law in general is called for. NGOs argue that legislators should also address environmental crimes outside the EU and sanction them appropriately. There is agreement that the establishment of a minimum level of sanctions should

be supported by training and awareness-raising activities (for practitioners and judges across Europe) in order to be effective.

Regarding improving the **cross-border cooperation** the large majority of NGOs supported the suggestion to set up a specific unit to deal with environmental crime at EU level to be supported by a network of focal points at MS level.

EU-based training is urgently needed on various themes, e.g. how to deal with online crime or illegal trade and how to conduct investigations into environmental crimes. Training will also encourage cooperation between agencies within Member States, across Member States and with non-European countries, which is however more tricky. One NGO mentioned an example of working with Thai and US authorities where Interpol played a crucial role in facilitation cooperation and sharing information.

The EU should support the proposed protocol of the CITES convention which should equate trade in wildlife to trade in drugs or arms. This will promote cooperation also beyond the EU borders.

Finally, the use of already existing mechanisms of cooperation, e.g. with Eurojust and Interpol, should be encouraged. Some participants reported good experiences in working with these European agencies and that the good cooperation has led to more effective law enforcement. Collaboration should clearly include sharing of intelligence and information, as this means lower costs for agencies. Participants identified some best practices of interagency cooperation at the Member State level for different objectives, such as priority setting, monitoring, and definition of strategies or action plans.

Regarding fostering **practical implementation** the enforcement should be improved by the setting up of a centralised environmental crime unit. At the level of Member States, the differences between countries should be taken into account: there are different ministries or agencies that deal with the subject. Some participants emphasized that enforcement should be at the national, rather than local, level; local authorities often lack the capacity to enforce the directive.

The role of civil society and NGOs should be clearly formalized in the enforcement process, as this has proven to be very effective in various cases also in connection with access to justice issues and the Aarhus Convention. Enforcement should be improved through specialization courses for practitioners, to be supported by Member States. These trainings should cover all parts of the enforcement chain and could also involve civil society.

Regarding the considered option to improve the **information sharing**, the NGOs reported that the problem of lack of data is not unique to Environmental Crime Directive. Data sharing, when

available, should be done in such a way that the sharing authority gets something back in return. This “reward” mechanism, could be also a simple data analysis report. Information flow is not always sufficient, sometimes environmental authorities are not informed about environmental crime cases that reach the court. The NGOs suggested to set up a centralised system for data sharing purposes, to be used by practitioners and judges.

3.3.4. Consultation of Member States

In an online meeting, three key issues were discussed on the basis of a discussion paper sent out beforehand: scope of the Directive, definitions of environmental crime and sanctions. The Member States expressed their preliminary opinion on these and gave their first assessment in the workshop.

Regarding the **scope** of the Environmental Crime Directive a majority of the Member States supported the update the Annexes as it would best ensure legal clarity. However, some Member States also did not regard the comitology procedure as the right tool include new environmental crime areas. To define new environmental crime categories should be for the EU legislator. Two Member States expressed preference for an infringement of sectorial legislation in general terms without Annexes.

The majority of the Member States considered the **breach of an administrative environmental law** is necessary to criminalise on behaviour in the Environmental Crime Directive. There is no widespread acceptance of loosen or cut the link between administrative law and criminal law. Some Member States also expressed doubts whether the limits of the legal basis of Art. 83 (2) would not be overstepped if crime would be defined without linking it to EU sectoral legislation. One Member States said that the decoupling of the administrative law from criminal law could be contradiction to the permits and authorisations issued and thus undermine legal certainty that was crucial for investments. The EU should not propose legislation that could hinder investments.

A number of Member States were open for the **autonomous approach** for the most serious offences. However, they state that more information on details and on the role of administrative permits and authorisation would be needed. Legal certainty must be ensured. One Member State has this approach already today in their national law and say it works find in practice.

There are no clear majorities regarding the review of the definitions. The range of opinions is rather broad here (in some cases with multiple preferences).

While a majority of the Member States seemed to endorse **legal binding definition** in the Directive itself, a number of Member States also drew attention to the difficulty in striking a balance between sufficiently clear definitions of environmental crime categories and the necessary flexibility that must be maintained to not create loopholes in criminalisation and to allow for the inclusion of new developments in the future. One Member State said it may make

sense to continue working with the existing open terms but guidelines and exchange of best practices should foster a common understanding among the Member States. A majority welcomed soft law as non-binding guidelines to complement existing or reviewed definitions in the Directive.

Some Member States supported or were open for relying more on the **definition of endangerment crime** that do not require actual damage. Other Member States are sceptical: Endangerment could not spare the legislator the effort to define the damage as a constituting element, otherwise endangerment crime might end up in penalising basically the infringement of sectoral legislation. Some Member States also cautioned that endangerment crimes should not serve to alleviate the burden of proof, while other Member States welcomed this as the chief benefit of the concept of endangerment crimes.

Almost all Member States could endorse the introduction in the Directive **minimum levels for maximum sanctions** for environmental crimes.

Regarding the consideration to provide for **the same sanction levels as for organised crime or other serious crime** in Member States penal law systems only two Member States could endorse this approach, as it would respect national traditions and systems. In contrast, most Member States claimed that environmental crime comes in many different shapes and gravity forms. It cannot always be considered as serious crime or crime at the same gravity level as organised crime. Although one Member State would favour relying more on the existing systems and tradition in each Member State, rather than fixed numbers for sentencing levels, this Member State does not think that this option is feasible.

3.3.5. Workshop with business/industry

The Commission wanted to know whether it makes a difference for companies whether the Directive contains **Annexes or a general reference** that would have the advantage not to be exhaustive. Partly, maintaining and updating the Annexes was supported as they provide legal clarity. One industry stakeholder detailed that the Annexes would not play a role, as they are not necessarily transposed into national law. Industry and practitioners would look into the national law. Apart from F-gases also the Reach legislation and the Plant Protection Regulation are missing from the annexes. Generally, there is a risk that an exhaustive list creates loopholes. Theoretically, there should be an obligation to regularly update the Annexes, but it is not sure whether any mechanism could be found that works in practice.

Regarding the **autonomous approach** (less strict link between environmental crime and a breach of sectoral legislation) it would not be the right approach to try to foster due diligence measures through criminal law rather than through administrative law directly. The participants described that in Spain and Germany, permits are very precise and the businesses have to apply strict due diligence obligations to receive a permit. In Spain, all violations of environmental sectoral

legislation or conditions in a permit constitutes environmental crime. In addition, permit holders must pay guarantees to the national authorities that serve to ensure that financial sanctions or restoration of nature is covered. Compliance costs in Spain are thus high for businesses, independent of criminal liability. Companies from Member States which have less rules are thus in a competitive more advantageous situation. It should be a priority to harmonise Member States' administrative law and ensure that existing rules are applied in all Member States to ensure the same level of playfield and equal trading conditions. Currently, there are high gaps in the different Member States regarding the required standards for a permit. It would not be the right approach trying to harmonise due diligence requirements through criminal law rather than directly in administrative law. Moreover, this approach would shift the responsibilities to ensure effective due diligence systems that protect the environment from the state to companies.

In Germany, the autonomous approach would exist to the extent that environmental crime does not require the breach of sectoral law but only an environmental damage caused. The offender can justify himself if his action is covered by a permit. One stakeholder had concerns regarding legal certainty if the autonomous approach would mean that less detailed permits could not any longer exculpate an offender. It is not the responsibility of the offender how detailed a permit is in a given Member State. This legal uncertainty would add to the uncertainties created by vague terms in the definitions of environmental crime (substantial damage).

Regarding the **definition of crime**, it would not be possible to define vague terms more precisely in the Directive or in soft-law. There would always be room for different interpretations. There are examples of negative consequences of different interpretations for cross-border cooperation. For example in the area of second-hand market (cars or electronics) shipped mainly to Africa it is unclear whether this is waste with the waste shipment regulation to apply or just used goods that can be shipped without restrictions. German companies could have a financial interest to keep such 'waste' cars in the country and recycle them according to high standards. Also other elements of the waste shipment regulation do lead to different interpretations whether a shipment is illegal or not. This very often prevents effective cross-border cooperation and an investigation comes to a halt. There are also positive examples of successful cross-border cooperation in the waste sector, for example a few years ago between the German county Brandenburg and the neighbouring Poland. After all, cross-border cooperation does not depend so much on the text of legislation but on proper law-enforcement and people.

One participant draw the attention to poor implementation of sectoral rules in some Member States. Poor environmental implementation also hinder investments in these countries, because of the legal uncertainties. The Commission should assume more responsibilities to use its possibilities to make Member States not only to transpose EU sectoral legislation but also to implement it in practice. There are numerous experience where investigations against illegal

practices were not initiated at national level. In the few cases that made it to the courts, sanctions imposed were inadequate and too low to be effective. The reason for these failures are due to a large extent to a lack of specialised knowledge, especially with the judges.

Illegal services with dumping prices, e.g. non EU compliant waste management service, are offered on internet platforms. The platform cannot be held liable because they claim they are only the host where such services are promoted and do not offer the service themselves. NGOs which have been addressed by the industry to help with this problem did not go further. For unknown reasons the police (in France) had not been contacted by the fair playing industry. In addition, industry did not try to have the illegal businesses held criminal liable. This might be due to a lack of trust in the capacity of the police although units specialised in environmental crime do exist. The industry appeals for clear legislation so that platforms can be prosecuted.

Businesses would appreciate stronger **enforcement** of existing environmental rules. This would impact positively the bad reputation of e.g. the chemical and waste industry. Mafia like organisations that make a business of systematically breaking the rules are a big problem on which criminal legislation or law enforcement should focus, as they cause the greatest harm. One participant detailed that criminal legislation would not have any impact on costs of businesses. Compliance costs are triggered by sectoral legislation and the requirements that must be fulfilled to receive a permit. Effective criminal law enforcement has rather an impact to improve the reputation of the industries and to prevent unfair competition. For a participant, linking the amount of the fines to the annual turnover is not feasible in practice. The annual turnover does not reflect the financial situation of a company correctly.

Overall, there was broad agreement that the industry is driven by administrative law, not by criminal law. This goes for costs as well as for change of behaviour. Practical implementation also of sectoral law is deficient in many Member States. There are big problems with illegally playing businesses in many sectors which go in most cases unpunished.

3.3.6. Semi-structured interviews and/or written opinions

Eurojust

Eurojust filled in a targeted questionnaire with extensive comments. The report on Eurojust's Casework on Environmental Crime from January 2021 provides experiences, challenges, identified best practices and statistical analysis. A series of targeted interviews has taken place.

Eurojust's experience indicates the existence in **different jurisdictions of different legislative approaches** to environmental crime (even though the current EU legal framework requires a harmonised approach), which results in different perceptions about some key legal qualifications and can trigger dual criminality issues during cross-border cooperation.

Based on the Eurojust's experience, two areas can be identified as the **areas not mentioned** by the Directive that have been dealt with in the cross-border environmental crime cases referred to Eurojust in 2014–2018: illegal trade in hazardous substances and (hazardous) contamination in food. Bringing illegal fishing under the remit of the Environmental Crime Directive can contribute to a harmonisation of key legal concepts of environmental crime.

Eurojust suggests that **cross-border investigations and prosecutions** of environmental crime in the EU, including judicial cooperation on such cases, would benefit from the application of more uniform and dissuasive penalties for such crimes across the EU. This is because the possibility to use certain investigative tools and techniques, as well as the possibility to use instruments and tools for cross-border cooperation at the EU level depend on the seriousness of the investigated crime and the severity of the envisaged penalty.

The main factors that hinder cross-border cooperation on environmental crime cases can be attributed to such specifics of environmental crime investigations and prosecutions as their complexity and their multidisciplinary and resource-intensive nature. Environmental crime cases may require highly specialised legal, scientific or technical expertise, and thus the need to cooperate with relevant national or international authorities and organisations.

From the perspective of Eurojust, international coordination and cooperation are the key requirements in fighting organised cross-border environmental crime effectively. The involvement of Eurojust and the use of joint investigation teams can be recommended as effective tools to address involvement of organised crime in environmental crime cases. In addition, financial investigations and recovery of criminal proceeds can also be considered as an efficient way to address the involvement of organised crime.

Europol

The Europol filled in the questionnaire for the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum and participated in the targeted consultation with Europol's vision from March 2021 on the revision of the Directive 2008/99/EC. In addition, Europol has provided further input with practical cases in the context of targeted interviews as well as in writing.

The current Environmental Crime Directive contains expressions and **legally ambiguous concepts** which in practical terms adds difficulties to initiate the criminal investigation and later on during the penal procedure. The language should be more precise in order to help creating more unified approach towards environmental crime across the Member States.

The concept of environmental crime is broad and therefore the Environmental Crime Directive **should involve areas** such as wildlife – trafficking of specimens, products or parts, including timber, poaching, illegal poisoning, IUU fisherie –, waste and pollution – trafficking, illegal management, disposal and dumping of waste, pollution of soil, air and water, illegal trafficking of Ozone Depleting Substances and F-gases – and habitats (deforestation, illegal mining, illegal watering, urban planning and construction crime, acoustic crimes).

In addition, document fraud is used to cover the criminal activity. This should be included in the revised Environmental Crime Directive.

Only few crimes are currently described as “**risk crimes**”. This means a serious legal loophole. It would be desirable to review in which cases an action or inactivity is worth to be considered as a crime “*per se*” regardless the eventual result. The new offences should be considered as a crime itself due to the conduct itself, independently of the eventual result.

The broad scope involves a strong need of **specialization and dedication of the units involved**. In addition, these units must be equipped with technical resources in order to carry out their duties. Environmental crime is often hidden, which means that the investigators need to work proactively to uncover it. The need of specialized units in Law Enforcement Agencies (LEAs) related to combating environmental crimes should be pointed out in the reviewed Environmental Crime Directive. Law enforcement authorities in all member states should have the same investigative powers. For instance, the possibility of carrying out telephone, environmental and telematics wiretapping for environmental crimes would guarantee a capacity to be more effective in investigations.

Europol should be mentioned in the Environmental Crime Directive concerning the transmission and exchange of information and intelligence concerning concrete investigations in which international cooperation would be a need.

The European Network of Prosecutors of Environment (ENPE)

The European network of prosecutors of environment (ENPE) recommends that the opportunity should be taken to include a clear, decisive and purposive requirement in the Directive that Member States should ensure both **natural and legal persons** can be prosecuted for environmental offences directly, rather than through the act or omission of a third party. There should be an additional catch-all definition of environmental crime to ensure that the requirement to criminalise certain behaviours which have an adverse impact upon regimes designed to protect it, is sufficiently broad.

Systems for administrative sanctions relating to criminal offending should be subject to legislative provision or judicial oversight which ensures that administrative sanctions are applied with high levels of governance and transparency.

ENPE fully agrees that Member States should be strongly encouraged to promote and adopt measures to ensure **specialisation of all participants** within the environmental law enforcement chain. ENPE suggests that the new version of the Environmental Crime Directive imposes an obligation on each Member State to nominate a specialist or specialist at each stage of the environmental enforcement chain and to publish the contact details of those personnel clearly.

According to ENPE's assessment Member States should be obliged to participate in a **common data collecting regime or system** with clear parameters and requirements, for law enforcement agencies involved in environmental crime, which is accessible to them and others for analytical purposes. The Commission should establish a mechanism for external audit or scrutiny.

The European Union Forum of Judges for the Environment (EUFJE)

For the European Union forum of judges for the environment (EUFJE) the **update** the Directive and its annexes and **include new environmental areas** – timber trade – is very useful. General terms without the annexes is very useful in EUFJE's view. EUFJE prefers the provision of non-binding EU-guidance on the interpretation of vague elements in the definitions and supports the autonomous approach.

EUFJE supports the bundle of measures for stronger alignment of **sanctions**, effective operation of the **enforcement chain** and **information sharing**. EUFJE welcomes a combination between legal requirement and the provision of non-binding guidance to Member States on the establishment of overarching national enforcement strategies and favors both a legal obligation and the provision of EU-guidelines on cooperation between Member States and how to make use of EU agencies.

The European Network for Environmental Crime (EnviCrimeNet)

The European network for environmental crime (EnviCrimeNet) filled in the questionnaire for the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum and participated in the targeted consultation with a report from April 2021 about the evaluation of the Directive 2008/99/EC.

The casuistry is innumerable, so **periodic updates** would greatly help a better implementation in all Member States according to EnviCrimeNet. EnviCrimeNet welcomes the **clarification** in the Directive because the whole chain must make this specification. It is necessary to keep the link with other EU legislation on environment. Corruption is an essential component in the

facilitation and perpetration of all environmental crimes. It can be considered a catalyst for environmental crime. In particular, corruption plays an important role in facilitating fraudulent trade, forging import/export certificates, clearing customs wrongly, ignoring illegal waste disposal, issuing licenses, etc. EnviCrimeNet suggests to include this typology as a new offence.

For a coordinated application of the sanction, EnviCrimeNet understand that a generic and binding guide is necessary that sets out the guiding principles for action throughout the EU. The fact that a certain illegal activity is a crime in one Member State, but it is an administrative offence in other Member States, causes problems in the international cooperation at EU level. As a possible solution could be recommend establishing certain criteria, for example height of an illegal profit and the height of environmental damage (cost of restoration of condition before the crime was committed) which should be common in all Member States.

The creation and strengthening of **specialized units** in all MS is essential according EnviCrimeNet, it constitutes the key to success to tackle efficiently with this (sometimes silent) threat. In this sense, reinforcing training plays a very relevant role. Raising awareness about the need to align strategies throughout the compliance chain at national level is essential. According to the experience achieved, the environmental criminality cannot be tackled without common strategies and common procedures that involve the whole enforcement chain (inspectors, police, prosecutors, judges), especially in case of transnational investigations.

Having a **reliable statistic** is essential for EnviCrimeNet, too.

European Union agency for fundamental rights (FRA)

The European Union agency for fundamental rights (FRA) has submitted an extensive written contribution. FRA suggests that **sanctions** could include obligatory awareness raising courses or training for environmental crime offenders and emphasises that sanctions against legal entities must be sufficiently dissuasive, stipulated in national law and effectively implemented.

How the results have been taken into account

The results of the consultation activities have been incorporated throughout the impact assessment in each of the option in which feedback was received. The consultation activities were designed to follow the same logical sequence as the impact assessment, starting with the problem definition and then moving on to possible options and their impacts. Using the same logical sequence in the consultation activities as in the impact assessment itself, facilitated the incorporation of the stakeholders' feedback – where relevant – into the different sections of the impact assessment.

ANNEX 9: INTERVENTION LOGIC

Drivers	Problems	Specific objectives	Options	Direct Impacts
Scope of the ECD defined through sectoral legislation listed in exhaustive annexes and corresponding definitions of crimes in Article 3 is outdated. No functioning mechanism to update scope of the ECD	The scope of the ECD (defined in two Annexes to the ECD and a list of offenses in Article 3 of the ECD) is outdated and defined in a complex way, hindering effective investigations, prosecutions and cross-border cooperation.	1. Improve the effectiveness of investigations and prosecutions by updating the scope of the ECD and by inserting a feasible mechanism to keep the ECD up-to-date in the light of the European Green Deal	<p>1a. Update the existing list of legislation in the annexes, add new relevant crime categories to Article 3</p> <p>1b. Refer to relevant sectoral legislation in general terms and remove the annexes, add new crime categories to Article 3, more precision on crime constituting elements in Article 3.</p> <p>1c. Define environmental crime in the Directive without the requirement of a breach of relevant EU sectoral legislation</p>	More and more effective investigations and prosecutions of environmental crime through greater clarity on the scope of the ECD and through widening the scope of the ECD
Vague terms used in the definitions of environmental crime in Article 3 leave too much scope for diverging interpretation	Unclear definitions of what is environmental crime within Member States and between Member States hinder effective investigation, prosecutions and cross border cooperation	2. Improve the effectiveness of investigations and prosecutions by clarifying the definitions of environmental crime	<p>2a. Define unclear terms in the definitions of environmental crime (such as substantial damage) more precisely</p> <p>2b. Criminalise risky behaviour (endangerment crime) thus eliminating vague terms,</p> <p>2c. A combination of 2a and 2b.</p>	More and more effective investigations, prosecutions and convictions through greater clarity on the definitions of environmental crime
No precise sanction types and levels required in the ECD	Sanction levels vary widely across MS. Sanctions levels imposed in practice are too low to be effective, dissuasive and proportionate.	3. Ensure that environmental crimes are sanctioned by effective, dissuasive and proportionate sanctions	<p>3a. Introduce minimum-maximum sanctions levels</p> <p>3b. Option 3a plus aggravating circumstances and accessory sanctions</p> <p>3c. Option 3b plus an obligation to link the level of fines to the financial situation of legal person and/or illegal profits</p>	A greater variety of sanction types and higher sanction levels available for criminal judges will lead to more effective sanctioning in practice and make environmental crime less lucrative for criminals
No provisions in the ECD obliging MS to cooperate, No provisions directly fostering cross-border cooperation	Insufficient cross-border cooperation and coordination on environmental crime, hinder effective investigations and prosecutions	4. Improve the effectiveness of cross-border cooperation on environmental crime	4. Introduce a package of provisions directly fostering cross-border cooperation, such as a harmonised investigative tools, obligation of MS to cooperate through Eurojust, Europol and OLAF, harmonised rules on jurisdiction.	More and more effective cross-border cooperation increase the effectiveness of law enforcement and will bring more cases to court.
Lack of resources/efforts in the MS to collect statistical data on environmental crime investigation, prosecution and convictions	Lack of and poor coordinated by policymakers; lack of monitoring of the functioning of the enforcement chain leads to environmental crime cases not being sufficiently investigated	5. Improve informed decision-making on environmental crime through improving statistical data collection and reporting	<p>5a. Oblige MS to collect and regularly report to the Commission statistical data related to environmental crime</p> <p>5b. Option 5a plus an obligation of the MS to collect and report statistical data according to harmonised common standards</p>	Better statistical data helps raise awareness, will lead to allocation of adequate resources, enables monitoring and helps address problems in the enforcement chain. Result: more and more effective investigations, prosecutions and convictions
Lack of resources /efforts in the Member States to implement the Directive in practice/ to enforce environmental crime policies	Environmental crime not effectively investigated, prosecuted and sanctioned due to ineffective operation of the enforcement chain	6. Improve the operational effectiveness of national enforcement chains (investigations, prosecutions, sanctioning)	6. Insert in the Directive obligations that directly strengthen practical implementation such as improved training at all levels of the enforcement chain, national overarching strategies to combat environmental crime, awareness-raising measures.	Strong enforcement and enhanced expertise on environmental crime will lead to more and more effective investigations, prosecutions and convictions
<p>Relevant policy option: Amending the Directive</p> <p>Discarded options: 1. Repeal the Directive</p> <p>2. Address the identified problems only through non-binding measures</p>				

ANNEX 10: OPTIONS TABLE

ECD Review – Options

Relevant policy option: Amending the Directive where needed in combination with non-legislative measures Discarded options: a. repeal the Directive, b. address the identified problems only through non-binding measures		
General Objective	Specific objectives	Options
Better protect the environment through more effective detection, investigation, prosecution, and sanctioning of environmental crime	1. Improve the effectiveness of investigations and prosecutions by updating the scope of the Directive and by inserting a feasible mechanism to keep the Directive up-to-date in the light of the European Green Deal	1a. Update the existing list of legislation in the annexes, add new relevant crime categories to Article 3. 1b. Refer to relevant sectoral legislation in general terms and remove the annexes, be more precise on crime constituting elements in the Article 3. 1c. Define environmental crime in the Directive without the requirement of a breach of relevant EU sectoral legislation.
	2. Improve the effectiveness of investigations and prosecutions by clarifying the definitions of environmental crime	2a. Define unclear terms in the Directive more precisely 2b. Eliminate vague terms by criminalising risky behaviour (endangerment crime) 2c. A combination of 2a and 2b
	3. Ensure effective, dissuasive and proportionate sanctions types –levels for environmental crime	3a. Introduce minimum-maximum sanctions levels 3b. Option 3a plus aggravating circumstances and accessory sanctions 3c. Option 3b plus an obligation to link the level of fines to the financial situation of legal person and/or illegal profits

	<p>4. Improve the effectiveness of cross-border cooperation on environmental crime</p>	<p>4. Introducing a package of provisions directly fostering cross-border cooperation</p> <ul style="list-style-type: none"> - harmonised effective investigative tools - obligation to cooperate through Eurojust, Europol and OLAF - harmonised rules on jurisdiction
	<p>5. Improve informed decision-making on environmental crime through improving statistical data collection and reporting</p>	<p>5a. Oblige MS to collect and regularly report to the Commission statistical data related to environmental crime</p> <p>5b. Option 5a plus an obligation of the MS to collect and report statistical data according to harmonised common standards</p>
	<p>6. Improve the operational effectiveness of national enforcement chains (investigations, prosecutions, sanctioning)</p>	<p>6. Insert in the Directive a package of obligations that directly strengthen practical implementation, e.g. specialisation/training, awareness-raising measures, national environmental crime strategies</p>