# **Final Report**

### Study to supply the Impact Assessment of the Directive 2008/99/EC on the protection of the environment through criminal law

JUST/2020/JACC/FW/CRIM/0122



This report has been prepared by Milieu Consulting SRL, Ramboll and Gopa Luxembourg under Contract No JUST/2020/JACC/FW/CRIM/0122. The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the Contracting Authority. The Contracting Authority does not guarantee the accuracy of the data included in this study. Neither the Contracting Authority nor any person acting on the Contracting Authority's behalf may be held responsible for the use which may be made of the information contained therein.

Milieu Consulting SRL, Chaussée de Charleroi 112, B-1060 Brussels, tel.: +32 2 506 1000; e-mail: Jennifer McGuinn <jennifer.mcguinn@milieu.be>; web address: www.milieu.be.

### Final Report

### **TABLE OF CONTENTS**

EXE		E SUMMARY	
1		DDUCTION	
2	METH	ODOLOGY, DATA AND SCOPE	19
	2.1	Scope of the impact assessment	.19
	2.2	Sources of information	
	2.3	Standard Cost Model and estimation of labour costs	.22
	2.4	Limitations	.23
3	COST	ESTIMATES FOR ALL OBJECTIVES	
	3.1	Transposition and the development of EU-level guidance documents	.24
	3.2	Costs related to options under Objective 4	.25
	3.3	Costs related to options under objective 5	.27
	3.4	Costs related to objective 6	.35
	3.5	Costs of an increase in staff in Member State police and prosecution	
	office	s51	
	3.6	European Commission reporting costs	.54
4	ENVI	RONMENTAL, SOCIAL AND ECONOMIC IMPACTS	<b>55</b>
	4.1	Economic impacts on businesses	.55
	4.2	Illegal logging and timber trade	.61
	4.3	Crimes occurring in the fisheries sector, including in association with IUU	
	fishing		
	4.4	Poaching / wildlife crimes	
	4.5	Forest fire crimes (man-made forest fires)	
	4.6	Waste-related crimes	
	4.7	Crimes related to chemicals	
	4.8	Pollution crimes affecting soil, water and air	
	4.9	Overview of magnitude and impact per crime type	
5		CLUSIONS	
	5.1	Practical implications of the initiative	
	5.2	Summary of costs and benefits	
ΑN	NEX 1:	BASELINES	90
		PUBLIC CONSULTATION REPORT 1	
ΑN		INTERVIEWS AND CONSULTATIONS WITH STAKEHOLDERS 1	
		orities, networks and NGOs1	
	Busine	esses and their associations	166

#### ABSTRACT

This report assesses the impacts of the proposed options to the Environmental Crime Directive, to support impact assessment procedure, carried out by the European Commission DG JUSTICE, in the context of a review of the Directive. The report presents calculation of cost estimates for proposed policy measures and options, which form the basis for the assessment of efficiency. Costs are summarised and reviewed against expected benefits in terms of increased effectiveness of the Directive to foster more detection, prosecution and conviction of environmental crime cases. Conclusions found that the costs. which would be borne mostly by the Member State authorities and the European Commission and could be partly covered through available EU funding instruments, are acceptable given expected benefits. The report also presents the expected environmental, social and economic impacts of the proposed measures, in terms of the impacts of environmental crime and the expected positive effects in reduction of environmental crime. Attention is given to the potential impacts on business, including SMEs, based mainly on stakeholder consultation. Some businesses express concerns about additional compliance costs, but with criminal provisions linked to existing administrative environmental law, these concerns are outweighed by the positive impacts for legitimate businesses operating in areas where environmental crime is prevalent, such as waste management. Summaries of Member State baselines and consultation results are included in Annexes.

Ce rapport propose une évaluation de l'impact des options proposées pour la directive sur la criminalité environnementale afin d'appuyer la procédure d'évaluation d'impact menée par la DG JUSTICE de la Commission européenne, dans le cadre du processus de révision de la directive. Il présente une estimation des coûts générés par les mesures et options politiques proposées, qui constituent le fondement de l'évaluation du critère d'efficacité. Ces coûts estimés sont analysés par rapport aux avantages attendus en termes d'efficacité accrue de la directive en faveur de la détection, des poursuites et des condamnations dans des cas de criminalité environnementale. Cette étude mène à la conclusion que les coûts, qui seraient principalement à la charge des États membres et de la Commission européenne et qui pourraient en outre être partiellement couverts par les instruments de financement communautaires disponibles, sont acceptables compte tenu des avantages attendus. Le rapport présente également les effets environnementaux, sociaux et économiques attendus des mesures proposées, en termes d'impacts et d'effets positifs attendus dans la réduction de la criminalité environnementale. Une attention particulière a été portée aux potentiels impacts sur les entreprises (y compris les PME), en s'appuyant sur une consultation des parties prenantes. Certaines entreprises émettent en effet des inquiétudes quant aux coûts de mise en conformité supplémentaires. Néanmoins, les dispositions pénales liées au droit administratif de l'environnement existant permettent de soulager ces inquiétudes, en démontrant les compensations offertes par les effets positifs pour les entreprises légitimes opérant dans des domaines où la criminalité environnementale est répandue, comme la gestion des déchets. Les résultats des consultations menées et le résumé des données fournies par les Etats membres sont proposés en annexe de ce rapport.

#### **EXECUTIVE SUMMARY (ENGLISH VERSION)**

#### Introduction and methodology

This report presents the results of a study to support the impact assessment procedure carried out by the European Commission DG JUSTICE in the context of a review of Directive 2008/99/EC on the protection of the environment through criminal law (the Environmental Crime Directive or ECD). The scope of the study covers cost estimates for all proposed policy objectives, measures and, where applicable, sub-options and a review of the environmental, social and economic impacts of the proposed revisions to the ECD. In conclusion, impacts on different stakeholder groups as well as costs and expected benefits are summarised.

The study is based on a targeted literature review, building on and updating 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 8<sup>th</sup> 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. In addition to relevant material from the Commission's targeted consultation activities for this impact assessment procedure, the team carried out interviews and email exchanges to develop cost estimates and understand the potential impacts on business. The study methods are in line with the Commission's Better Regulation Guidelines and include use of the Standard Cost Model to estimate costs associated with administrative burden, and to estimate labour costs for EU and Member State administrations, which form the bulk of the cost estimates presented in the study. Costs have been quantified for the majority of the proposed measures but are estimates and in some cases may be offset by activities already underway in the Member States, co-financing from EU funds, or other uncertainties.

#### Cost estimates for the revised ECD

Section 3 of the report provides cost estimates for all elements of the revised ECD expected to generate additional costs, linked to the following:

- 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. These are included in objectives 4, 5 and 6.

A major part of the work carried out involved the development of quantified implementation cost estimates for each proposed policy measure, as well as costs for transposition, the development of EU-level guidance and reporting costs for the European Commission on the transposition and evaluation of the revised Directive. These cost estimates were used to assess efficiency in 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.

#### Cooperation and coordination

For Objective 4, 'Improving the effective cooperation and coordination between relevant authorities' measures relating to the use of investigative tools, and focal points for cross-border cooperation and to ensure cooperation through relevant EU agencies/bodies were considered.

For investigative tools, 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.. However, as comprehensive quantitative data on the costs of the use of investigative tools in the Member States is not available, costs are shown through indicative examples in the study.

Also under objective 4, 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. Cost estimates assume that all Member States would need to establish such focal points who would work on a part time basis within each institution along the enforcement chain, i.e.: the administrative authorities, police, customs, prosecution and courts. Based on reference data from other EU impact assessment studies, 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 2.2 of the main report (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.

Collection of statistical data on environmental crime

For Objective 5, 'Improving statistical data collection and reporting with regard to environmental crime', the impact assessment report presents two options to improve statistical data collection and dissemination in the Member States:

- Option 5 a): Oblige Member States to collect and regularly report to the Commission statistical data related to environmental crime
- Option 5 b): Oblige Member States to collect and report statistical data according to harmonised common standards

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 others<sup>1</sup>. The assumption is that coordination and collection activities would constitute the bulk of the additional administrative burden resulting from requirements on statistical data collection.

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 statistics<sup>2</sup>. Activities and associated costs have been developed for both options, and a final preferred option, which is a simplified version of option 5b, in which no EU database is envisaged and the Commission would prepare a biennial report summarising data collected from the Member States. Cost estimates are shown in the main report for each Member State separately, based on the number of agencies to coordinate in the data collection procedure. Total costs for all options are summarized in the table below.

\_

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Cost estimates were prepared by a team of statistical experts from Gopa Luxembourg, co-authors of the impact assessment support study. For details see Section 3.3.1 of the main report.

Table 1: Summary of costs for Objective 5 sub-options

Option	Member State costs		EU costs	
	One-off	Annual	One-off	Annual
5a Existing MS data	€211 375	€140 917	€100 963	€57 693
5b Harmonised common standards	€428 034	€255 411	€261 755	€157 587
5b Simplified (preferred option)	€428 034	€255 411	€213 677	€34 188

#### Operation of the enforcement chain

Objective 6 aims at improving the effective operation of the enforcement chain. The preferred option would introduce a set of provisions obliging Member States to take measures aimed at fostering the effectiveness of law enforcement, including training, raising public awareness, and setting up national strategies to combat environmental crime. For training, costs have been estimated for 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.

At the Member State level, 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. Three variables have been used to calculate the costs of training: 1) the average cost of one day of training per participant; 2) the number of training days; and 3) the number of persons targeted by the training. These variables are different for each Member State, based on an estimation of the amount of training already provided and for each training group, based on the estimated need for training and the numbers of such professionals expected to work in each Member State. Data to calculate the costs are based on existing training provided in the Member States as well as inputs from NGOs providing similar training. 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. Cost estimates are shown in the main report for each Member State separately.

Training on environmental crime that is provided by EU-level organisations, networks, and training institutes. Such training would ideally be guided by an EU-level training strategy targeting the revised ECD. To estimate the costs of providing additional EU-level training on environmental crime, reference data from existing training efforts have been collected for the following:

- Costs of a typical EU level training course for law enforcement practitioners
- Costs of typical EU level training course for judicial practitioners
- Costs of setting up an e-learning module in existing platforms (e.g., CEPOL, EJTN)

Using these reference data, a flat rate of EUR 350 per participant in EU-level training events was estimated, and one additional training day for all practitioners across the EU was assumed. Costs are shown in total for all Member States, as it is also very likely that the costs of such training would be included in EU funding programmes, removing the direct cost burden from the Member States. The assumption is a rough one and would be driven mainly by demand and a targeted training strategy.

Table 2: Additional costs for EU-level training activities

Target group	Estimate of total number of practitioners targeted by training for all Member States	Average cost per participant for one training activity	Total estimated costs
Public prosecutors and police officers	18 743	€ 350	€ 6 559 944
Judges	394	€ 350	€ 137 967
Customs	19 010	€ 350	€ 6 653 426
Administrative authorities	23 265	€ 350	€ 8 142 683
<b>Total estimated costs for</b>	€ 21 494 021		

The main report explores some possible avenues for funding training both at EU and Member State level, including the LIFE Programme, the Internal Security Fund (ISF Police) and the Justice Programme.

Increasing staff in Member State police and prosecution offices

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. 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.

Cost estimates are linked to assumptions about the number of additional staff that Member States would be likely to add in reaction to the revised ECD, linked to estimates of the numbers of such staff currently working on environmental crime in each Member State. Data were extrapolated for the entire EU from figures for those Member States that reported such information in the 8<sup>th</sup> Round of Mutual Evaluation country reports, and it was assumed that the lowest observed percentage of police and prosecutorial staff working on environmental crime (0.20% and 0.17% respectively) 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. Total additional staff costs for all Member States on an annual basis are estimated at EUR 189 341 968 for police and EUR 4 069 175 for prosecutors. The main report provides more details on the approach and the estimates for each Member State.

#### European Commission reporting

Cost estimates have also been prepared for Commission reporting on the transposition of the Directive by the Member States and an evaluation of the effectiveness of the Directive. The costs assume that the preparation of the reports by Commission staff would be supported by studies developed by external contractors. Costs for these studies are based on typical prices given in Commission tender specifications for studies of similar scope. Total estimates are EUR 392 186 for the transposition report (EUR 350 000 for external study + 64 days Commission staff time for review and management) and EUR 422 720 (EUR 380 000 for external study and 80 days to manage the study and prepare the report).

#### **Environmental, social and economic impacts**

Chapter 4 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.

#### *Impacts on business*

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 and discussions during a workshop on the issue hosted by the European Commission.

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 expressed in some respect that a revised ECD needs to improve legal certainty and avoid changes that might reduce it. Higher uncertainty about criminal offences – and prosecution – could impact the attractiveness of industries to skilled leadership personnel and limit the investment in new operation sites.

A second general aspect 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.

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 of the entity committing the crime.

#### 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. The following facts summarise the key impacts:

- Total magnitude estimated at USD 51-152 billion per year (worldwide)
- Illegal logging accounts for 10-30% of total logging worldwide (or 20-50% when laundering of illegal wood is included)
- 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
- Impacts prevalent in Central and South East Europe where ancient forests exist (Bulgaria, Romania, Hungary, Latvia, Lithuania)

Crimes occurring in the fisheries sector including in association with IUU fishing

Illegal, unreported and unregulated (IUU) fishing<sup>3</sup> 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 obligations. Data on the value and impact of crimes occurring in the fisheries sector, including IUU fishing are scarce and often older than current policy instruments in the EU. The following facts summarise the key impacts, as they can be measured with the limitation of the age of estimations, as more recent data is not available:

- Estimated economic loss resulting from IUU fishing is USD 11-23.5 billion per year (worldwide)
- IUU fishing practices represent approx. 19% of the reported value of catches worldwide
- Impacts prevalent in oceans and the Mediterranean Sea (Netherlands, Spain, France, Ireland, Malta, Italy, Spain, Portugal, Greece)

#### Wildlife crimes

As presented in a key guidance from the EU Commission, wildlife crimes concern a wide range of offences defined by EU legislation<sup>4</sup>. The current Directive criminalises trading (supplying, selling or

<sup>&</sup>lt;sup>3</sup> 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

<sup>&</sup>lt;sup>4</sup> European Commission, 2021. Combating environmental crimes and related infringements.

trafficking), importing, exporting, processing, possessing, obtaining and consumption of protected wild fauna and flora as well as deteriorations of protected habitats. The following facts summarise the key impacts:

- 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

#### Forest fire crimes

Forest fire crime refers to the willful and malicious burning of forests, and is distinguished from fires which are spontaneously or naturally caused. The following facts summarise the key impacts:

- Up to 96% of all forest fires are man-made
- 1 535 572.41 hectares of forest burned in the EU between 2003-2012
- 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)
- Scale of impacts depends on land use and meteorological conditions, but are prevalent in Spain, Italy, Portugal, Greece and France

#### Waste 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. 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. The following facts summarise the key impacts:

- Illegal trafficking in waste accounts for 20% of all the waste shipments in the EU
- Annual revenues from illicit trafficking of non-hazardous waste between EUR 1.3 billion and EUR 10.3 billion per year in the EU
- Annual revenues from illicit trafficking of hazardous waste between EUR 1.5 billion and EUR 1.8 billion

#### 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). The following facts summarise the key impacts:

- Trade in illegal and counterfeit *pesticides* is worth EUR 4.4 billion per year (worldwide)
- Illegal trade in *pesticides* represents over 10% of the worldwide market Trade in *ODS* represents between 10 and 20% of legitimate trade, which is between 7 000 and 14 000 tonnes per year (worldwide)
- Trade in *ODS* represents an approximate annual value between USD 25 million and USD 60 million (worldwide)

#### Synthèse (VERSION FRANCAISE)

#### Introduction et méthodologie

Ce rapport présente les résultats d'une étude destinée à appuyer la procédure d'analyse d'impact menée par la DG JUSTICE de la Commission européenne dans le cadre d'une révision de la directive 2008/99/CE relative à la protection de l'environnement par le droit pénal (DPE). Le champ d'application de l'étude couvre les estimations de coûts pour tous les objectifs politiques et les mesures proposés et, le cas échéant, les sous-options, ainsi qu'un examen des impacts environnementaux, sociaux et économiques des révisions proposées par la DPE. Les impacts sur les différents groupes de parties prenantes ainsi que les coûts et les bénéfices attendus sont résumés en conclusion.

L'étude est fondée sur une analyse documentaire ciblée, qui s'appuie sur et propose une mise à jour des recherches documentaires effectuées pour l'étude d'évaluation de la directive 2008/99/UE. L'analyse consiste en un examen particulier de la littérature relative à l'ampleur et aux impacts de la criminalité environnementale, ainsi que des rapports nationaux et des rapports de synthèse du 8ème d'évaluation mutuelle, afin de percevoir l'état d'avancement des différents États membres en ce qui concerne la mise en œuvre des activités susceptibles d'être requises en vertu de la directive révisée. En complément des documents issus des activités de consultation ciblées de la Commission pour cette procédure d'analyse d'impact, l'équipe a mené une série d'entretiens et d'échanges de courriels dans le but de développer des estimations de coûts et de comprendre les impacts potentiels sur les entreprises. Les méthodes utilisées dans le cadre l'étude sont conformes aux lignes directrices de la Commission pour une meilleure réglementation. Elles comprennent l'utilisation du modèle des coûts standard pour estimer les coûts associés à la charge administrative ainsi que les ceux de la main-d'œuvre pour les administrations de l'UE et des États membres, qui constituent la majeure partie des estimations présentées. Les coûts ont été quantifiés pour la majorité des mesures proposées. Il s'agit toutefois d'estimations et, dans certains cas, ceux-ci peuvent être compensés par des activités déjà en cours dans les États membres, un cofinancement par des fonds de l'UE ou d'autres éléments.

#### Estimations des coûts pour la DPE révisée

La section 3 du rapport fournit une estimation des coûts relatifs à tous les éléments de la DPE révisée susceptibles de générer des coûts supplémentaires, liés aux éléments suivants :

- 1. toutes les mesures proposées conduiraient à des enquêtes sur les crimes contre l'environnement plus efficaces, nécessitant du personnel supplémentaire dans les États membres ;
- 2. l'élargissement du champ d'application de la directive et la clarification de ses termes entraîneraient une augmentation du nombre de cas de criminalité environnementale traités, ce qui nécessiterait également du personnel supplémentaire ;
- 3. certaines mesures, telles que la formation et l'amélioration de la coopération transfrontalière, la collecte de données statistiques, l'élaboration de stratégies et les mesures de sensibilisation, auraient des coûts de mise en œuvre directs supérieurs au besoin de personnel supplémentaire. Elles sont incluses dans les objectifs 4, 5 et 6.

L'élaboration d'estimations quantifiées des coûts de mise en œuvre relatifs à chaque mesure politique proposée, ainsi que des coûts de transposition, d'élaboration d'orientations au niveau de l'UE et de préparation de rapports pour la Commission européenne sur la transposition et l'évaluation de la directive révisée ont constitué une large part du travail effectué. . Ces estimations ont été utilisées afin d'évaluer l'efficacité dans le rapport d'analyse d'impact.

Les coûts relatifs à la transposition de la législation par les États membres et à l'élaboration de documents d'orientation au niveau de l'UE n'ont pas été présentés pour les différentes options par objectif, ni pris directement en compte dans de cadre de l'évaluation d'efficacité.

#### Coopération et coordination

Dans le cadre de l'objectif 4, "Améliorer l'efficacité de la coopération et de la coordination entre les autorités compétentes", des mesures relatives à l'utilisation d'outils d'investigation et de points focaux pour la coopération transfrontalière et ayant pour but d'assurer la coopération par l'intermédiaire des agences/organes communautaires compétents ont été envisagées.

En ce qui concerne les outils d'investigation, la disposition proposée n'harmoniserait pas les outils disponibles mais ferait en sorte qu'ils soient plus facilement accessibles. Compte tenu de ce qui précède et du fait que l'on s'attende à ce que des cas supplémentaires et plus graves de criminalité environnementale soient détectés dans les États membres à la suite de la révision générale de la DPE, un usage plus large de techniques d'enquête spécialisées est certainement à prévoir. Toutefois, à défaut de données quantitatives complètes sur les coûts de l'utilisation des outils d'investigation dans les États membres, les coûts sont présentés dans l'étude au moyen d'exemples indicatifs.

Toujours dans le cadre de l'objectif 4, les États membres seraient tenus d'installer des points focaux nationaux pour la coopération transfrontalière et d'assurer la coopération par l'intermédiaire d'agences européennes compétentes. Le principal coût généré par ces dispositions serait associé aux ressources humaines. Les estimations de coûts supposent que tous les États membres mettent en place de tels points focaux qui travailleraient à temps partiel au sein de chaque institution de la chaîne d'exécution, à savoir : les autorités administratives, la police, les douanes, le ministère public et les tribunaux. En s'appuyant sur des données de référence provenant d'autres études d'évaluation d'impact de l'UE, on estime le temps moyen nécessaire à un point focal entre 12 et 20 jours par personnes par an, par institution et par État membre. Sur base du coût de la main-d'œuvre journalière des États membres tel que défini au point 2.2 du rapport principal (soit 294 euros), le coût global de l'établissement et du maintien de points de contact ou de points focaux, y compris ceux nécessaires à la coordination transfrontalière, est estimé dans une fourchette de 17 615 à 29 358 euros par an et par État membre.

Collecte de données statistiques sur les crimes contre l'environnement

Dans le cadre de l'objectif 5, "Améliorer la collecte et la communication de données statistiques sur les crimes contre l'environnement", le rapport d'analyse d'impact présente deux options pour améliorer la collecte et la diffusion de données statistiques dans les États membres :

- Option 5 a): Contraindre les États membres à collecter et à communiquer régulièrement à la Commission les données statistiques relatives aux infractions environnementales.
- Option 5 b): Contraindre les États membres à collecter et à communiquer des données statistiques conformément à des normes communes harmonisées.

Afin d'établir une base de travail permettant de comprendre les efforts que les différents États membres devraient déployer s'ils étaient tenus de collecter et de communiquer des statistiques sur les crimes contre l'environnement, des informations ont été recueillies au sein des sources documentaires disponibles, notamment des rapports nationaux du 8ème cycle d'évaluation mutuelle et d'autres rapports<sup>5</sup>. L'hypothèse posée est que les activités de coordination et de collecte d'informations constitueraient l'essentiel de la charge administrative supplémentaire résultant des exigences en matière de collecte de données statistiques.

Afin d'estimer la charge administrative associée à chaque sous-option, un ensemble d'activités de mise en œuvre pour chacune d'elles a été défini, ainsi qu'une estimation des jours par personne en équivalent temps plein (ETP) nécessaires à leur mise en œuvre. Les définitions des activités de mise en œuvre et de l'effort approximatif en jours par personne ont été élaborées sur la base d'un jugement d'expert par des praticiens ayant une expérience de première main des activités et tâches pratiques associées à la

-

<sup>&</sup>lt;sup>5</sup> Rapport final relatif à l'Evaluation de la Directive sur la criminalité environnementale (Directive 2008/99/CE) – étude menée par 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 (en anglais); consultation des parties prenantes menée par la DG Justice.

collecte et à la communication des données pour les statistiques sur la criminalité<sup>6</sup>. Les activités et les coûts qui y sont associés ont été analysés pour les deux options, ainsi que pour une option finale privilégiée : une version simplifiée de l'option 5b, dans laquelle aucune base de données européenne n'est envisagée et la Commission préparerait un rapport biennal résumant les données collectées auprès des États membres. Le rapport principal propose une estimations de coûts sont pour chaque État membre séparément, en fonction du nombre d'agences à coordonner dans la procédure de collecte des données. Les coûts totaux pour toutes les options sont résumés dans le tableau ci-dessous.

Tableau 1 : Résumé des coûts des sous-options de l'objectif 5

Option	Coûts pour l'État membre		EU costs	
	Ponctuels	Annuels	Ponctuels	Annuels
5a Données existantes des EM	€211 375	€140 917	€100 963	€57 693
5b Normes communes harmonisées	€428 034	€255 411	€261 755	€157 587
5b Simplifié (option préférée)	€428 034	€255 411	€213 677	€34 188

Fonctionnement de la chaîne de contrôle de l'application de la législation environnementale

L'objectif 6 vise à améliorer l'efficacité du fonctionnement de la chaînes des procédures liées à l'identification, le jugement et la répression des responsables de crimes environnementaux. L'option privilégiée introduirait une série de dispositions contraignant les États membres à prendre des mesures visant à favoriser l'efficacité de l'application de la loi, notamment par la formation, la sensibilisation du public et la mise en place de stratégies nationales de lutte contre la criminalité environnementale. En ce qui concerne la formation, les coûts ont été estimés pour une combinaison de formations dispensées au niveau de l'UE par des organisations telles que le CEPOL ou le Réseau européen de formation judiciaire (REFJ) et de formations dispensées directement par les autorités des États membres pour leurs propres praticiens.

Au niveau des États membres, quatre groupes de praticiens ont été identifiés comme principaux bénéficiaires de la formation sur la criminalité environnementale : les juges, la police et les procureurs, les agents des douanes et les autorités administratives responsables de l'inspection environnementale. Trois variables ont été utilisées pour calculer les coûts de la formation : 1) le coût moyen d'une journée de formation par participant ; 2) le nombre de jours de formation ; et 3) le nombre de personnes visées par la formation. Ces variables diffèrent d'un Etat membre à l'autre, en fonction d'une estimation de la quantité de formation déjà dispensée et pour chaque groupe et d'une estimation du besoin de formation et du nombre de ces professionnels censés travailler dans chaque État membre. Les données permettant de calculer les coûts sont inspirés des formations existantes dispensées dans les États membres ainsi que des contributions des ONG dispensant des formations similaires. Suivant ce scénario, les coûts varieraient entre 14 034 et 1 429 746 euros par an au niveau national, avec un coût annuel total de 7 978 446 euros pour l'ensemble des États membres. Les estimations de coûts sont présentées séparément dans le rapport principal pour chaque État membre.

La formation sur la criminalité environnementale serait dispensée par des organisations, des réseaux et des instituts de formation au niveau de l'UE. Cette formation serait idéalement guidée par une stratégie de formation au niveau européen se concentrant sur la DPE révisée. Afin d'estimer les coûts d'une formation supplémentaire sur les crimes contre l'environnement au niveau de l'UE, des données de référence sur les efforts de formation existants ont été recueillies pour les éléments suivants :

<sup>&</sup>lt;sup>6</sup> L'estimation des coûts a été élaborée par une équipe d'experts statisticiens de Gopa Luxembourg, co-auteurs de l'étude d'impact

- les coûts d'une formation type au niveau de l'UE pour les professionnels de la justice et de la police,
- les coûts d'une formation type au niveau de l'UE pour les professionnels de la justice,
- les coûts de la mise en place d'un module d'apprentissage en ligne sur les plateformes existantes (par exemple, CEPOL, REFJ).

Ces données de référence ont permis l'estimation d'un forfait de 350 euros par participant aux événements de formation au niveau européen, en supposant une journée de formation supplémentaire pour tous les praticiens de l'UE. Seuls les coûts totaux, pour tous les États membres, dont indiqués, car il est également très probable que ceux-ci soient inclus dans les programmes de financement européens, ce qui supprime dès lors la charge financière directe des États membres. Cette hypothèse est approximative et dépendrait principalement de la demande et d'une stratégie de formation ciblée.

Tableau 2 : Coûts supplémentaires relatifs à des activités de formation au niveau de l'UE

Groupe cible	Estimation du nombre total de praticiens visés par la formation pour tous les États membres	Coût moyen par participant pour une activité de formation	Coûts totaux estimés
Procureurs et officiers de police	18 743	€ 350	€ 6 559 944
Juges	394	€ 350	€ 137 967
Douanes	19 010	€ 350	€ 6 653 426
Autorités administratives	23 265	€ 350	€ 8 142 683
Total des coûts estimés p	€ 21 494 021		

Augmenter le personnel des services de police et des parquets des États membres

Puisque la révision de la DPE devrait entraîner le traitement d'un plus grand nombre de cas de criminalité environnementale, on peut s'attendre à ce que ce volume plus élevé d'affaires ait un impact principalement sur les praticiens de la chaîne de contrôle de l'application de la législation environnementale en charge des enquêtes, des poursuites et des condamnations. Il s'agit généralement des forces de police, des procureurs et des juges. Les coûts de main-d'œuvre des officiers de police, procureurs ou juges supplémentaires nécessaires pour traiter ces affaires peuvent constituer une approximation utile des coûts associés à cette augmentation.

Les estimations de coûts reposent sur des hypothèses quant au nombre d'employés supplémentaires que les États membres seraient susceptibles d'ajouter en réaction à la révision de la DPE. Ces hypothèses sont liées à des estimations du nombre de ces employés travaillant actuellement sur les crimes contre l'environnement dans chaque État membre. Les données ont été extrapolées pour l'ensemble de l'UE à partir des chiffres des États membres qui ont fourni ces informations dans les rapports nationaux du 8ème cycle d'évaluation mutuelle. Le parti a été pris que le pourcentage le plus faible observé de personnel de police et de personnel du ministère public travaillant sur les crimes contre l'environnement (respectivement 0,20% et 0,17%) dans l'ensemble des États membres pouvait être considéré comme une approximation raisonnable du nombre d'employés supplémentaires que chaque État serait susceptible d'engager pour réaliser un plus grand volume de travail sur les crimes contre l'environnement. Le total des frais de personnel supplémentaire pour tous les États membres sur une base annuelle est estimé à 189 341 968 euros pour la police et à 4 069 175 euros pour les procureurs. Le rapport principal fournit davantage de détails sur l'approche et les estimations pour chaque État membre.

#### Rapports de la Commission européenne

Des estimations de coûts ont également été préparées dans le cadre de rapports de la Commission sur la transposition de la directive par les États membres et l'évaluation de son efficacité. Les coûts supposent que la préparation des rapports par le personnel de la Commission serait appuyée par des études élaborées par des contractants externes. Les coûts de ces études sont basés sur les prix types indiqués dans les cahiers des charges de la Commission pour des études de portée similaire. Les estimations totales sont de 392 186 EUR pour le rapport de transposition (350 000 EUR pour l'étude externe + 64 jours de travail du personnel de la Commission pour l'examen et la gestion) et de 422 720 EUR (380 000 EUR pour l'étude externe et 80 jours pour gérer l'étude et préparer le rapport).

#### Incidences environnementales, sociales et économiques

Le chapitre 4 de l'étude propose une vue d'ensemble des différents types de crimes contre l'environnement, de la situation actuelle en termes de législation environnementale pertinente et de sa mise en œuvre dans les États membres, ainsi que des estimations disponibles de l'ampleur totale des crimes contre l'environnement, en termes monétaires et autres. Les principaux impacts environnementaux, sociaux et économiques de la criminalité environnementale dans l'UE, sur la base d'un large éventail d'études et de rapports récents, sont également identifiés.

#### Impacts sur les entreprises

L'évaluation de l'impact sur les entreprises est fondée sur un examen des rapports existants sur les éléments liés aux entreprises (par exemple, les niveaux de sanction), ainsi que sur les 28 réponses des entreprises à la consultation publique en ligne et sur les données qualitatives recueillies lors d'entretiens avec des parties prenantes du monde des affaires et de discussions au cours d'un atelier organisé par la Commission européenne.

Les entreprises s'expriment, dans l'ensemble, sur la notion de sécurité juridique en ce qui concerne tous les objectifs et options politiques et dans toutes les activités de consultation des parties prenantes. Toutes les entreprises consultées ont indiqué, dans une certaine mesure, qu'une DPE révisée devra améliorer la sécurité juridique et éviter tout changement qui pourraient la réduire. Une plus grande incertitude concernant les infractions pénales - et les poursuites qui en découlent - pourrait avoir un impact sur l'attractivité des industries pour le personnel dirigeant qualifié et limiter les investissements dans de nouveaux sites d'exploitation.

Un deuxième aspect général concerne la réputation des entreprises légitimes. Des normes pénales et leur application plus strictes seraient bénéfiques pour l'image publique des secteurs, car les scandales ont tendance à dominer la perception du public. Une réputation plus positive faciliterait les processus d'octroi de permis et le recrutement dans ces secteurs.

Une directive renforcée aurait certainement des effets positifs sur les PME. Cela dépend toutefois de la conception exacte des révisions, car si les risques pour les PME peuvent augmenter en raison d'un découplage, leurs bénéfices également pourraient augmenter en raison de sanctions liées à la situation économique de l'entité qui commet le délit.

Exploitation forestière illégale et commerce du bois

Est entendu commedélits à l'encontre du patrimoine forestier le processus constitué d'activités illégales allant de la pré-exploitation (obtention de permis) à l'exploitation illégale, en passant par le transport illégal et la transformation illégale. Les faits suivants résument les principaux impacts :

- L'ampleur totale est estimée à 51-152 milliards de dollars par an (dans le monde entier).
- L'exploitation forestière illégale représente 10 à 30 % de l'exploitation totale dans le monde (ou 20 à 50 % si l'on inclut le blanchiment illégal du bois).
- L'UE est responsable de près de 3 milliards d'euros de pertes dues à l'exploitation illégale des forêts, avec une importation d'environ 20 millions de mètres cubes de bois illégal chaque année.
- Impacts prévalant dans l'Europe centrale et du Sud-Est où il existe des forêts anciennes (Bulgarie, Roumanie, Hongrie, Lettonie, Lituanie)

Crimes commis dans le secteur de la pêche, notamment en relation avec la pêche INN

La pêche illicite, non déclarée et non réglementée (INN) est le terme général qui recouvre une grande

variété d'activités de pêche et d'activités connexes, telles que la pêche sans permis valide, la pêche dans une zone restreinte ou les pratiques de pêche non conformes aux lois nationales ou aux obligations internationales. Les données concernant la valeur et l'impact des infractions commises dans le secteur de la pêche, y compris la pêche INN, sont rares et souvent plus anciennes que les instruments politiques actuels de l'UE. Les faits suivants résument les principaux impacts, tels qu'ils peuvent être mesurés, avec toutefois la limite liée à l'ancienneté des estimations, des données plus récentes n'étant pas disponibles :

- Les pertes économiques résultant de la pêche INN sont estimées à 11-23,5 milliards de dollars par an (au niveau mondial).
- Les pratiques de pêche INN représentent environ 19 % de la valeur déclarée des captures dans le monde.
- Impacts prévalant dans les océans et la mer Méditerranée (Pays-Bas, Espagne, France, Irlande, Malte, Italie, Espagne, Portugal, Grèce)

#### Crimes contre la faune et la flore sauvages

Comme indiqué dans un document d'orientation de la Commission européenne, la criminalité liée aux espèces sauvages comporte un large éventail d'infractions définies par la législation européenne. La directive actuelle criminalise le commerce (approvisionnement, vente ou trafic), l'importation, l'exportation, la transformation, la possession, l'obtention et la consommation de la faune et de la flore sauvages protégées ainsi que la détérioration des habitats protégés. Les faits suivants résument les principaux impacts :

- 7 à 23 milliards USD par an (dans le monde entier).
- 6 441 saisies dans l'UE en 2019.
- Valeur du commerce illégal d'espèces sauvages de 2,3 millions d'euros dans l'UE en 2018.

#### Crimes liés aux incendies de forêt

La criminalité liée aux incendies de forêt fait référence à l'incendie volontaire et malveillant des forêts et se distingue des incendies spontanés ou naturels. Les faits suivants résument les principaux impacts :

- Jusqu'à 96 % de tous les incendies de forêt sont d'origine humaine.
- 1 535 572,41 hectares de forêts ont brûlé dans l'UE entre 2003 et 2012.
- Aucune estimation du coût total n'est disponible, mais le coût des événements individuels dans l'UE se situe entre 50 000 et 200 000 euros (échantillon de 3 incendies en Italie).
- L'ampleur des impacts dépend de l'utilisation des terres et des conditions météorologiques, mais ils sont prévalents en Espagne, en Italie, au Portugal, en Grèce et en France.

#### Délits liés aux déchets

Les délits liés aux déchets s'inscrit dans les processus de collecte, de transport, de récupération et d'élimination inappropriés des déchets. Les actions criminelles peuvent être de nature et d'impact très différents selon les flux de déchets. Obtenir une vision claire et actualisée de l'ampleur de la criminalité liée aux déchets n'est pas une tâche aisée car les informations disponibles sont limitées. Les faits suivants résument les principaux impacts :

- Le trafic illégal de déchets représente 20 % de tous les transferts de déchets dans l'UE.
- Les revenus annuels issus trafic illicite de déchets non-dangereux se situent entre 1,3 et 10,3 milliards d'euros par an dans l'UE.
- Les revenus annuels issus trafic illicite de déchets dangereux se situent entre 1,5 et 1,8 milliard d'euros.

#### Crimes liés aux produits chimiques

Les principales infractions environnementales liées aux produits chimiques comprennent la production,

l'importation, l'exportation, la commercialisation ou l'utilisation de substances appauvrissant la couche d'ozone et d'autres produits chimiques non-autorisés dans l'UE (par exemple, dans les domaines des produits pharmaceutiques, des cosmétiques, des perturbateurs endocriniens, des gaz à effet de serre fluorés ou des pesticides). Les faits suivants résument les principaux impacts :

- Le commerce de pesticides illégaux et contrefaits représente 4,4 milliards d'euros par an (au niveau mondial).
- Le commerce illégal de pesticides représente plus de 10 % du marché mondial.
- Le commerce des SAO représente entre 10 et 20 % du commerce légitime, soit entre 7 000 et 14 000 tonnes par an (dans le monde).
- Le commerce des SAO représente une valeur annuelle approximative comprise entre 25 et 60 millions de dollars (dans le monde).

#### 1 INTRODUCTION

This is the final report prepared for the project 'Study to supply the Impact Assessment of the Directive 2008/99/EC on the protection of the environment through criminal law' (JUST/2020/JACC/FW/CRIM/0122). The report consists of a support study including work carried out to:

- 1) assess the costs at Member State and EU level of measures proposed to amend the Environmental Crime Directive:
- 2) identify the key economic impacts, notably on businesses and SMEs, social impacts and environmental impacts. This support study addresses only these elements of the impact assessment procedure; does not cover the full scope of impact assessment analysis, in particular assessment of the effectiveness and legal feasibility of the proposed measures and options; and
- 3) prepare conclusions on the costs and benefits of the proposed measures.

In addition to this introductory section, the report is organised as follows:

- Section 2 presents the scope and purpose of the report, the methodology and data used to develop results, and key limitations
- Section 3 presents the quantitative assessment of implementation costs for all proposal objectives of the ECD review
- Section 4 presents the assessment of environmental, social and economic impacts of environmental crime
- Section 5 presents conclusions, including a summary of impacts on stakeholder groups and overall costs and benefits

Three annexes are included, presenting the information collected on the Baseline situation in the EU Member States (Annex 1); the Public consultation report (Annex 2) and Interview transcripts (Annex 3).

Many of the report sections and annexes were incorporated directly in the Commission's impact assessment report and its annexes. These are all collected directly in this final report for the contract.

The contract also included a separate assessment on how Member States can best improve the collection of accurate, complete and EU-wide comparable statistical data on environmental crime; this report is prepared as a stand-alone document.

#### 2 METHODOLOGY, DATA AND SCOPE

#### 2.1 SCOPE OF THE IMPACT ASSESSMENT

This report assesses the impacts of the proposed options to the Environmental Crime Directive, to support the impact assessment procedure carried out by the European Commission DG JUSTICE in the context of a review of the Directive. As such, the scope of the study is based upon the proposed measures and options as part of the review, drawing assumptions based on desk research and consultation on the current status and activities carried out in the Member States to implement the ECD and combat environmental crime more broadly.

For reference, the drivers, problems, objectives, options and direct impacts identified through the overall review procedure are shown in the intervention logic figure below, taken directly from the Commission's impact assessment report (Annex 11).

Figure 1: Intervention logic for the impact assessment

			Intionsat	Direct-ImpactsX
igure 1: Interventi Driversx 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-ECDsi Vague-terms-used-in-the- definitions-of- environmental-crime-in- Article-3-leave-too-much- scope-for-diverging- interpretations	Problems#  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. Il Unclear definitions of- what is environmental- crime within-Member- States and between Member-States hinder- effective investigation, prosecutions and cross-	Specific-objectives8  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-Deal8  2.Improve-the-effectiveness-of-investigations-and-prosecutions-by-clarifying-the-definitions-of-environmental-crime8	1a. Update the existing list of legislation in the annexes, add new relevant crime categories to Article 3, introduce comitology procedure to keep the annexes updated 1b. Refer to relevant sectoral legislation in general terms and remove the annexes 1 1c. Define environmental crime in the Directive without the requirement of a breach of relevant EU-sectoral legislation = 2 2a. Define unclear terms in the definitions of environmental crime (Art. 3) more precisely 1 2b. Criminalising risky-behaviour (endangerment crime) thus eliminating vague terms.	greater-clarity-on¶ the-scope-of-the-ECD-and-through- widening the-scope-of-the-ECD-a  More-and-more-effective- investigations, prosecutions-and- convictions-through greater-clarity on-the-definitions of environmenta
No-precise-sanction-types- and-levels-required-in-the- ECDs	border-cooperations Sanction-levels-vary- widely-across-MS Sanctions-levels-imposed- in-practice-are-too-low-to- be-effective, dissuasive- and-proportionatest	3. Ensure-that- environmental-crimes- are-sanctioned-by- effective, dissuasive-and- proportionate-sanctionss	3aIntroduce-minimum-maximum-sanctions-levels¶ 3bOption-3a-plus-aggravating-circumstances-and-accessory-sanctions¶ 3cOption-3b-plus-an-obligation-to-link-the-level-of-fines-to-the-financial-situation-of-legal-person-and/or-illegal-profits¶	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 #	Insufficinet-cross-border- cooperation-and- coordination-on- environmental-crime, hinder-effective- investigations-and- prosecutions#	4.Improve the effectiveness of cross-border cooperation on environmental crimes	¶  4a. No-further-action, the-options-under-objectives-1-to-3-are-sufficient-¶  4bIntroducing-a-package-of-provisions-directly-fostering-cross-border-cooperation-¶	More-and-more-effective-cross- border-cooperation-increase-the- effectiveness-of-law-ep/goccement- and-will-bring-more-cases-to-courts
Lack of resources/efforts- in-the-MS-to-collect statistical-data-on- environmental-crime- investigation, prosecution- and-convictions-¶	Lack of and adjoritisation by policymakers; lack of- manitoring of the- functioning of the- enforcement chain-leads- to-environmental-trime- cases not being- sufficiently-investigateds	5.Improve-informed- decision-making-on- environmental-crime- through-improving- statistical-data-collection- and-reportingst	Sa. Oblige MS-to-collect-and-regularly-report-to-the-Commission-statistical-data-¶ related-to-environmental-crime-in-combination-with-further-supporting-measures-¶ Sb. Option-Sa-plus-an-obligation-of-the-MS-to-collect-and-report-statistical-data-according-to-harmonised-common-standards-¶ -3	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-convictionsal
Lack of-resources-/efforts- in-the-Member-States-to- implement-the-Directive-in- practice/-to-enforce- environmental-crime- policiessi	Environmental-crime-not- effectively-investigated, prosecuted-and- sanctioned-due-to- ineffective-operation-of- the-enforcement-chainst	6.Improve-the- operational-effectiveness- of-national-enforcement- chains (investigations, prosecutions, sanctioning)  ■	6a. No-further-action, -implementation-is-fostered-through-measures-taken-under- objectives-1-to-5 ¶ 6bInsert-in-the-Directive-obligations-that-directly-strengthen-practical- implementation-¶ 31	Strong enforcement and enhanced expertise on environmental crime will lead to more and more effective investigations, prosecutions and convictions at

 $Relevant-policy-option: Amending the - Directive, where needed in-combination-with non-regulatory-measures - \P \\ Discarded-options: -- 1. Repeal the - Directive \P$ 

2. Address the identified problems only through non-binding measures ¶

#### 2.2 SOURCES OF INFORMATION

To prepare cost estimates, a 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 8<sup>th</sup> 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 Annex 1 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.

For the assessment of environmental, social and economic impacts, a wider literature review was carried out, focused on studies assessing the scope and extent of different types of environmental crime and its impacts, with special attention on efforts to describe and quantify the impacts in monetary terms.

The consultation strategy for the overall impact assessment was managed directly by the Commission. Activities included online consultation on the inception impact assessment, a 12-week open public consultation (analysed by the Milieu project team in Annex 2 to this report), as well as a series of online targeted thematic workshops or expert groups meetings, supported by dedicated questionnaires.

In addition, the Milieu project team conducted supplementary targeted consultation activities to support this study. These activities were carried out to shed light on the baseline situation and Member States; to verify the assumptions made for cost estimates; and to collect additional information about potential impacts on businesses. These activities are detailed in the tables below. Transcripts from all interviews conducted are included in Annex 3.

Table 3: Consultation activities carried out to support the development of cost estimates

Stakeholder	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

Table 4 Interviews carried out to assess impacts on business

Industry	Organisation
Chemicals	The European Chemical Industry Council (CEFIC)
Recycling	Plastic Recyclers Europe (PRE)

Industry	Organisation
Hazardous Waste	Hazardous Waste Europe (HWE)
Ships	European Community Shipowners' Associations (ECSA)
Various	Chamber of Commerce Austria (WKÖ)

#### 2.3 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 bodies) 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 toolbox<sup>3</sup>. 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 initiatives<sup>7</sup>, 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

#### **Labour cost calculation**

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 year<sup>8</sup> or alternatively 1 720 person hours of FTE in a year<sup>9</sup>, 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 final <sup>10</sup>). 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 2016<sup>11</sup>. 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 2020<sup>12</sup>, which can be comparable to the EU labour cost. A 25% overhead cost is

<sup>&</sup>lt;sup>7</sup> See, for example, the SWD (2017) 298 final on combating fraud and counterfeiting of non-cash means of payment

<sup>&</sup>lt;sup>8</sup> Eurostat, 2017, Guidelines Unit Costs for Direct Personnel Costs applicable to all grants awarded by Eurostat: <a href="https://ec.europa.eu/eurostat/documents/10186/7970019/Guideline-unit-costs.pdf">https://ec.europa.eu/eurostat/documents/10186/7970019/Guideline-unit-costs.pdf</a>

<sup>&</sup>lt;sup>9</sup> European Commission, 2019, H2020 Programme User's Guide for the Personnel Costs Wizard: <a href="https://ec.europa.eu/research/participants/data/ref/h2020/other/gm/reporting/guide-personnel-costs en.pdf">https://ec.europa.eu/research/participants/data/ref/h2020/other/gm/reporting/guide-personnel-costs en.pdf</a>

<sup>10</sup> COM(2020) 773 final, Annexes: <a href="https://eur-lex.europa.eu/resource.html?uri=cellar:9e757c7c-3328-11eb-b27b-01aa75ed71a1.0005.02/DOC\_2&format=PDF">https://eur-lex.europa.eu/resource.html?uri=cellar:9e757c7c-3328-11eb-b27b-01aa75ed71a1.0005.02/DOC\_2&format=PDF</a>

<sup>11</sup> 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

<sup>&</sup>lt;sup>12</sup> Based on the annual inflation rates reported for 2017-2020 by Eurostat: 2020, 2019, 2018, 2017

#### Labour cost calculation

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.

#### 2.4 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 were carried out to ascertain these details for all Member States, information was mainly collected from the 8<sup>th</sup> 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 8<sup>th</sup> 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.

Further details on limitations and assumptions made are provided in the sections of the report presenting detailed cost estimates.

#### 3 COST ESTIMATES FOR ALL OBJECTIVES

A major part of the work carried out involved the development of quantified implementation cost estimates for each proposed policy measure. These cost estimates were used to assess efficiency in the impact assessment report. Implementation costs have been quantified wherever possible.

Three main categories of cost were considered, as follows:

- 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 the following sub-sections.

#### 3.1 TRANSPOSITION AND THE DEVELOPMENT OF EU-LEVEL GUIDANCE DOCUMENTS

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.

#### 3.1.1 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 payment<sup>13</sup>. 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 **Error!** 

-

<sup>&</sup>lt;sup>13</sup> 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.

**Reference source not found.** (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.

Table 5: Estimated costs of transposition of new legislation in the Member States

One-off costs	Low	y	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	

#### 3.1.2 Preparation of EU-level guidance

Some EU-level guidance already exists with regard to environmental crime<sup>14</sup>. 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 terms<sup>15</sup>. 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.

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 payment<sup>16</sup>. The necessary effort is assumed to be between 30 and 60 person days. Using the EU daily labour cost defined in section **Error! Reference source not found.** (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 6: Estimated costs of developing and publishing a non-legislative guiding document at the EU level

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

#### 3.2 COSTS RELATED TO OPTIONS UNDER OBJECTIVE 4

Objective 4 aims to '4. Foster cross-border investigation and prosecution'. Option 4a, 'no further action, the options under objectives 1 to 3 are sufficient', would require no further action beyond those under objectives 1 to 3, would not entail any direct additional costs. Option 4b, 'introducing a package of provisions directly fostering cross-border cooperation' contains three proposed measures; details on the cost estimates for each of the measures proposed as part of option 4b are considered in the following

<sup>&</sup>lt;sup>14</sup> For example, the recently published European Commission, 2021, Guidance Document on combating environmental crimes and related infringements.

<sup>&</sup>lt;sup>15</sup> 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.

<sup>&</sup>lt;sup>16</sup> 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.

sections.

#### 3.2.1 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 8<sup>th</sup> Round of Mutual Evaluation country reports and as shown in the Annex on the baselines, 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 wiretap<sup>17</sup>. 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 telecommunications companies for data on customers (data not including the call or message content)<sup>18</sup>. 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).

#### 3.2.2 Focal points, cooperation with EU agencies and bodies

Member States would be required to install national focal points for cross border cooperation and to ensure cooperation through relevant EU agencies and bodies. 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.

\_

<sup>&</sup>lt;sup>17</sup> Le Soir, 2018, 'Belgique: le nombre d'écoutes téléphoniques en hausse', 20 August 2018, <a href="https://www.lesoir.be/173917/article/2018-08-20/belgique-le-nombre-decoutes-telephoniques-en-hausse">https://www.lesoir.be/173917/article/2018-08-20/belgique-le-nombre-decoutes-telephoniques-en-hausse</a>

<sup>&</sup>lt;sup>18</sup> 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

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 infringements<sup>19</sup>). 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 2.3.

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 payment  $^{20}$ . The 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 2.2 (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 7: Estimated annual costs of establishing and maintaining focal points in the Member States

Annual costs	Lo	)W	High	
Per focal point	12 days	€ 3 523	20 days	€ 5 872
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

#### 3.3 COSTS RELATED TO OPTIONS UNDER OBJECTIVE 5

Objective 5 aims to 'Improve informed decision-making on environmental crime through improved collection and dissemination of statistical data'. Two options to improve statistical data collection and dissemination in the Member States were considered:

- Option 5 a): Oblige Member States to collect and regularly report to the Commission statistical data related to environmental crime
- Option 5 b): Oblige Member States to collect and report statistical data according to harmonised common standards

#### 3.3.1 Baseline and assumptions for costs

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

<sup>&</sup>lt;sup>19</sup> European Commission, 2021, Guidance Document on combating environmental crimes and related infringements.

<sup>&</sup>lt;sup>20</sup> 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.

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 others<sup>21</sup>.

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 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 8: 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 suboption, 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

<sup>&</sup>lt;sup>21</sup> 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.

with data collection and reporting for crime statistics<sup>22</sup>. 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.

3.3.2 Option 5a: 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.
- 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:**

Setti

- 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

<sup>&</sup>lt;sup>22</sup> 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.

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 9: Member State costs for Option 5a

			Set-up	one off			Annual / continuous					
MS	Baseline # agencies	Central reporting system	Round tables*	Total set- up / one- off days	1	al set-up /	Reporting	Compilation	Total annual / continuous days		al annual / tinuous ts	
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	
ΙE	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	

<sup>\* 2</sup> persons for 2 round tables (1 day each) per agency

Table 10: EU-level costs for Option 5a

			up / one-off			Annual / continuous		
	Cool	Coordination				Total set-up		
	3 day	ys per MS	EU ro	ound tables*	/one	-off	EU co	ollection**
Days		81		108		189		108
Cost	€	43,270	€	57,693	€	100,963	€	57,693

<sup>\* 1</sup> person for 2 round tables (2 day each) per MS

# 3.3.3 Option 5b: 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

<sup>\*\* 1</sup> day per agency

<sup>\*\*\* 3</sup> days per agency

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

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 ICCS<sup>23</sup>) 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.
- 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

.

<sup>&</sup>lt;sup>23</sup> 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.

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:**

- Setting up an EU coordination system, including: designation of responsibilities to an already existing entity at EU level (e.g. DG JUST, with a possible role for Eurojust or Eurostat) to coordinate the data collection at EU level; definition of a work programme; definition of a structure (e.g. EU task force) and work procedures (e.g. Member States working group); planning and allocation of budget and human resources.
- **EU Task Force**: the definition of common standards (i.e. indicators, classification, counting units, counting rules and reporting templates) would be supported by a Task Force at the EU level. It 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.
- **Establishment of an EU database**: it is assumed that with the availability of data across the EU some kind of EU level database might be set up to report the data provided by the Member States. This would entail an initial set-up for a small team and a website using standard IT tools and a definition of a reporting format.
- **Annual coordination**: following the set-up, efforts will be required to maintain the system and contacts with other EU partners and Member States.
- 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: start-up costs for the 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 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 11: Member State costs for Option 5b

			Set	-up / one-off			Annual / continuous							
		Set-up national			Total set-	Total set-up				Total Total annua				
	Baseline#	coordination	MS working	Setting up	up / one-off	/ one-off		Maintenance	Collection and	annual /	/ cor	ntinuous		
MS	agencies	procedure***	Group*	standards**	days	costs	Coordination****	of standards	reporting***	continuous	cost	s		
AT	4	5	13	32	50	€ 14.679	10	4	16	30	€	8.807		
BE	7	5	16	56	77	€ 22.605	10	7	28	45	€	13.211		
BG	4	5	13	32	50	€ 14.679	10	4	16	30	€	8.807		
CY	3	5	12	24	41	€ 12.037	10	3	12	25	€	7.339		
CZ	3	5	12	24	41	€ 12.037	10	3	12	25	€	7.339		
DE	3	5	12	24	41	€ 12.037	10	3	12	25	€	7.339		
DK	4	5	13	32	50	€ 14.679	10	4	16	30	€	8.807		
EE	4	5	13	32	50	€ 14.679	10	4	16	30	€	8.807		
EL	7	5	16	56	77	€ 22.605	10	7	28	45	€	13.211		
ES	7	5	16	56	77	€ 22.605	10	7	28	45	€	13.211		
FI	4	5	13	32	50	€ 14.679	10	4	16	30	€	8.807		
FR	6	5	15	48	68	€ 19.963	10	6	24	40	€	11.743		
HR	3	5	12	24	41	€ 12.037	10	3	12	25	€	7.339		
HU	2	5	11	16	32	€ 9.394	10	2	8	20	€	5.872		
ΙE	5	5	14	40	59	€ 17.321	10	5	20	35	€	10.275		
IT	7	5	16	56	77	€ 22.605	10	7	28	45	€	13.211		
LT	4	5	13	32	50	€ 14.679	10	4	16	30	€	8.807		
LV	2	5	11	16	32	€ 9.394	10	2	8	20	€	5.872		
LU	2	5	11	16	32	€ 9.394	10	2	8	20	€	5.872		
MT	3	5	12	24	41	€ 12.037	10	3	12	25	€	7.339		
NL	7	5	16	56	77	€ 22.605	10	7	28	45	€	13.211		
PL	6	5	15	48	68	€ 19.963	10	6	24	40	€	11.743		
PT	4	5	13	32	50	€ 14.679	10	4	16	30	€	8.807		
RO	6	5	15	48	68	€ 19.963	10	6	24	40	€	11.743		
SE	5	5	14	40	59	€ 17.321	10	5	20	35	€	10.275		
SI	5	5	14	40	59	€ 17.321	10	5	20	35	€	10.275		
SK	3	5	12	24	41	€ 12.037	10	3	12	25	€	7.339		
Days		135	363	960	1458	€ 428.034	270	120	480	870	€	255.411		
Costs		€ 39.633	€ 106.568	€ 281.833	€ 428.034		€ 79.266	€ 35.229	€ 140.917	€ 255.411				

<sup>\*</sup> 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

<sup>\*\*</sup> 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

<sup>\*\*\*</sup> Reporting: 1 day per agency + collection: 1 day per agency + validation: 2 days per agency

\*\*\*\*Set-up and annual coordination are between one national coordinating agency /focal point and EU bodies, while MS working group, setup and maintenance of standards and collection and reporting depend upon the various agencies reporting environmental crime statistics within a Member State.

Table 12: EU-level costs for Option 5b

	Set-up / one-off					Annual / continuous						
	EU		ĺ			Maintenance		Reporting &				
	coordination	EU Task		Total set-up /	Coordination	of	Collection	dissemination	Total annual /			
	system	Force*	EU database**	one-off	***	standards****	****	*****	continuous			
Days	20	370	100	490	32	24	199	40	295			
Costs	€ 10,684	€ 197,652	€ 53,419	€ 261,755	€ 17,094	€ 12,821	€ 106,305	€ 21,368	€ 157,587			

<sup>\*</sup> Development of standards 12 persons, 30 days each + assisting translating/transposing: 2 persons, 5 days each

#### 3.3.4 Preferred option

The preferred option is a simplified version of option 5b. In this option, no EU database is envisaged, and the Commission would compile all statistical data on environmental crime collected and transmitted by the Member States and publish a report on a biennial basis. The EU-level costs for this preferred, simplified version have therefore been adjusted as follows:

- Costs for setting up an EU coordination system, annual coordination of such a system and the annual collection and review of the data are not included in this option, as the EU would not play a coordinator or reviewer role.
- The primary work of the EU Task Force would be to define, agree and set common standards for the collection of environmental statistical data. Costs are shown under column 'Definition of minimum standards' in Table 10.
- There would be no costs for the establishment of an EU database, but the costs included under this heading in option 5b for the set-up of a reporting format (30 out of 100 days) would be included in this option. Costs are shown under 'Report format for MS' column in Table 10.
- On-going costs for the maintenance of standards are expected to remain, as well as reporting and dissemination, in the form of a biennial Commission report based on the data Member States transmit.

The Member State costs for this preferred option are expected to be the same as for option 5b. The revised EU-level costs as described above are presented in the table below. The total is 400 days (EUR 213 677) for set-up or one-off costs and 64 days (EUR 34 188) for recurring or continuous costs. The recurring costs could be considered on a biennial basis, as the Commission report is planned to be published every two years.

Table 13: EU-level costs for preferred option

	5	et-up / one-o	ff	Recurring / continuous						
	Definition of minimum standards*		_	Maintenance of standards	Biennial EU report on MS data	Total annual /				
Days	370	30	400	24	40	64				
Costs	€ 197.652	€ 16.026	€ 213.677	€ 12.821	€ 21.368	€ 34.188				

<sup>\*</sup> EU Task Force in Option 5b

<sup>\*\*</sup> Initial set-up, website and reporting format: 55 person days for the EU + 3 experts for 5 days + 30 days

<sup>\*\*\* 5</sup> days at EU level and 1 day per MS

<sup>\*\*\*\*</sup> One meeting a year for 2 days: 12 persons, 2 days each

<sup>\*\*\*\*\*</sup> Collecting data: 3 days per MS + validation: 4 days per MS + database tools: 10 days

<sup>\*\*\*\*\*</sup> Annual publication: 30 days + tools & website: 10 days

#### 3.4 COSTS RELATED TO OBJECTIVE 6

Under objective 6, the impact assessment report presents two options to 'Improve the operational effectiveness of national enforcement chains to foster investigations, prosecutions, sanctioning':

- Option 6 a): Foster implementation through measures taken under objectives 1 to 5
- Option 6 b): Insert in the Directive obligations that directly strengthen the effectiveness of the law enforcement chain

Option 6a, which would require no further action beyond those under objectives 1 to 5, would not entail any direct additional costs. Option 6b would introduce a set of provisions obliging Member States to take measures aimed at fostering the effectiveness of law enforcement. Details on the cost estimates for each proposed provision are considered in the following sections.

3.4.1 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 Annex 1 on baselines, 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 3.5 of this report.

#### 3.4.2 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 3.4.2.1) and training at EU level (Section 3.4.2.2), 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 3.4.2.3 looks at possible sources of EU funding to support both national and EU level training on environmental crime.

#### 3.4.2.1 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 Annex 1 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 chain<sup>24</sup>. 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 8<sup>th</sup> 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 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

-

<sup>&</sup>lt;sup>24</sup> European Commission, 2021, Guidance Document on combating environmental crimes and related infringements.

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 8<sup>th</sup> 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 Sates (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 14: 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 studies<sup>25</sup> and stakeholder consultation 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

<sup>&</sup>lt;sup>25</sup> 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 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.

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 100<sup>26</sup>.
- 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 239<sup>27</sup>.
- 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 course<sup>28</sup>.
- 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 year<sup>29</sup>.

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

 $<sup>^{26} \, \</sup>underline{\text{https://institut-superieur-environnement.com/wp-content/uploads/2018/01/Catalogues-formation-Pro-ISE.pdf}$ 

<sup>&</sup>lt;sup>27</sup> https://www.cepol.europa.eu/sites/default/files/Annex 3 CEPOL Training Catalogue 2021.pdf

<sup>&</sup>lt;sup>28</sup>https://www.psni.police.uk/globalassets/advice--information/our-publications/disclosure-logs/2011/human-resources/training costs police officers.pdf

<sup>&</sup>lt;sup>29</sup> SWD(2020) 259 final part 2

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

MS	Continuous training for police and prosecutors	Continuous training for judicial branch
$AT^{30}$	One week every two years	No detailed information in the country report
$CZ^{31}$	3 days annually	1 day annually for the judicial branch
DE <sup>32</sup>	Example at Länder level: 2 days annually (Rhineland/Palatinate)	4-day conferences for judicial branch
EE <sup>33</sup>	4 days annually for EI investigators and public prosecutors	No detailed information in the country report
FI <sup>34</sup>	5 days annually	No detailed information in the country report
FR <sup>35</sup>	3 days annually for inspectors	No detailed information in the country report
$PL^{36}$	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 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). Cost estimates are based on customs and administrative authorities receiving an average of 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.

<sup>&</sup>lt;sup>30</sup> 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

<sup>&</sup>lt;sup>31</sup> Ibid - Report on the Czech Republic, 14129/1/18 REV 1

<sup>&</sup>lt;sup>32</sup> Ibid - Report on Germany, 11430/1/18 REV 1

<sup>33</sup> Ibid - Report on Finland, 8430/1/18 REV 1

<sup>34</sup> Ibid - Report on Finland, 8430/1/18 REV 1

<sup>&</sup>lt;sup>35</sup> Ibid - Report on France, 6734/18 DCL 1

<sup>36</sup> Ibid - Report on Poland, 15079/1/18 REV 1

### 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 crime<sup>37</sup>. Based on Eurostat data (CRIM\_JUST\_JOB<sup>38</sup>) 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 3.5 of this report. 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 3.5; 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 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 16: Calculations for number of customs targeted by training

MS	Customs workforce	National population <sup>39</sup>	Customs per inhabitant	
BE	3 199 <sup>40</sup>	11 566 041	0.00028	
DE	44 000 <sup>41</sup>	83 166 711	0.00053	

 $<sup>^{37}</sup>$  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,  $15079/1/18\ REV\ 1$ 

<sup>38</sup> https://ec.europa.eu/eurostat/databrowser/view/crim\_just\_job/default/table?lang=en%20b

<sup>&</sup>lt;sup>39</sup> Eurostat, <sup>2021</sup>, Population on 1 January by age and sex, DEMO\_PJAN, Available at: <a href="https://ec.europa.eu/eurostat/databrowser/view/demo\_pjan/default/table?lang=en">https://ec.europa.eu/eurostat/databrowser/view/demo\_pjan/default/table?lang=en</a>

<sup>&</sup>lt;sup>40</sup> Cour des comptes, 2017, Organisation d'un service continu au sein de l'Administration générale des douanes et accises. Available at: <a href="https://www.ccrek.be/Docs/2019">https://www.ccrek.be/Docs/2019</a> 02 AGDA.pdf

<sup>41</sup> 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

MS	Customs workforce	National population <sup>39</sup>	Customs per inhabitant
FR	16 897 <sup>42</sup>	67 320 216	0.00025
LU	443 <sup>43</sup>	626 108	0.00071
Average number of customs per inhabitant applied to all other MS		nt applied to 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 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 17: Calculations for number of inspectors targeted by training

MS	Number of inspectors based on 8th Round of Mutual Evaluation reports	National population <sup>44</sup>	Inspectors per inhabitant	
EE	6 <sup>45</sup>	1 330 068	0.0000045	
HR	77 <sup>46</sup>	4 036 355	0.000019	
LT	433 <sup>47</sup>	2 795 680	0.00015	
RO	621 <sup>48</sup>	19 186 201	0.000032	
Average number of inspectors per inhabitar all other MS		ant applied to 0.000053		

<sup>&</sup>lt;sup>42</sup> Direction générale des douanes et droits indirects, 2020, Bilan Annuel de la Douane 2020, République Française. Available at: <a href="https://www.douane.gouv.fr/sites/default/files/2021-04/02/Bilan-annuel-de-la-douane-2020.pdf">https://www.douane.gouv.fr/sites/default/files/2021-04/02/Bilan-annuel-de-la-douane-2020.pdf</a>

Administration des douanes et accises, 2020, Rapport d'activité du Ministère des Finances 2020, Gouvernement du Grand-Duché de Luxembourg. Available at: <a href="https://douanes.public.lu/content/dam/douanes/fr/actualites/rapport-annuel-ADA.pdf">https://douanes.public.lu/content/dam/douanes/fr/actualites/rapport-annuel-ADA.pdf</a>
 Eurostat, 2021, Population on 1 January by age and sex, DEMO\_PJAN, Available at: <a href="https://ec.europa.eu/eurostat/databrowser/view/demo\_pjan/default/table?lang=en">https://ec.europa.eu/eurostat/databrowser/view/demo\_pjan/default/table?lang=en</a>

<sup>&</sup>lt;sup>45</sup> 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.

<sup>&</sup>lt;sup>46</sup> Ibid – Report on Croatia, 9178/1/19.

<sup>&</sup>lt;sup>47</sup> Ibid – Report on Lithuania, 10080/1/19.

<sup>&</sup>lt;sup>48</sup> Ibid – Report on Romania, 8783/1/19.

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  $\in$  1 429 746 annually at national level, with a total annual cost of EUR  $\in$  7 978 446 across all Member States.

Table 18: 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	В	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	Α	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	В	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	В	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	В	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	В	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	С	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

## 3.4.2.2 Training provided by EU organisations

A considerable amount of training on environmental crime is provided by EU-level organisations, networks, and training institutes. Some stakeholders implied, however, that the training activities currently provided at EU-level are somewhat fragmented and provided more on an ad hoc basis rather than following a coordinated strategy. The cost estimates here assume that additional EU-level training is likely to be carried out in response to the revised ECD, as the increase in activity in environmental crime will increase demand from Member States as well as EU actors for new training targeting more practitioners. A training strategy developed at EU level, possibly within the Environmental Compliance and Governance Forum, could vastly improve the effectiveness and efficiency and training provided by EU organisations on environmental crime.

At EU level, the main body responsible for providing training to police officers, customs and public prosecutors is CEPOL, which already offers regular annual courses in relation to environmental crime, notably on cross-border cooperation<sup>49</sup>. The 8<sup>th</sup> Mutual Evaluation country reports of 17 Member States indicate that national practitioners regularly attend CEPOL courses linked to environmental crime, and environmental crime was selected as a key priority theme for CEPOL training for the 2018-2021 EU

<sup>&</sup>lt;sup>49</sup> See <a href="https://www.cepol.europa.eu/publications-training-catalogue">https://www.cepol.europa.eu/publications-training-catalogue</a>

Strategic Training Needs Assessment. In addition, environmental crime is also part of FRONTEX training on cross-border crime detection<sup>50</sup>. The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) also provides training for different types of practitioners with the support of EU funding (e.g., the LIFE programme). Regarding the judicial branch, training at EU-level is provided through several European networks/professional organisations supported by European funding, such as the European Judicial Training Network (EJTN), the Academy of European Law (ERA), the European Network of Prosecutors for the Environment (ENPE) and the European Institute of Public Administration – European Centre for Judges and Lawyers (EIPA). These networks provide annual trainings in relation to environmental issues, which focus on both environmental law and crimes. Further details on EU level training are in Annex 1 on baselines.

To estimate the costs of providing additional EU-level training on environmental type, reference data from existing training efforts have been collected for the following:

- Costs of a typical EU level training course for law enforcement practitioners
- Costs of typical EU level training course for judicial practitioners
- Costs of setting up an e-learning module in existing platforms (e.g., CEPOL, EJTN)

## Costs of a typical EU level training course for law enforcement practitioners

The Five-Year Evaluation Report (2011-2015)<sup>51</sup> of CEPOL provides reference data on the average costs of one CEPOL training activity. Most of the training activities are in the form of residential training, which consists of face-to-face training in the form of courses, seminars or conferences, organised either by CEPOL itself or a CEPOL Framework Partner in a Member State. CEPOL bears the vast majority of the costs linked to the provision of residential training in the form of grants provided to the Framework Partner responsible for organising the training. The primary costs for national authorities are travel costs for sending participants (if the travel distance is less than 300km)<sup>52</sup>. In 2013 (the latest year for which data is available):

- On average the cost for one training & learning activity was EUR 26 261
- On average the cost per participant of one training & learning activity was EUR 353

#### Costs of a typical EU level training course for judicial practitioners

Desk research on the existing training activities provided for the judicial branch in relation to environmental crime<sup>53</sup>, enables the following conclusions:

■ The EU indirectly funds training activities for judicial practitioners through grants provided to European networks (e.g., EJTN, ERA, ENPE)

<sup>&</sup>lt;sup>50</sup> See <a href="https://frontex.europa.eu/assets/Publications/Training/TRU\_Course\_Catalogue\_2018.pdf">https://frontex.europa.eu/assets/Publications/Training/TRU\_Course\_Catalogue\_2018.pdf</a>

<sup>&</sup>lt;sup>51</sup> ICF, 2015, Five-Year External Evaluation of CEPOL: Final Report. Available at:

https://www.cepol.europa.eu/sites/default/files/five-year-evaluation-report-2011-2015.pdf

<sup>&</sup>lt;sup>52</sup> CEPOL, 2017, Financial rules for CEPOL's residential training activities. Available at: https://www.cepol.europa.eu/sites/default/files/Annex%202%2033-2017-

DIR% 20On% 20financial% 20rules% 20for% 20CEPOL% 20residential% 20training% 20ac....pdf

<sup>&</sup>lt;sup>53</sup> See: - EJTN, 2021, Course on Judicial Cooperation in Criminal Matters: Cross-border Environmental crimes -

 $CR/2021/06, available \ at: \ \underline{https://www.ejtn.eu/Catalogue/EJTN-funded-activities-201911/\underline{Judicial-Cooperation-in-Criminal-Matters-Practical-Case-Based-Simulation-on-cross-border-Environmental-crimes---CR202106/\underline{\ }$ 

<sup>-</sup> EJTN, 2021, Webinar on cooperation in protected species trafficking cases, available at:

https://www.ejtn.eu/Catalogue/Catalogue-201911/Cooperation-in-protected-species-trafficking-cases/

<sup>-</sup> EJTN, 2021, Course on EU Environmental Law (AD/2021/06), available at: <a href="https://www.ejtn.eu/Catalogue/EJTN-funded-activities-201911/EU-Environmental-Law-AD202105/">https://www.ejtn.eu/Catalogue/EJTN-funded-activities-201911/EU-Environmental-Law-AD202105/</a>

<sup>-</sup> EJTN, 2021, Environmental Crimes (Webinar), available at: <a href="https://www.ejtn.eu/Catalogue/Catalog

<sup>-</sup> ERA, 2020, Course on EU Waste Legislation and Protection of the Environment through Criminal Law, available at: <a href="https://www.era.int/cgi-bin/cms?">https://www.era.int/cgi-bin/cms?</a> SID=NEW& sprache=en& bereich=artikel& aktion=detail&idartikel=129371

- On average the EU level training activities for judicial practitioners last 2.5 days
- On average the EU level training activities for judicial practitioners have 35 participants
- The evaluation of the 2011-2019 European Judicial training strategy shows that on average one training day in criminal justice cost EUR 352

## Costs of setting up an e-learning module in existing platforms (e.g., CEPOL, EJTN)

The report on CEPOL's Digitalisation Strategy Project provides reference data on the costs of developing and setting up e-learning modules. The report estimates that "the cost and development time of eLearning modules depends on their duration, level of sophistication and interactivity and can range from 5 000 to 60 000 Euros<sup>54</sup>.

Table 19: Overview of cost assumptions for EU level training activities

Target group	Average cost per training activity	Average cost per participant
Police and prosecutors	€ 28 602	€ 353
Judicial branch	€ 12 320	€ 352
Online module	€ 5 000 - € 60 000	Based on the assumption that 100 participants use the module: $\[ \in 50 - \in 600 \]$

As training costs for different types of practitioners are similar (see table above), a flat rate of EUR 350 per participant per training activity was used. To estimate the costs of providing additional training to all practitioners in all Member States targeted by the national-level training, one additional training day per practitioner was used. Costs are shown in total for all Member States, as it is also very likely that the costs of such training would be included in EU funding programmes, removing the direct cost burden from the Member States (see Section 3.4.2.3 on who is likely to bear the costs of training). The assumption is a rough one and would be driven mainly by demand and a targeted training strategy, as discussed above.

Table 20: Additional costs for EU-level training activities

Target group	Estimate of total number of practitioners targeted by training for all Member States	Average cost per participant for one training activity	Total estimated costs
Public prosecutors and police officers	18 743	€ 350	€ 6 559 944
Judges	394	€ 350	€ 137 967
Customs	19 010	€ 350	€ 6 653 426
Administrative authorities	23 265	€ 350	€ 8 142 683
<b>Total estimated costs for</b>	EU level training		€ 21 494 021

### 3.4.2.3 EU funding for training on environmental crime

The costs for additional training on environmental crime could be significant, if fully implemented according to the assumptions. These costs are very likely to be shared between the EU and the Member

<sup>&</sup>lt;sup>54</sup> See: https://www.cepol.europa.eu/sites/default/files/14-2020-MB-Annex.pdf

States, for a number of reasons.

First, most of the training provided at EU-level on environmental crime is funding by EU programmes. In the majority of cases shown in Annex 1 on baselines 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 themselves<sup>55</sup>. 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 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 chain<sup>56</sup>. 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 prosecution<sup>57</sup>. 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 practitioners<sup>58</sup>.

## ■ 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 eligible<sup>59</sup>. 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

https://webgate.ec.europa.eu/life/publicWebsite/index.cfm?fuseaction=search.dspPage&n\_proj\_id=5828

<sup>&</sup>lt;sup>55</sup> Examples of EU level training co-financed by the EU include:

<sup>-</sup> CEPOL residential activities, which are co-financed up to 95% through grant agreements, see: https://www.cepol.europa.eu/sites/default/files/Annex%201%20Call%20for%20Proposals%20for%20Grant%20Agreements%202022.pdf

 $<sup>-</sup> The \ IMPEL \ Capacity \ Building \ and \ Training \ programme, which is \ funded \ by \ the \ European \ Commission, see: \ https://www.impel.eu/wp-content/uploads/2019/09/ToR-2019_23-Capacity-Building-and-Training.pdf$ 

<sup>-</sup> 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

<sup>&</sup>lt;sup>56</sup> See the 'You have right to effective protection of nature' project at:

<sup>57</sup> See the 'Minimize the incidence of environmental crimes' project at: https://webgate.ec.europa.eu/life/publicWebsite/project/details/4848

<sup>58</sup> See the 'Successful Wildlife Crime Prosecution in Europe' project at: <a href="https://webgate.ec.europa.eu/life/publicWebsite/project/details/5269">https://webgate.ec.europa.eu/life/publicWebsite/project/details/5269</a>

<sup>&</sup>lt;sup>59</sup> See: <a href="https://ec.europa.eu/home-affairs/financing/fundings/security-and-safeguarding-liberties/internal-security-fund-police/union-actions\_en">https://ec.europa.eu/home-affairs/financing/fundings/security-and-safeguarding-liberties/internal-security-fund-police/union-actions\_en</a>

(TECUM) with a grant of EUR 780 489. This project was implemented by BS Europe, the Italian Carabinieri, the Spanish SEPRONA, the National Environmental Guard of Romania, and CEPOL, with the aim of filling operational gaps in the cross-border fight against environmental crime<sup>60</sup>.

## **■** 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.

3.4.3 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 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 8<sup>th</sup> 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.

<sup>&</sup>lt;sup>60</sup> See: <a href="https://www.bseurope.com/project/tackling-environmental-crimes-through-standardised-methodologies-tecum">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</a>

- **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 NGOs<sup>61</sup>. 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 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 21: 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	€3 080 000	Impact Assessment of the Directive on the protection of the financial interests of the

<sup>&</sup>lt;sup>61</sup> See Italy country report, p. 15.

Activity	Cost	Source
provisions + preparation of practitioners' guidelines compiling the best practices (EU level cost including meeting organisation, travel expenses, working time of officials)		EU <sup>62</sup>
Education measures, awareness raising campaigns at the Member State level	100 person days per MS	Impact Assessment of the Directive on combating fraud and counterfeiting of non-cash means of payment <sup>63</sup>

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.

## 3.4.4 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 8<sup>th</sup> 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:

■ **Group A:** CZ, FI, NL, SK These Member States have a dedicated national environmental crime strategy and/or action plan, coordinated at central level.

<sup>&</sup>lt;sup>62</sup> 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

<sup>&</sup>lt;sup>63</sup> 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 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 22: Estimated cost of developing national strategies in the Member States

MS	Baseline	One-off cost	Annual costs
AT	C	€ 37 578	€ 14 092
BE	В	€ 37 578	€ 14 092
BG	C	€ 37 578	€ 14 092
CY	C	€ 37 578	€ 14 092
CZ	A	-	-
DE	В	€ 37 578	€ 14 092
DK	C	€ 37 578	€ 14 092
EE	C	€ 37 578	€ 14 092
EL	В	€ 37 578	€ 14 092
ES	В	€ 37 578	€ 14 092
FI	A	-	-
FR	C	€ 37 578	€ 14 092
HR	C	€ 37 578	€ 14 092
HU	C	€ 37 578	€ 14 092
IE	В	€ 37 578	€ 14 092
IT	В	€ 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	В	€ 37 578	€ 14 092
PT	В	€ 37 578	€ 14 092
RO	C	€ 37 578	€ 14 092
SE	В	€ 37 578	€ 14 092
SI	В	€ 37 578	€ 14 092
SK	A	-	-
Total		€ 864 289	€ 324 108

# 3.5 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 2: 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, Environnemental Compliance Assurance Guidance Document, Combatting environnemental 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 unlikely<sup>64</sup>. 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 cases<sup>65</sup>. (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 in the number of environmental crime cases on the human resource

<sup>&</sup>lt;sup>64</sup> In addition, some Member States have also highlighted the lack of sufficient number of cases to warrant having a judge dedicated to environmental crime.

<sup>65</sup> Interview with representatives of the Swedish authorities and practitioners.

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 23: 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%

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

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 grey<sup>66</sup>) 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 generate an estimate for the number of police and prosecutors that would require training in Section 3.4.2.1 above (Variable 3).

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

<sup>\*\*</sup>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.

<sup>&</sup>lt;sup>66</sup> 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.

Table 24: 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

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

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

Prosecutors: data are for 2018 and taken from Council of Europe, <a href="https://public.tableau.com/app/profile/cepej/viz/CEPEJ-Explorerv2020\_1\_0EN/Tables">https://public.tableau.com/app/profile/cepej/viz/CEPEJ-Explorerv2020\_1\_0EN/Tables</a>

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 2.4 on limitations, the baseline information relies to a large extent on Member State reporting linked to the 8<sup>th</sup> 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 Section 4 of this report, 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 prosecution67, 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.

## 3.6 EUROPEAN COMMISSION REPORTING COSTS

In addition to the implementation costs described in the previous section, adopting modifications to the Directive will generate reporting costs on the Commission. These include reporting on the transposition of the Directive by the Member States and an evaluation of the effectiveness of the Directive. The costs assume that the preparation of the reports by Commission staff would be supported by studies developed by external contractors. Costs for these studies are based on typical prices given in Commission tender specifications for studies of similar scope.

3.6.1 Costs to prepare a report on the transposition of the Directive by Member States

A support study by a contractor, including analysis by a national legal expert of the transposition in all 27 EU Member States, plus a synthesis report, would cost approximately EUR 350 000, based on the budgets allocated in previous tenders for similar services. In addition to this, the time for the Commission staff to manage and review the contractor's study, plus prepare the actual transposition report to be adopted is estimated as: 2 days to review each MS transposition report ( $27 \times 2 = 54$ ) plus 10 days for overall contract management and 15 days for preparation and internal review of the report. The total cost estimate is EUR 392 186.

3.6.2 Costs to prepare a report on the evaluation of the effectiveness of the Directive

A support study for an evaluation of the Directive by a contractor after five years would cost approximately EUR 380.000, based on the cost of the 2020 evaluation study (budgeted at EUR 345.000 in 2019). In addition to this, the time for the Commission staff to manage and review the contractor's study, plus prepare the actual evaluation SWD report to be adopted is estimated as: 40 days to manage the contract and review deliverables and 40 days for preparation and internal review of the SWD report. The total cost estimate is EUR 422 720.

<sup>&</sup>lt;sup>67</sup> According to the baseline research, these Member States are: CY, CZ, EE, FR, IE, LT, PL, PT, SE.

### 4 ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACTS

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 annually<sup>68</sup>.

This chapter 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 4.9 at the conclusion of this report section.

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 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; crimes occurring in the fisheries sector, including in association with 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 willfully circumvent existing rules and are appropriately strict in this regard.

## 4.1 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.

<sup>&</sup>lt;sup>68</sup> UNEP (2018), The State of Knowledge of Crimes That Have Serious Impacts on the Environment.

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 and discussions during a workshop on the issue hosted by the European Commission (see Section 2.2.)

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.

## 4.1.1 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 crimes occurring in the fisheries sector, including in association with IUU 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 Directive<sup>69</sup> and defining environmental crime independently of administrative law<sup>70</sup>. 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 scope<sup>71</sup> 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.

## 4.1.2 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

<sup>&</sup>lt;sup>69</sup> 17 respondents consider this option useful or very useful

<sup>&</sup>lt;sup>70</sup> 15 respondents consider this option useful or very useful

<sup>&</sup>lt;sup>71</sup> As an example, waste brokers are mentioned by the stakeholder

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 3 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.

Which measures do you consider useful to improve the definitions of environmental crime? Define more precisely vague terms i(e.g. 'substantial damage', 'negligible' or 'non-negligible' quantities) in the Directive Provide non-binding EU-guidance on the interpretation of 10 vague elements in the definitions Delete such vague elements from the definitions and leave it to the national authorities to decide whether a particular 17 incident is severe enough to be prosecuted No action necessary. The elements in Article 3 of the 17 Directive are clear enough Do not act at EU level but leave the interpretation of vague terms in the Directive to Member States and 16 national courts 0% 20% 40% 60% 80% 100% ■ Very useful ■ Useful ■ Not useful ■ No answer

Figure 3 Business stakeholder responses to the OPC on options to improve the clarity of definitions and vague terms

### 4.1.3 Creating an effectively deterrent sanctioning system

The evaluation of the Directive<sup>72</sup> 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 the following sub-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

<sup>&</sup>lt;sup>72</sup> 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

#### sanctions<sup>73</sup>.

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 actors<sup>74</sup>. 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. The table below 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.

Table 25 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 MS <sup>75</sup>	Sanctions under national administrative law in scope of Article 3 <sup>76</sup>	Fisheries legislation in MS <sup>77</sup>
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	

https://cefic.org/app/uploads/2021/05/Cefic-views-on-the-review-of-the-Environmental-Crime-Directive.pdf

75 Furonean Commission (2020) FVALUATION of the DIRECTIVE 2008/99/EC of the European Parliament and of the

**IPEC** (2015).EnviCrimeNet Intelligence Project Environmental Crime. http://www.envicrimenet.eu/images/docs/ipec report on environmental crime in europe.pdf **CEFIC** (2021).Cefic views on the review of the Environmental

<sup>&</sup>lt;sup>75</sup> 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

<sup>&</sup>lt;sup>76</sup> 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

<sup>&</sup>lt;sup>77</sup> Milieu Consulting (2021), Study on the sanctioning systems of Member States for infringements to the rules of the Common Fisheries Policy. <a href="https://op.europa.eu/en/publication-detail/-/publication/dfb452c8-c4df-11eb-a925-01aa75ed71a1">https://op.europa.eu/en/publication-detail/-/publication/dfb452c8-c4df-11eb-a925-01aa75ed71a1</a>

Member State	Sanctions under national environmental criminal law and administrative fines in MS <sup>75</sup>	Sanctions under national administrative law in scope of Article 3 <sup>76</sup>	Fisheries legislation in MS <sup>77</sup>
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 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 <sup>75</sup>	Sanctions under national administrative law in scope of Article 3 <sup>76</sup>	Fisheries legislation in MS <sup>77</sup>
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> <li>Fine of up to SEK 500,000</li> <li>(EUR 48,600)</li> <li>Special fee based on the market value or the selling price of the catch, depending on which is higher</li> </ul>
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	

## 4.1.4 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.

## 4.1.5 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. Expanded criminal law is there likely to result in higher costs only in cases where SMEs would be subject to lower emissions or safety requirements under administrative law. Such different levels of standards could not be found in key legislation included in the current Annex to the Directive or in areas considered to be included in the revised scope of the Directive.

In interviews<sup>78</sup>, 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 of the entity committing the crime.

### 4.2 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 Flows<sup>79</sup>, 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<sup>80</sup>. The issue seems to have worsened over time, as UNEPT estimated the cost of this crime at USD 30-100 billion per year before 2014<sup>81</sup>. Illegal logging accounts for as much as 10-30% of the total logging worldwide, with some estimates as high as 20-50% when laundering of illegal wood is included. According to a WWF report<sup>83</sup>, 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.

<sup>&</sup>lt;sup>78</sup> 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.

<sup>&</sup>lt;sup>79</sup> UNEP (2018), The State of Knowledge of Crimes That Have Serious Impacts on the Environment..

<sup>&</sup>lt;sup>80</sup> 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.

<sup>&</sup>lt;sup>81</sup> UNEP and Interpol, 2016.

<sup>&</sup>lt;sup>82</sup> 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.

<sup>&</sup>lt;sup>83</sup> WWF, 2016. Failing the Forests Europe's illegal timber trade. Available at: <a href="https://wwfeu.awsassets.panda.org/downloads/failingforests.pdf">https://wwfeu.awsassets.panda.org/downloads/failingforests.pdf</a>

In 2013, the EU Timber Regulation (EUTR)<sup>84</sup> 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 2019<sup>85</sup> 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 warnings<sup>86</sup>.

#### 4.2.1 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 forests<sup>87</sup>. 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 combined<sup>88</sup>. 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 inconsistences in the national legislation do not allow them to check large amounts of illegally harvested timber<sup>89</sup>. The evaluation of the ECD also found that this type of crime is particularly common in Hungary, Latvia and Lithuania<sup>90</sup>.

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 regulation<sup>91</sup>.

As reported by the Commission<sup>92</sup>, 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,

<sup>89</sup> Infringement decisions, February 2020. Available at: <a href="https://ec.europa.eu/commission/presscorner/detail/en/inf">https://ec.europa.eu/commission/presscorner/detail/en/inf</a> 20 202 (last accessed 14 June 2021).

<sup>&</sup>lt;sup>84</sup> 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).

<sup>&</sup>lt;sup>85</sup> 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.

<sup>&</sup>lt;sup>86</sup> WWF, 2019. WWF Enforcement Review of the EU Timber Regulation (EUTR), EU Synthesis Report, page 3.

 $<sup>^{87}</sup>$  WWF, 2015. Illegal timber in the EU: Why the EU Timber Regulation should be improved.

<sup>88</sup> Ibid

<sup>&</sup>lt;sup>90</sup> 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: <a href="https://ec.europa.eu/info/sites/info/files/evaluation">https://ec.europa.eu/info/sites/info/files/evaluation</a> - swd2020259 - part 1 0.pdf

<sup>&</sup>lt;sup>91</sup> UN WCMC, 2020. Key obligations and practical aspects of the application of the EUTR – 2019. Available at: <a href="https://ec.europa.eu/environment/forests/pdf/30092020">https://ec.europa.eu/environment/forests/pdf/30092020</a> EUTR%20MS%20Key%20obligations%20and%20practical%20aspects%20of%20implementation%20and%20enforcement%202019.pdf

<sup>&</sup>lt;sup>92</sup> European Commission, 2020. EUTR Biennial report for the period March 2017 - February 2019, COM/2020/629 final.

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).

## 4.2.2 Environmental impacts

Illegal logging and illegal trade in timber contribute to deforestation, habitat destruction and biodiversity decline<sup>93</sup>. 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 crimes<sup>94</sup>.

Moreover, forests are carbon sinks, and therefore their depletion can impact climate change <sup>95</sup>. 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 basins <sup>96</sup>. EU forests absorb the equivalence of 8.9% of total EU greenhouse gas emissions yearly, consequently playing an important role in achieving Carbon neutrality <sup>97</sup>.

## 4.2.3 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 humans<sup>98</sup>. According to UNEP<sup>99</sup>, 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 Group<sup>100</sup>, 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.

## 4.2.4 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

https://ec.europa.eu/environment/legal/law/4/pdf/environmental economic social criminal impacts.pdf

<sup>93</sup> World Bank Group, 2019.

<sup>&</sup>lt;sup>94</sup> UNEP, 2018.

 $<sup>^{95}</sup>$  European Commission, 2016. What are the environmental, economic, social and criminal impacts of wildlife trafficking and illegal logging? Available at:

<sup>96</sup> World Bank Group, 2019.

<sup>&</sup>lt;sup>97</sup> European Parliament, 2020.

Sustainable forestry: Parliament's work to fight deforestation. Available at: <a href="https://www.europarl.europa.eu/news/en/headlines/eu-affairs/20201015STO89416/sustainable-forestry-parliament-s-work-to-fight-deforestation">https://www.europarl.europa.eu/news/en/headlines/eu-affairs/20201015STO89416/sustainable-forestry-parliament-s-work-to-fight-deforestation</a>

<sup>&</sup>lt;sup>98</sup> UNEP, 2018.

<sup>&</sup>lt;sup>99</sup> UNEP, 2014. UNEP YEAR BOOK 2014: EMERGING ISSUES IN OUR GLOBAL ENVIRONMENT Available at: https://wedocs.unep.org/handle/20.500.11822/9240

<sup>100</sup> World Bank Group, 2019.

illegal logging.<sup>101</sup> The loss in tax revenue stifles economic growth in the source country and increases development risks and vulnerabilities in other regions.

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 market<sup>102</sup>.

### 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 m<sup>3</sup> of wood is illegally harvested every year<sup>103</sup>.

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. <sup>104</sup> The Romanian national forest inventory reported that 49% of the timber cut down during the period 2008-2014 was done illegally <sup>105</sup>.

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 Directive<sup>106.</sup>

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 107,108.

# 4.3 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 obligations <sup>109</sup>. It concerns all aspects and stages of the capture and utilisation of fish. IUU fishing shall be distinguished from crimes occurring in the fisheries sector, including in association with IUU fishing, also when 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 constitute a criminal offence. Only offences resulting in environmental damage would fall need to be criminalised under this Directive.

It should be noted that data on IUU fishing 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.

103 GreenPeace, 2018. ILLEGAL LOGGING IN ROMANIA'S FORESTS 2018 REPORT Available at:

 $\frac{\text{https://www.greenpeace.org/static/planet4-romania-stateless/2019/11/5cbe6848-greenpeace-illegal-logging-report-2018.pdf}{104 GreenPeace, 2018.}$ 

<sup>&</sup>lt;sup>101</sup> 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.

<sup>&</sup>lt;sup>102</sup> World Bank Group, 2019.

<sup>105</sup> EIA, 2016. Saving Europe's last virgin forests. Available at: https://eia-global.org/subinitiatives/romania

<sup>&</sup>lt;sup>106</sup> European Commission, 2020. February infringements package: key decisions. Available at: <a href="https://ec.europa.eu/commission/presscorner/detail/en/inf">https://ec.europa.eu/commission/presscorner/detail/en/inf</a> 20 202

<sup>&</sup>lt;sup>107</sup>BBC, 2019. Romanians protest over illegal logging and murders. Available at: <a href="https://www.bbc.com/news/world-europe-50287999">https://www.bbc.com/news/world-europe-50287999</a>

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

<sup>&</sup>lt;sup>109</sup> A comprehensive definition of IUU fishing is provided in the FAO International Plan of Action. Available at: <a href="http://www.fao.org/3/Y3536E/y3536e04.htm">http://www.fao.org/3/Y3536E/y3536e04.htm</a>

According to information material of the European Commission<sup>110</sup>, based on 2009 estimations<sup>111</sup>, IUU fishing practices represent approximatively 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 and an assessment of the methodologies to calculate these<sup>112</sup>. UNEP and Interpol<sup>113</sup> reported in 2016 an economic loss of around USD 11-23.5 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. 114. While the mentioned limitations apply, this shows that the impact of IUU fishing is an issue of global scale.

The EU has taken action to limit and counteract IUU fishing with strong regulations. The Common Fisheries Policy (CFP) has been in place for several decades and it has undergone a series of revisions over the year, with the most recent reformed CFP entered into force in 2014. 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 (Control 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.

#### 4.3.1 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 activities<sup>115</sup>. There is however evidence to suggest that this does take place<sup>116</sup>. In the past, the OECD<sup>117</sup> has reported on 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 fleets<sup>118</sup> (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 touched upon in this study (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

<sup>&</sup>lt;sup>110</sup> European Commission, 2021. Tackling illegal, unreported and unregulated (IUU) fishing. Available at: <u>Illegal fishing</u>

Agnew DJ, Pearce J, Pramod G, Peatman T, Watson R, Beddington JR, et al. (2009) Estimating the Worldwide Extent of Illegal Fishing. PLoS ONE 4(2): e4570. https://doi.org/10.1371/journal.pone.0004570

<sup>112</sup> FAO, 2016. Review of studies estimating IUU fishing and the methodologies utilized. Available at: https://www.fao.org/3/bl765e/bl765e.pdf

<sup>113</sup> 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

<sup>114</sup> 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

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

<sup>116</sup> 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.

<sup>117</sup> OECD, 2006. Closing the net: Stopping illegal fishing in the high seas. Available at: http://www.oecd.org/sdroundtable/papersandpublications/39375276.pdf

<sup>&</sup>lt;sup>118</sup> 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

value of this traffic represented more than EUR 12 million a year 119.

The IUU Regulation sets sanctions for serious infringements of its provisions that can amount to five or eight (in case of repeated action) time the value of fishery products obtained through the infringement <sup>120</sup>. 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)<sup>121</sup>.

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", <sup>122</sup> providing examples (Spain, and Cyprus) where the levels of administrative sanctions overtake those set out under criminal law. This goes in the same direction of the 2018 Commission proposal for a revised fisheries control system, <sup>123</sup> 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<sup>124</sup> 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 report<sup>125</sup> identified declines in imports across the EU, except for a few variations<sup>126</sup>. 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.

123 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: <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1529594401208&uri=CELEX:52018PC0368">https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1529594401208&uri=CELEX:52018PC0368</a>

 $<sup>\</sup>frac{119}{\text{https://www.europol.europa.eu/newsroom/news/how-illegal-bluefin-tuna-market-made-over-eur-12-million-year-selling-fish-in-spain}$ 

<sup>&</sup>lt;sup>120</sup> 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

<sup>&</sup>lt;sup>121</sup> Milieu Consulting, 2021. Study on the sanctioning systems of Member States for infringements to the rules of the Common Fisheries Policy.

<sup>&</sup>lt;sup>122</sup> Ibid., p. 208.

<sup>124</sup> European Commission, 2020. REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the application of Council Regulation (EC) No 1005/2008 establishing a community system to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing (the IUU Regulation). COM(2020)772 final. Available at: <a href="https://www.europarl.europa.eu/RegData/docs">https://www.europarl.europa.eu/RegData/docs</a> autres institutions/commission europeenne/com/2020/0772/COM COM(2020)0772 EN.pdf

<sup>&</sup>lt;sup>125</sup> 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.

<sup>&</sup>lt;sup>126</sup> 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.

## 4.3.2 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 provide 127, 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 discarding <sup>128</sup>. 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 assessments <sup>129</sup>. 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.

## 4.3.3 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 sector<sup>130</sup>. According to Eurostat<sup>131</sup>, 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 products<sup>132</sup>. A significant proportion of imports to the EU originates from developing countries<sup>133</sup>, making the effects of IUU fishing on poorer populations and developing countries relevant also in an EU context. A publication by the World Bank Group<sup>134</sup> 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 communities<sup>135</sup>. This practice particularly affects small-scale fishing communities in developing countries, with significant negative implications for their development and livelihoods<sup>136</sup>. Although not directly applicable to the

<sup>&</sup>lt;sup>127</sup> EFFACE, 2015. Report on Illegal Fishing

<sup>&</sup>lt;sup>128</sup> EFFACE, 2015. Report on Illegal Fishing

<sup>&</sup>lt;sup>129</sup> Watson, R. and Pauly, D., 2001. Systematic distortions in world fisheries catch trends. Nature, 414(6863), pp.534-536.

<sup>&</sup>lt;sup>130</sup> EFFACE, 2015. Report on Illegal Fishing

<sup>&</sup>lt;sup>131</sup>Eurostat, 2020. Agriculture, forestry and fishery statistics, 2020 Edition.

 $<sup>\</sup>frac{https://ec.europa.eu/eurostat/documents/3217494/12069644/KS-FK-20-001-EN-N.pdf/a7439b01-671b-80ce-85e4-4d803c44340a?t=1608139005821$ 

<sup>&</sup>lt;sup>132</sup>European Commission, 2015. The EU fish market, 2015 edition.

https://trade.ec.europa.eu/doclib/docs/2016/february/tradoc\_154321.pdf

<sup>&</sup>lt;sup>133</sup>European Commission, 2018. The EU fish Market, 2018 Edition.

https://www.eumofa.eu/documents/20178/132648/EN The+EU+fish+market+2018.pdf

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

<sup>&</sup>lt;sup>135</sup> 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

<sup>136</sup> EFFACE, 2015. Report on Illegal Fishing

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 the trafficking in persons, drugs and arms, smuggling of migrants and terrorism. For instance, forced labour can take place on IUU fishing vessels<sup>137</sup>.

## 4.3.4 Economic impacts

Similar to environmental and social ones, economic impacts from environmental offences occurring in the fisheries sector, including in association with 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 license 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 fishers<sup>138</sup>.

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 alone<sup>139</sup>. 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 billion<sup>140</sup>. 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)<sup>141</sup>. 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 fisheries<sup>142</sup>.

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

#### Example – Illegal fishing and trade of Bluefin tuna

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 million<sup>143</sup>.

Bluefin Tuna was in the beginning of the 1990s at risk of extinction after significant overfishing in the 1980s. 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 activity<sup>144</sup>.

<sup>&</sup>lt;sup>137</sup> EFFACE, 2015. Report on Illegal Fishing

<sup>&</sup>lt;sup>138</sup> EFFACE, 2014. Understanding the damages of environmental crime - Review of the availability of data: Annexes.

Available at: <a href="https://www.ecologic.eu/sites/default/files/news/2015/efface">https://www.ecologic.eu/sites/default/files/news/2015/efface</a> 3.1 annexes final.pdf

<sup>&</sup>lt;sup>139</sup> Stimson, 2015. Environmental Crime. Defining the Challenge as a Global Security Issue and Setting the Stage for Integrated Collaborative Solutions. Available at: <a href="http://www.stimson.org/enviro-crime/">http://www.stimson.org/enviro-crime/</a>

<sup>&</sup>lt;sup>140</sup>World Bank Group, 2019. Illegal logging, fishing, and wildlife trade: the costs and how to combat it. Available at: <u>Illegal-Logging-Fishing-and-Wildlife-Trade-The-Costs-and-How-to-Combat-it</u> (1).pdf

<sup>141</sup> World Bank Group, 2019.

<sup>&</sup>lt;sup>142</sup> World Bank Group, 2019.

<sup>&</sup>lt;sup>143</sup> WWF, 2018. EUR 12.5 million illegal bluefin tuna trade exposes threat to sustainable fisheries in Europe. Available at: <a href="https://wwf.panda.org/?336830/125-million-illegal-bluefin-tuna-trade-exposes-threat-to-sustainable-fisheries-in-Europe">https://wwf.panda.org/?336830/125-million-illegal-bluefin-tuna-trade-exposes-threat-to-sustainable-fisheries-in-Europe</a>

<sup>&</sup>lt;sup>144</sup> MSC, 2020. Recent history of Atlantic bluefin tuna. Available at: <a href="https://www.msc.org/species/tuna/recent-history-of-bluefin-tuna">https://www.msc.org/species/tuna/recent-history-of-bluefin-tuna</a>

## 4.4 POACHING / WILDLIFE CRIMES

As presented in a key guidance from the EU Commission, wildlife crimes concern a wide range of offences defined by EU legislation<sup>145</sup>. 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 worldwide<sup>146</sup>. 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 worldwide<sup>147</sup>. 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 Regulations<sup>148</sup>. 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 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 2018-2021<sup>149</sup>. 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. To disrupt criminal networks involved in all forms of environmental crime, with a specific focus on wildlife trafficking, remains a priority for the EU, as stipulated in the EU Strategy to tackle organised crime (2021-2025)<sup>150</sup> and the European Multi-Disciplinary Platform Against Criminal Threats (EMPACT) policy cycle for the period 2022-2025<sup>151</sup>.

In addition to the aspect of trafficking, the EU Habitats Directive<sup>152</sup> and Birds Directive<sup>153</sup> (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.

<sup>&</sup>lt;sup>145</sup> European Commission, 2021. Combating environmental crimes and related infringements.

<sup>&</sup>lt;sup>146</sup>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

<sup>&</sup>lt;sup>147</sup> UNOCD, 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

<sup>&</sup>lt;sup>148</sup> 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).

<sup>149</sup> Furopean Commission, 2018, Progress report on the implementation of the EU Action Plan against Wildlife Trafficking

<sup>&</sup>lt;sup>149</sup> European Commission, 2018. Progress report on the implementation of the EU Action Plan against Wildlife Trafficking, COM(2018) 711 final.

<sup>150</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0170&from=EN

<sup>151</sup> https://data.consilium.europa.eu/doc/document/ST-8665-2021-INIT/en/pdf

<sup>&</sup>lt;sup>152</sup> Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

<sup>&</sup>lt;sup>153</sup> Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

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.

#### 4.4.1 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 million<sup>154</sup>. 5 644 seizure records were reported by Member States in 2017; 6 012 in 2018; and 6 441 in 2019. 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 derivatives<sup>156</sup>.

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 properly<sup>157</sup>. There are clear differences in the laws applied in each country. Some examples, taken from a 2016 ENEC study covering 18 Member States<sup>158</sup>, 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

Milieu Consulting SRL Brussels

<sup>&</sup>lt;sup>154</sup> European Commission, 2018. Progress report on the implementation of the EU Action Plan against Wildlife Trafficking, COM(2018) 711 final.

<sup>&</sup>lt;sup>155</sup> Annual overviews of seizures of CITES-listed wildlife in the European Union, 2017-2019. Available at: <a href="https://ec.europa.eu/environment/cites/reports">https://ec.europa.eu/environment/cites/reports</a> en.htm#seizures annual illegal

<sup>&</sup>lt;sup>156</sup> European Commission, 2018. An overview of seizures: CITES-LISTED WILDLIFE IN THE EUROPEAN UNION Available at: <a href="https://www.impel.eu/wp-content/uploads/2020/04/eu-seizures-report-2020-final-web.pdf">https://www.impel.eu/wp-content/uploads/2020/04/eu-seizures-report-2020-final-web.pdf</a>

<sup>&</sup>lt;sup>157</sup> 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.

<sup>158</sup> Study on the implementation of Directive 2008/99/econ the Protection of the Environment Through Criminal Law. Available at: <a href="https://www.eufje.org/images/docPDF/Study-on-the-implementation-of-Directive-2008-99">https://www.eufje.org/images/docPDF/Study-on-the-implementation-of-Directive-2008-99</a> 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.

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.

## 4.4.2 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 countries.<sup>159</sup>.

## 4.4.3 Social impacts

Wildlife crimes can increase poverty and negatively impact food security and public health<sup>160</sup>, e.g. through the unregulated import of invasive species.

In addition to this, illegal wildlife trade can have broader consequences. With organised crime increasingly present and investing in lucrative environmental crime, including wildlife trafficking, it can erode state authority and the stability of state institutions and threaten the security of citizens within and beyond the EU<sup>161</sup> Involvement in illegal trafficking of wildlife is now routine for many organised crime groups. There are indications that the proceeds of wildlife crime are also used to finance terrorism<sup>162</sup>. In both destination and source countries, indigenous people and rangers protecting biodiversity might also suffer threats of violence<sup>163</sup>.

Although many of the negative social impacts are likely to affect source countries more than destination countries, wildlife trafficking undermines EU efforts to address pressing global problems because it undermines many key goals in EU foreign policy and development support, including sustainable development, the rule of law, good governance and peace and stability<sup>164</sup>.

## 4.4.4 Economic impacts

Wildlife crimes weaken the economies within and beyond the EU, as they undermine legal global wildlife trade, and employment opportunities thereof, especially if it concerns organised environmental crime. They deprive governments of revenues and taxes from legal activities<sup>165</sup>, which can negatively impact all aspects of citizens' lives. In addition to this, wildlife crimes particularly impact communities living near endangered species as they are robbed of potential sources of income through wildlife tourism<sup>166</sup>.

<sup>&</sup>lt;sup>159</sup> https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment

<sup>&</sup>lt;sup>160</sup> EFFACE, 2015. Report on Illegal Wildlife Trafficking

<sup>&</sup>lt;sup>161</sup> EFFACE, 2015. Report on Illegal Wildlife Trafficking; Europol, Serious and Organised Crime Threat Assessment (2021), https://www.europol.europa.eu/activities-services/main-reports/european-union-serious-and-organised-crime-threat-assessment

<sup>&</sup>lt;sup>162</sup> Europol, EMPACT priority – environmental crime (2021), https://www.europol.europa.eu/crime-areas-and-trends/crime-areas/environmental-crime

<sup>&</sup>lt;sup>163</sup> 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. <a href="https://doi-org.ezproxy.its.uu.se/10.1057/978-1-349-95085-0">https://doi-org.ezproxy.its.uu.se/10.1057/978-1-349-95085-0</a> 5

<sup>164</sup> European Commission, Questions and answers on the EU Action Plan against Wildlife Trafficking https://ec.europa.eu/commission/presscorner/detail/es/MEMO 16 388

<sup>&</sup>lt;sup>165</sup> 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

<sup>166</sup> 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

## 4.5 FOREST FIRE CRIMES (MAN-MADE FOREST FIRES)

Forest fire crime refers to the willful and malicious burning of forests, and is distinguished from fires which are spontaneously or naturally caused. According to the WWF<sup>167</sup>, 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.

#### 4.5.1 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 countries<sup>168</sup>. Spain, Italy and Portugal, Greece and France were the European countries most affected by forest fire crimes during the same period<sup>169</sup>.

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 committed<sup>170</sup>.

## 4.5.2 Environmental impacts

According to a report by EFFACE<sup>171</sup>, 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.<sup>172</sup>

Impacts moreover include damages to vegetation, peat and soils, and the destruction of habitats for wildlife<sup>173</sup>. Depending on the scale and location of the fire, effects also include damage to endangered animal and plant species<sup>174</sup>. Moreover, fires directly impact benefits and resources derived from forests, including flood and drought regulation, nutrient recycling, and water and food provision.

## 4.5.3 Social impacts

Social impacts include negative health impacts caused by the smoke released from the fires. According to the European Commission<sup>175</sup>, 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 crimes<sup>176</sup>.

In addition to fatalities, the indirect impacts are significant. According to the WHO<sup>177</sup>, forest fires cause health impacts related to the resulting smoke, ashes, and mercury released during 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

<sup>&</sup>lt;sup>167</sup> WWF. 2017

<sup>&</sup>lt;sup>168</sup>EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.

<sup>169</sup>Ibid.

<sup>170</sup>Ibid.

<sup>&</sup>lt;sup>171</sup>Ibid.

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

<sup>&</sup>lt;sup>173</sup> EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.

<sup>&</sup>lt;sup>174</sup> WWF, 2017.

<sup>&</sup>lt;sup>175</sup> European Forest Fire Information System (EFFIS), EC PESETA II project report.

<sup>176</sup> WWF, 2017.

<sup>177</sup> WHO, 2021. Wildfires. Available at: https://www.who.int/health-topics/wildfires/#tab=tab\_2

carbon monoxide, fine dust, formaldehyde and polycyclic aromatic hydrocarbons<sup>178</sup>. The health effects of mercury include impairment of speech, hearing and walking<sup>179</sup>. 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 sites<sup>180</sup>.

Furthermore, as a growing problem with links to organised crime and corruption, forestry crimes pose a risk to the security of EU citizens. Organised criminal networks involved in forestry crimes and illegal logging utilise international networks of quasi-legitimate businesses and corporate structures to hide their illegal activities, which include creative accounting to launder criminal proceeds or corruption to enable criminal operations<sup>181</sup>.

#### 4.5.4 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 exits 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. EFFACE<sup>182</sup> 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 provide<sup>183</sup>.

#### **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.

#### 4.6 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

<sup>&</sup>lt;sup>178</sup> WWF, 2017.

<sup>&</sup>lt;sup>179</sup> WHO, 2021.

<sup>&</sup>lt;sup>180</sup> EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.

<sup>181</sup> https://wwfeu.awsassets.panda.org/downloads/wwf\_eu\_forest\_crime\_report\_eng.pdf

<sup>&</sup>lt;sup>182</sup>EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.

<sup>&</sup>lt;sup>183</sup> WWF, 2017.

illegal shipments may cause important impacts in other places, including outside of the EU<sup>184</sup>. 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.

#### 4.6.1 Current status in the EU

According to IMPEL<sup>185</sup>, illegal trafficking in waste accounts for **20% of all the waste shipments** in the EU. The evaluation of the ECD<sup>186</sup> 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 undetected<sup>187</sup>.

Regarding e-waste in particular, a study on illegal e-waste trade<sup>188</sup> 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.

#### 4.6.2 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 metals<sup>189</sup>.

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 recovered <sup>190</sup>. 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.

#### 4.6.3 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, chocking, pneumonia, tremors, neuropsychiatric problems, convulsions, coma or even death, asthma, skin diseases, eye irritations, stomach disease, inflammatory response, oxidative stress, DNA damage)<sup>191</sup>.

<sup>&</sup>lt;sup>184</sup> European Commission, 2021. Combating environmental crimes and related infringements.

<sup>&</sup>lt;sup>185</sup> EnviCrimeNet, 2016. Report on Environmental Crime. Available at:

http://www.envicrimenet.eu/images/docs/envicrimenet%20report%20on%20environmental%20crime.pdf

<sup>186</sup> 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: <a href="https://ec.europa.eu/info/sites/info/files/evaluation-swd2020259">https://ec.europa.eu/info/sites/info/files/evaluation-swd2020259</a> - part 1 0.pdf

<sup>&</sup>lt;sup>187</sup> European Commission, 2020.

<sup>&</sup>lt;sup>188</sup> Huisman et al, 2015. Countering WEEE Illegal Trade (CWIT) Summary Report, Market Assessment, Legal Analysis, Crime Analysis and Recommendations Roadmap. Lyon, France Available at: <a href="https://www.cwitproject.eu/wp-content/uploads/2015/09/CWIT-Final-Report.pdf">https://www.cwitproject.eu/wp-content/uploads/2015/09/CWIT-Final-Report.pdf</a>

<sup>189</sup> 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

<sup>&</sup>lt;sup>190</sup>UNEP, 2018. The State of Knowledge of Crimes that have Serious Impacts on the Environment. Available at: <a href="https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment">https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment</a>
<sup>191</sup> UNEP, 2018.

Furthermore, organised criminal networks involved in waste trafficking have moved away from illegally dumping waste to the more complex business model of illicit waste management. Waste traffickers now operate along the entire waste-processing chain, committing also other crimes, such as document fraud and corruption, to enable their criminal activities<sup>192</sup>.

#### 4.6.4 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 it<sup>193</sup>. 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 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 risks<sup>194</sup>. One study indicated substantially increased levels of cancer in the area surrounding the waste dump<sup>195</sup>. 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 goods <sup>196</sup>.

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.

#### 4.7 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

at:

<sup>192</sup> https://www.europol.europa.eu/crime-areas-and-trends/crime-areas/environmental-crime

<sup>&</sup>lt;sup>193</sup> 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

194 Aljazeera, 2016. The toxic wasteland of Italy's 'Campania Felix. Available

<sup>194</sup> Aljazeera, 2016. The toxic wasteland of Italy's 'Campania Felix. Av https://www.aljazeera.com/gallery/2016/1/28/the-toxic-wasteland-of-italys-campania-felix

<sup>&</sup>lt;sup>195</sup> Senior and Mazza, 2004. Italian "Triangle of death" linked to waste crisis. Available at: <a href="https://www.thelancet.com/pdfs/journals/lanonc/PIIS147020450401561X.pdf">https://www.thelancet.com/pdfs/journals/lanonc/PIIS147020450401561X.pdf</a>
<sup>196</sup> Aljazeera, 2016.

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 globally<sup>197</sup>. 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<sup>198</sup>. 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<sup>199</sup>. However, in the EU, the impact of illegal trade activities related to ODS is found to be of lower concern, as the ODS Regulation<sup>200</sup> proves to be effective<sup>201</sup>. Quantitative estimations of the impacts in Europe are not available, though.

#### 4.7.1 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 trade<sup>202</sup>. 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.<sup>203</sup>

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 authorities<sup>204</sup>. 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 examinations<sup>205</sup>.

# 4.7.2 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 area<sup>206</sup>. It also contributes to global warming as ozone depleting substances such as chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons

<sup>&</sup>lt;sup>197</sup> Europol, 2011. OC-SCAN Policy Brief 011-2011.

<sup>&</sup>lt;sup>198</sup> 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, page. 5.

<sup>&</sup>lt;sup>199</sup> UNODC (2013) Transnational Organized Crime in East Asia and the Pacific, cit., page. 119.

<sup>&</sup>lt;sup>200</sup> Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

<sup>&</sup>lt;sup>201</sup> 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.

<sup>&</sup>lt;sup>202</sup> Europol, 2011. OC-SCAN Policy Brief 011-2011.

 $<sup>^{203}</sup>$  European Commission, DG SANTE, 2015. Ad-hoc study on the trade of illegal and counterfeit pesticides in the EU, page iii.

<sup>&</sup>lt;sup>204</sup> EUROJUST, 2014. Strategic Project on Environmental Crime Report, page 21. Available at <a href="https://www.eurojust.europa.eu/strategic-project-environment-crime">https://www.eurojust.europa.eu/strategic-project-environment-crime</a>

<sup>&</sup>lt;sup>205</sup> EnviCrimeNet, 2014. Intelligence Project on Environmental Crime: Preliminary Report on Environmental Crime in Europe, page 21. Available at: <a href="http://www.envicrimenet.eu/images/docs/ipec report on environmental crime in europe.pdf">http://www.envicrimenet.eu/images/docs/ipec report on environmental crime in europe.pdf</a>.

<sup>206</sup> EIA (2014) New Trends in ODS Smuggling. EIA Briefing to the 26th Meeting of the Montreal Protocol, page. 1.

(HCFCs) are generally potent greenhouse gases<sup>207</sup>.

#### 4.7.3 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 industry, resulting in a total of 2 600 lost jobs across the EU<sup>208</sup>. 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 jobs<sup>209</sup>. 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 products<sup>210</sup>. 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 cancer<sup>211</sup>.

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 operations<sup>212</sup>.

## 4.7.4 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 year<sup>213</sup>. 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 billion<sup>214</sup>. 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 million<sup>215</sup>.

#### 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 gas generated a profit of between EUR 500 000 and EUR 1 million. The investigation by the Spanish Civil Guard revealed

Brussels

<sup>&</sup>lt;sup>207</sup> EFFACE (2014). Understanding the damages of environmental crime: Review of the availability of data.

<sup>&</sup>lt;sup>208</sup> European Union Intellectual Property Office (2017). The Economic Cost of IPR Infringement in the Pesticides Sector, page 15.

<sup>&</sup>lt;sup>209</sup> Ibid., page 16

<sup>&</sup>lt;sup>210</sup> Europol (2011), OC-SCAN Policy Brief 011-2011.

<sup>&</sup>lt;sup>211</sup> EIA (2014) New Trends in ODS Smuggling. EIA Briefing to the 26th Meeting of the Montreal Protocol, page. 1.

<sup>&</sup>lt;sup>212</sup> EFFACE, 2014. Understanding the damages of environmental crime: Review of the availability of data.

<sup>&</sup>lt;sup>213</sup> European Union Intellectual Property Office (2017). The Economic Cost of IPR Infringement in the Pesticides Sector, page 13: https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document\_library/observatory/resources/research-andstudies/ip infringement/study10/pesticides sector en.pdf <sup>214</sup> Ibid., page 16

<sup>&</sup>lt;sup>215</sup> Ibid., page 17

#### 4.8 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.

#### 4.8.1 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 context<sup>217</sup>. 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 pollution<sup>218</sup> 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.

#### 4.8.2 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"<sup>219</sup>.

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 surface waters, can impact wildlife in a number of ways. For instance, air toxics are contributing to birth defects, reproductive failure, and disease in animals<sup>220</sup>.

*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 debris<sup>221</sup>.

\_

<sup>&</sup>lt;sup>216</sup> Europol, 2019. How a company earned up to EUR 1 million illegally trading ten tons of ozone-depleting substances. Available at: <a href="https://www.europol.europa.eu/newsroom/news/how-company-earned-to-%E2%82%AC1-million-illegally-trading-ten-tons-of-ozone-depleting-substances">https://www.europol.europa.eu/newsroom/news/how-company-earned-to-%E2%82%AC1-million-illegally-trading-ten-tons-of-ozone-depleting-substances</a>

<sup>&</sup>lt;sup>217</sup> As evidenced by the Environmental Noise Directive (2002/49/EC).

<sup>&</sup>lt;sup>218</sup> 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.

<sup>&</sup>lt;sup>219</sup> Climate Change. Soil Carbon (CLIMSOIL), 2008. Review of existing information on the interrelations between soil and climate change, page. 13.

<sup>&</sup>lt;sup>220</sup> MassDEP, Health & Environmental Effects of Air Pollution. Available at: <a href="https://www.mass.gov/doc/health-environmental-effects-of-air-pollution/download">https://www.mass.gov/doc/health-environmental-effects-of-air-pollution/download</a>

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

#### 4.8.3 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 waste<sup>222</sup>.

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 tinnitus<sup>223</sup>.

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  $2012^{224}$ .

#### 4.8.4 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 polluted<sup>225</sup>.

#### Box 7. Example - Burning of waste in Romania

#### 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 slavery<sup>226</sup>.

\_

<sup>&</sup>lt;sup>222</sup> WWF, Pollution. <a href="https://www.worldwildlife.org/threats/pollution">https://www.worldwildlife.org/threats/pollution</a> (last accessed 25/05/2021)

<sup>&</sup>lt;sup>223</sup> European commission. Noise. <a href="https://ec.europa.eu/environment/noise/index">https://ec.europa.eu/environment/noise/index</a> en.htm

<sup>&</sup>lt;sup>224</sup>WHO, 2014. 7 million premature deaths annually linked to air pollution. Available at: http://www.who.int/mediacentre/news/releases/2014/air-pollution/en/

http://www.who.int/mediacentre/news/releases/2014/air-pollution/en/
225 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

<sup>&</sup>lt;sup>226</sup> ABC news, 2021. In Romania, 'modern slaves' burn noxious trash for a living. Available at: <a href="https://abcnews.go.com/Health/wireStory/romania-modern-slaves-burn-noxious-trash-living-77236071">https://abcnews.go.com/Health/wireStory/romania-modern-slaves-burn-noxious-trash-living-77236071</a>

# 4.9 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	USD 51-152 billion per year (worldwide)  Illegal logging accounts for 10-30% of total logging worldwide (or 20-50% when laundering of illegal wood is included)  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	Deforestation, habitat destruction and biodiversity decline  Loss of important environmental services such as soil quality, water retention and the stability of local climate systems  Increased flood risk, landslides, erosion of coastal zones  Impact on climate change through depletion of carbon sinks and GHG emissions resulting from deforestation activities	Impact on human health (e.g. spread of Lyme disease)  Threatened livelihoods of local communities  Damage to aesthetic and cultural value of forests  Link to corruption which in turn can lead to weakened governance and rule of law	Loss of tax revenue (USD 6-9 million per year worldwide)  Loss in tax revenue stifles economic growth in the source country and increases development risks and vulnerabilities  Economic losses from the loss of ecosystem services	Central and South East Europe where ancient forests exist (Bulgaria, Romania, Hungary, Latvia, Lithuania)
Crimes occurring in the fisheries sector including in association with IUU fishing <sup>227</sup>	USD 11-23.5 billion per year (worldwide)  IUU fishing practices represent approx. 19% of the reported value of catches worldwide	Over-harvesting and potential depletion of fish stocks that are already under pressure (directly and indirectly)  Threat to marine biodiversity, 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	Reduced resources for legitimate fishing activities, thereby negatively effecting legal employment opportunities 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)  Possible link with:	Reduced profits for the legal fishing sector and its ancillary industries  Losses of landing fees, taxes and levies for EU Member 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	Coastal countries, notably bordering the Atlantic Ocean and Mediterranean Sea (Netherlands, Spain, France, Ireland, Malta, Italy, Spain, Portugal, Greece)

 $\underline{^{227}}$  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
		they provide in the form of coastal protection, tourism and recreation, biodiversity and fisheries	International organised criminal activities (e.g. trafficking in persons, drugs and arms, smuggling of migrants and terrorism)		
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 through wildlife tourism	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)
Forest fire crimes	Up to 96% of all forest fires are man-made  1 535 572.41 hectares of forest burned in the EU between 2003-2012  No estimate available of total costs, but individual events in the EU cost between EUR 50 000 and EUR 200 000 (sample of 3	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)  Damage to vegetation, peat and soils  Destruction of habitats for wildlife  Damage to endangered animal and plant species  Depletion of benefits and resources	Death (during 200-2017, 611 people died in the EU  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  Emotional stress and damage caused by the destruction of	Costs for fire suppression  Costs resulting from damages to infrastructure and private properties  Loss of income from land and loss of jobs  Damages to industries such as tourism	Depends on land use and meteorological conditions. Spain, Italy and Portugal, Greece, France

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
	fires in Italy)	derived from forests, e.g. flood and drought regulation, nutrient recycling, and water and food provision	homes and property, loss of livelihoods, and damages to cultural and historical sites		
Waste crimes	Illegal trafficking in waste accounts for 20% of all the waste shipments in the EU  Annual revenues from illicit trafficking of non-hazardous waste between EUR 1.3 billion and EUR 10.3 billion per year in the EU  Annual revenues from illicit trafficking of hazardous waste between EUR 1.5 billion and EUR 1.5 billion and EUR 1.8 billion	Contamination of air, land, water systems  Treat to local ecosystems, affecting animals and plants  Release of heavy metals (e-waste in particular)  Loss of valuable materials that could have instead been recycled or recovered	Threat to human health through contamination of drinking water and food chains  Physical injuries or chronic diseases for people involved in the inappropriate disposal (e.g. breathing difficulties, respiratory irritation, coughing, chocking, pneumonia, tremors, neuropsychiatric problems, convulsions, coma or even death, asthma, skin diseases, eye irritations, stomach disease, inflammatory response, oxidative stress, DNA damage)	Economic loss for countries that generate the waste, as they miss out on the gains related to recycling it  Link to organised crime because of little enforcement and low penalties  Legitimate businesses experience negative effects 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	All EU Member States
Crimes related to chemicals	Trade in illegal and counterfeit pesticides is worth EUR 4.4 billion per year (worldwide)  Illegal trade in pesticides represents over 10% of the worldwide market  Trade in ODS represents between 10 and	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)	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)  Products are usually neither tested nor authorised and can contain toxic	Lost sales from legitimate channels (13.8% of sales or EUR 1.3 billion each year for pesticides in the EU)  Indirect economic impact resulting from lost sales in ancillary sectors (EUR 1.5 billion per year in the EU)  Loss of government	All Member States (notably those with more farmland (pesticides), and large points of entry for illegal trade

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
	20% of legitimate trade, which is between 7 000 and 14 000 tonnes per year (worldwide)  Trade in <i>ODS</i> represents an approximate annual value between USD 25 million and USD 60 million (worldwide)	Contributes to global warming through GHG emissions	substances which are harmful for human health Risks of certain human health conditions resulting from depletion of the ozone layer, e.g. suppression of the immunity system, photoaging of the skin, cataracts and skin cancer  Dangerous work environments where employment and safety laws tend to be ignored	revenue from household income taxes, social security contributions and corporate income taxes (EUR 238 million per year in the EU)	
Pollution crimes	No estimate available, as highly influenced by all other types of environmental crime	Soil degradation, which can contribute to climate change and air pollution  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  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  Plastics and other marine debris can persist in the oceans for years, and can distribute toxic chemicals	Threat for human health, e.g. through contamination of drinking water and food supplies, which can lead to a range of illnesses  Noise pollution has been found to cause sleep disturbance, cardiovascular diseases, annoyance, cognitive impairment and mental health problems  Air pollution exposure can cause death (7 million deaths per year, worldwide)	Economic impact through human health impact (e.g. medical costs)  Unfair competition  Declines in property prices and local businesses	All Member States

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
		throughout the oceans, snag and tear corals, and harm animals			

#### 5 CONCLUSIONS

The findings from the assessment of costs and impact for this study were effectively summarised in Annex 3 to the impact assessment: 'Who is concerned and how?' This annex, required for Commission impact assessment reports, looks at the practical implications of the Directive for different stakeholder groups, as well as a summary of overall costs and benefits. A snapshot of this Annex, which was drafted by the project team, is presented below.

#### 5.1 PRACTICAL IMPLICATIONS OF THE INITIATIVE

#### 5.1.1 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, which 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. Member State authorities will also be impacted by an obligation for Member States to collect and report statistical data according to new and more harmonised standards. This could 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.

## 5.1.2 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.

#### 5.1.3 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.

#### 5.1.4 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 a environmental protection,

the reduction in criminal activity supports better governance, reduced corruption and reduction of the risks posed by large organised criminal groups.

#### 5.2 SUMMARY OF COSTS AND BENEFITS

This section first provides an overview of the benefits that can be expected from the adoption of the preferred options aiming improve the effectiveness of detection, investigation, prosecution and sanctioning of environmental crime and contribute to the protection of the environment through criminal law.

#### 5.2.1 Overview of benefits

Table 26: Costs for the main stakeholders

I. Overview of Benefits (	I. Overview of Benefits (total for all provisions) – Preferred Option						
Description	Amount	Comments					
	Direct benefits						
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.					
	Indirect benefits						
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	Not quantifiable, but point was raised by a majority of businesses consulted.					

#### I. Overview of Benefits (total for all provisions) – Preferred Option

industries will recover if there is less criminal activity.

#### 5.2.2 Overview of costs

The table below summarises those costs that could be directly quantified for each policy objective for the preferred option. 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. The main costs foreseen 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) or the assumption that they would mostly be included in additional staff (i.e. awareness raising and specialisation/improving cooperation and information exchange within Member States).

Table 27: Costs for the main stakeholders

		Citizens/0	Consumers	Businesses		Member State Administrations (EU27)	
Policy objectiv	e	One-off	Recurrent	One-off	Recurrent	One-off	Recurrent (per year)
Objective 1 (transposition)	Direct costs	-	-	-	-	0.158 – 0.475	-
	Indirect costs	-	-	-	-	-	-
Objective 2 (transposition)	Direct costs	-	-	-	-	0.158 – 0.475	-
	Indirect costs	-	-	-	-	-	-
Objective 3 (transposition)	Direct costs	-	-	-	-	0.158 – 0.475	-
	Indirect costs	-	-	-	-		-
Objective 4 (national focal points and investigative tools)	Direct costs		-		-	-	Non- quantifiable costs of using investigative tools

		Citizens/	Consumers	Businesses		Member State Administrations (EU27)	
Policy objective	Policy objective		Recurrent	One-off	Recurrent	One-off	Recurrent (per year)
	Indirect costs	-	-	-	-	-	-
Objective 5 (harmonised data	Direct costs	-	-	-	-	0.428	0.255
collection, option 2, MS costs)	Indirect costs	-	-	-	-	-	-
Objective 6 (training and national	Direct costs	-	-	-	-	0.864	8.302
strategies, MS costs)	Indirect costs	-	-	-	-	-	-
All 6 objectives (additional staff)	Direct costs	-	-	-	-	-	193.411
Total preferred option						1.766 – 2.717	202.760 – 202.443

Under some of the objectives, certain costs may also be incurred by EU institutions, particularly European Commission services or EU agencies/bodies, as a result of activities such as development of guidelines or provision of training on environmental crime.

**Table 28: Costs for the EU institutions** 

Objective	Implementing measures for the Commission	One-off / Set-up / Recurring costs	Costs for the Commission (EUR)
5: Improving	Provide reporting format to the MS	One-off costs	16 026
statistical data	Definition of minimum standards	One-off costs	197 652
collection and reporting on	Maintenance of standards	Recurring costs	12 821
environmental crime	Biennial EU report on the data received by MS	Recurring costs	21 368
6: Improving the effective operation of the enforcement chain	Training	Recurring costs	21 494 021

Objective	Implementing measures for the Commission	One-off / Set-up / Recurring costs	Costs for the Commission (EUR)
Reporting	Report on the transposition of MS within 2 years after the entry in force of the Directive	One-off costs	392 186
	Evaluation of the Directive after 5 years	One-off costs	422 720

# **ANNEX 1: BASELINES** This document was included as part of the Annexes to the Commission's impact assessment report.

# OBJECTIVE 1: UPDATING THE SCOPE OF THE DIRECTIVE; INTRODUCE A SIMPLE MECHANISM TO KEEP THE DIRECTIVE UP-TO-DATE ALSO IN THE FUTURE

# 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:

# **IUU 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	IUU 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 forms the national legal basis of the IUU Fisheries Ordinance.	Included in Forestry Act with penalties. Forestry Act para 174; Bundesgesetz über die Überwachung des Handels mit Holz (Holzhandelsüberwachungsgesetz - HolzHÜG), Article 14, 15	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 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

<b>Member State</b>	IUU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
			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.  Forms of illegal fishing are 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.
CY	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice  Illegal fishing actions that are	Covered by Forest (management) law. Administrative fines, imprisonment, seizure of timber/timber products, suspension of authority to trade.	ECD 3f, 3g and 3 h covered.  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.

Member State	IUU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	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 vaild lisence and to fish for sponges or use a trawler. Penalties include imprisonment up to three years and fines up to CYP 500.	Unspecified legal basis for infringements.	EUR 17,500) and/or not more than 3 years imprisonment.
CZ	Unknown	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	ECD 3f, 3g and 3h covered.  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.  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).
DE	Sanctions provided by law are mainly criminal, administrative sanctions are mostly used in practice	Covered by EUTR specific legislation and Forest (management) law. Administrative fines, criminal fines, imprisonment, seizure of timber/timber products. Holzhandelssicherungsgesetz HolzSiG, Article 2, 7, 8	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 imprisonment (max. 5 years) or a fine. The Federal Agency for Nature Conservation (BfN) also initiates administrative offence procedures.
DK	Administrative and criminal	Covered by Timber Act No. 1225,	Covers ECD 3h and 3f and 3g broader.

Member State	IUU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	sanctions in law, administrative sanctions mostly used in practice	18/12/2012. Criminal fines, imprisonment, seizure of timber/timber products. Timber Act no. 1225; 18/12/2012,	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.
	Article 7		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 it causes environmental damage more than 4000 EUR. Penalties depends on the circumstances of the crime and can be punishable by a	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
	pecuniary punishment or up to three years' imprisonment.		(2004) is EEK 18 000 (EUR 1 150) or arrest, or up to EEK 50,000 (EUR 3 200) for a corporation.

Member State	IUU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
			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 sanctions mostly used in practice.  Fishing actions which can be considered criminal offences	Covered by Forest (management) law and General administrative sanctions law; Administrative fines, seizure of timber/timber products, suspension of authority to trade. Ley 21/2015 de Montes, Article 67,	ECD 3f incomplete due to missing possession of wildlife and ambiguous around 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.

Member State	IUU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	(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 lisence. Penalties include for e.g. fines and imprisonment of up to two years.	68, 69 and 74	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".  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).
FI	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice	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)	ECD 3f, 3g an 3 h covered.  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.
FR	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice.  Illegal fishing crimes are covered by the Rural and Maritime Fisheries Code - Book IX: Marine Fisheries and Marine Aquaculture. Penalties are found in Article L954-4 of the Rural and Maritime Fisheries Code and provides for a fine EUR 22 500.	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 Forét (LAAF), Article 76	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, moral or public security, or when the illegal activities are part of organised crime.

Member State	IUU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
HR	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice.  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 if prohibited fishing gear is used and environmental harm is caused, and e.g. includes the destruction of protected habitats and the use of electric shock generators in fishing.	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	3f, 3g and 3h covered.

• OBJECTIVE 3 OF IMPROVING THE PROPORTIONALITY AND DISSUASIVENESS OF SANCTION TYPES AND LEVELS

# 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.
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	

Member	Sanctions under national environmental	Sanctions under national administrative law in	Fisheries legislation in MS
State	criminal law and administrative fines in MS	scope of Article 3	
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 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

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
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.
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

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
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	

# • OBJECTIVE 4 OF IMPROVING THE EFFECTIVE COOPERATION AND COORDINATION BETWEEN RELEVANT AUTHORITIES

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

Information has been collected from the following sources:

• 8<sup>th</sup> 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	х	X				
BG				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
CY					x		
CZ	x	х					
DE	x		x			x	
DK	X		X				
EE	X		X				
ES	X						
FI	X		X				
FR	X		X				
GR	X		X				
HR			X	X			X
HU	X					X	
IE	Х		Х				
IT	Х		Х				
LT	Х		Х				
LU							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
LV	x	X					
MT							x
NL	х	X					
PL	х		X				
PT	х	X					
RO			X				
SE			X		x		
SI							X
SK							

# • 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

• OBJECTIVE 6: IMPROVING THE EFFECTIVE OPERATION OF THE ENFORCEMENT CHAIN

# **Baseline information on training**

Training provided at national level along the enforcement chain

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

	Level of training provided					Topics covered by the training				
MS	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 c	General courses/investigative tools  No information			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	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	A	Ad hoc training		No	Ad hoc training	General courses	General courses	General No information		information	

				information		/investigative tools	/investigative tools	courses			
ES	Initial and continuous training	Regular training		No information	No information	General courses /investigative tools, internal cooperation	General courses /investigative tools, internal cooperation		tion		
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		tion	
FR	Initial and continuous training	Initial training	Regular training	Initial and continuous training	No information	General courses /investigative tools, internal cooperation	No information	General courses No information 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 level	national	Initial training only	Initial training only	No information					
IT	Initial and continuous training	Regular tra	ining	No information	No information	General courses/investigative tools, cross-border cooperation	urses/investigative No information				
LT	Γ No training at national level										
LV	Initial training only	No training at level	national	No information	No information	General courses/investigative tools	no training No information			information	
LU	U No training at national level										

MT	Initial training only	No training at level	national	No information	No information	No information	No trainin	g	No 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 tra	ining	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											

## Training provided at EU level

Organisation	Practitioners targeted	Example of courses
CEPOL	LEAs and public prosecutors	•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 trafficking <sup>228</sup>
FRONTEX	LEAs	• FRONTEX offers course on cross-border crime detection which includes environmental crime (dumps and waste trafficking and also wildlife/CITES trafficking) <sup>229</sup>
EJTN	Judges and prosecutors	• 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)

See <a href="https://www.cepol.europa.eu/publications-training-catalogue">https://www.cepol.europa.eu/publications-training-catalogue</a>
 See <a href="https://frontex.europa.eu/assets/Publications/Training/TRU\_Course\_Catalogue\_2018.pdf">https://frontex.europa.eu/assets/Publications/Training/TRU\_Course\_Catalogue\_2018.pdf</a>

Organisation	Practitioners targeted	Example of courses
		• 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 $law^{230}$
ERA	Judges and prosecutors	• 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. <sup>231</sup>
		• 09-11/03/2020: Two-day in person workshop on EU Waste Legislation and Protection of the Environment through Criminal Law
ENPE	Prosecutors	• 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 crimes <sup>232</sup> .
		• Over 1 000 delegates have been trained by the ENPE over the 5-year period.
IMPEL		• Continuous offer of online toolkits for members of relevant Competent Authorities on shipment of waste, wildlife and waste crime, available via the IMPEL-PREVENT website <sup>233</sup>
		• 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 level <sup>234</sup>

See <a href="https://www.era.int/cgi-bin/cms">https://www.era.int/cgi-bin/cms</a>? SID=a1a4bb07794b7a2f9728f38b75d630cd13430f9500784449058078</a> sprache=en& bereich=artikel& aktion=detail&idartikel=124138

232 See: <a href="https://www.environmentalprosecutors.eu/eu-life-project">https://www.environmentalprosecutors.eu/eu-life-project</a>

333 <a href="https://www.impel-prevent.eu/">https://www.impel-prevent.eu/</a>

4ttps://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 <sup>235</sup> . This resulted in the publication of a report from IMPEL on the training needs of practitioners <sup>236</sup> . 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 <sup>237</sup> .

#### Baseline information on awareness-raising measures

• Information has been collected from the 8<sup>th</sup> 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
AT	х	х	x Practical information, explanatory	x Information in several	х	х	x For events and campaigns	х		

https://ec.europa.eu/environment/legal/pdf/COM 2018 10 F1 COMMUNICATION FROM COMMISSION TO INST EN V8 P1 959219.pdf https://circabc.europa.eu/ui/group/cafdbfbb-a3b9-42d8-b3c9-05e8f2c6a6fe/library/fafe3895-04ae-4c42-b8b1-a233a5a780f3/details 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
			notes and standard documents	languages						
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		
DE			х	х			х	_		
DK	x National information campaign	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
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 million EUR waste awareness campaign in 2018 Local information campaign	x	x	x				x		
IT	X	x	х				X	х		

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
LT	x							x		
LU	x National information campaign					x				
LV	x National information campaign	x				x	x	x		
MT										х
NL			х	х	х					
PL	x  National information campaign and local information campaign	x					x			
PT	x Local information campaign	х				х				
RO										X
SE	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									
SI	x National information campaign	x	x			x	x			х
SK	x National information campaign		x	x						

## Baseline information on national enforcement strategies to combat environmental crime

Information has been collected from the following sources:

- 8<sup>th</sup> 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	х					

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
BE			х		X			
BG			х			X		
CY								
CZ	Х					X		
DE				х				
DK			х	х				
EE								х
ES			х		X	х		
FI	Х	X						
FR			х			х		
GR			х		X			х
HR								
HU								
IE			х	х				х
IT			х	х				
LT						х		

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
LU								
LV								
MT						X		X
NL	x							
PL				x		X	X	X
PT			X	x				
RO			X			X		
SE				x	x			
SI					x			
SK		X						

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

Information has been collected from the following sources:

- 8<sup>th</sup> round of Mutual Evaluation country reports
- Letters from Member States responding to these reports
- Interviews and correspondence with following stakeholders:
  - o National authorities and practitioners from Sweden (interview)
  - o ENPE interview with practitioners from the Netherlands and the UK
  - o 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	Structure of u	nits specialised in	environmental cri	me	Numbers of per	sonnel working	on environmenta	l crime
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
AT	Specialised personnel	de facto 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			

Member State	Structure of uni	its specialised in e	environmental cri	me	Numbers of pe	rsonnel working	on environmenta	l crime
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
					average of 5 personnel per province (9 provinces)			
BE	Specialised personnel at federal level; also in some regions and some local police areas	de facto 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	de facto specialists In prosecutor's office informal			Total number unknown.  2 officers at national level			

Member	Structure of uni	ts specialised in e	nvironmental crir	ne	Numbers of per	sonnel working	on environmenta	l crime
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
		groups analyse environmental issues and cooperate. Planned further specialisation and development of network (see upcoming strategy)			with expertise; 1 officer in each region with expertise 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					

Member	Structure of un	its specialised in e	nvironmental cri	me	Numbers of pe	rsonnel working	on environmen	tal crime
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
DK		de facto specialists	No specialised judges except through experience					
EE			No specialised court	The environmental inspectorate is responsible for investigation of all environmental offences				Investigation 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 1 specialised prosecutor for Athens PPO		
ES	Specialised units in civil guard at regional and local level; environment	Specialised units in all provincial PPOs	No specialist judicial bodies		In Guardia Civil 1884 specialist investigation	174		

Member State	Structure of uni	ts specialised in 6	environmental crir	ne	prosecutors authorities  officers; Environmental Group in national organised crime unit has			
State	Police	Public prosecutors	Judges	Administrative authorities	Police		Judges	Administrative authorities
	group within national organised crime unit				officers; Environmental Group in national organised crime unit has 5 experts			
FI	No special unit; environmental crime unit pilot project in one region	de facto 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	Designated courts	Designated courts (since 2020)  Specialised tribunal in each court of appeal for		435 70 officers for national environmental crime office; 365 investigators specially		New law 2020	

Member	Structure of un	nits specialised in	environmental crii	me	Numbers of per	sonnel working	on environme	ntal crime
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
	within gendarmerie		environmental matters  Each public prosecutor's office of a court can appoint a specialist judge for environmental matters.  Specialised public health courts exist in Paris and Marseille, with competence in environmental cases affecting public health.		trained in environmental issues; unknown number of additional territorial units within gendarmerie			
HR	No specialised authority		No specialised court	Environmental protection inspectorate responsible for				77 inspectors

Member State	per   Structure of units specialised in environmental crime   Numbers of personnel working on environmental crime				al crime			
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
				inspections and action on illegal waste shipments				
HU	Grouping of specialised police but not from formal training	de facto specialists  3% of prosecutors have specialist degrees in environmental criminal law	No specialised court or judges					
IE			No specialised court or judges	Strong collaboration with police to provide expertise				
IT	Specialised unit for Forestry, Environmental and Agri-Food Protection with	Specialised unit for environmental crimes linked to organised crime;	No specialised judges but one specialised court attached to the court of cassation					

Member						ntal crime		
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
	offices across the country	specialised teams in almost all PPOs						
LT	No specialised unit	No specialised PPO	No specialised judges					433 (inspectors)
LV	Specialist within economic crime department							
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	Specialised units	Specialised courts		260 400 specialised officers deal	20 Specialised prosecutors		

Member State	Structure of uni	ts specialised in e	nvironmental crir	ne	Numbers of per	ucture of units specialised in environmental crime  Numbers of personnel working on environmental			
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities	
	and in each region		4 specialised courts		with environment and food safety crimes, of which 140 deal with agriculture and food crimes	estimated at 2- 3% [2.5% of 800 prosecutors]			
PL	No specialised structures for environmental crime	Specialised units: Coordinators in regional and circuit prosecutor officers for environmental crime Investigations can be carried out directly by prosecutors	No specialised court or judges			59 3 at national level; 11 at regional level; 45 at district level			

Member	Structure of uni	ts specialised in e	nvironmental crii	ne	Numbers of per	sonnel working o	n environmental	crime
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
PT	Specialised unit within national guard, service for protection of nature and the environment; specialised police officers in environmental protection teams at regional level	de facto 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 elements of environmental crime at national level	de facto specialised personnel linked through a network bringing together 1 prosecutor in each local PPO, 1-2 prosecutors	No specialised court or judges		322 142 posts for fighting illegal forestry, poaching and fishing; 45 officers working for the Directorate of	Network involves approximately 200 prosecutors but these are not working exclusively on		621

Member	Structure of un	nits specialised in e	nvironmental crir	ne	Numbers of per	sonnel working o	on environmenta	crime
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
		from PPOs attached to tribunals and courts of appeal, and prosecutors from high court, dealing with environmental cases with priority			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 environmental crime	environmental crime		
SE	Specialised units	Specialised unit	Specialised court on environmental		84 (approx.)	21		

Member	Structure of un	its specialised in e	environmental crin	me	Numbers of per	sonnel working o	on environmenta	l crime
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities
		National unit for environment and working environment located in five cities	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.		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		
SI	Specialised units but also working on	No specialised prosecutor team	No specialised court					

Member						sonnel working	onnel working on environmental crime		
State	Police	Public prosecutors	Judges	Administrative authorities	Police	Public prosecutors	Judges	Administrative authorities	
	other types of crime								
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)				



#### 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.

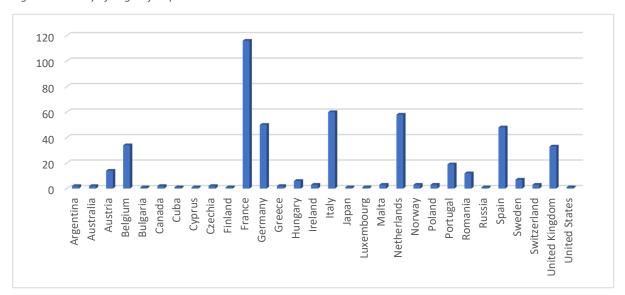


Figure 4: Country of origin of respondents

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.

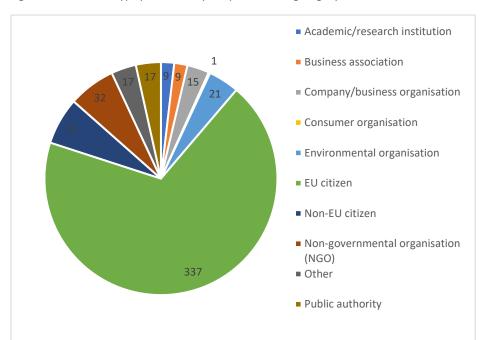


Figure 5: Stakeholder type per EU Survey template - 'I am giving my contribution as...'

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 6: Follow-up question on stakeholder role

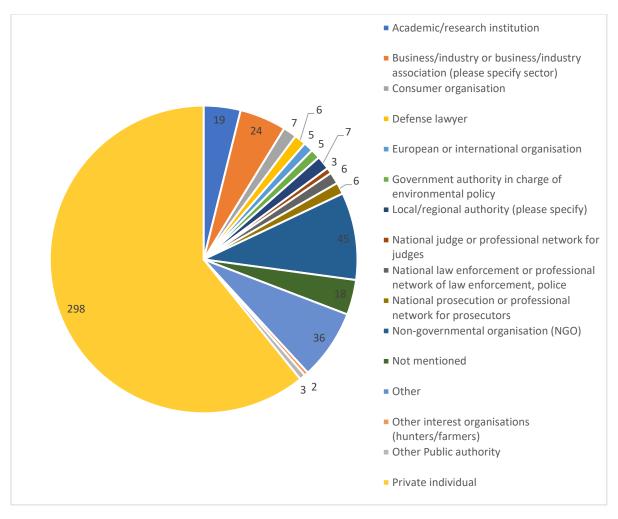


Table 29: Number and percentage of respondents according to their more precise role

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.

#### 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.

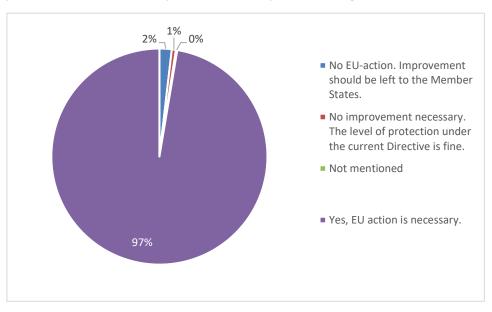
## Question 1: Do you think the EU should act to improve environmental protection through criminal law in the Member States?

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 30: 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 7: Do you think the EU should act to improve environmental protection through criminal law in the Member States?



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

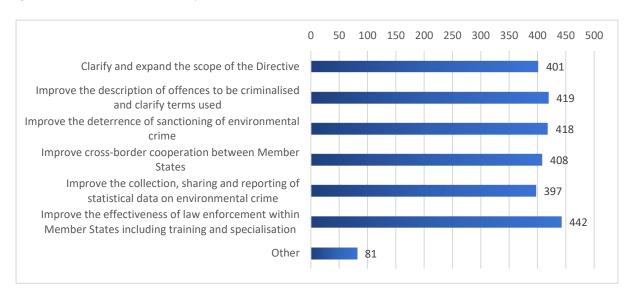
For this question respondents could select multiple answers and the majority of respondents indicated their support for all of the possible ways that the ECD could be revised. The option most often selected

(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 31: 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 8: 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 32: Main themes addressed in open replies to question 2

Main themes identified	Total references (n=86)
Ecocide	34 37%

Main themes identified	Total re (n=86)	ferences
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%
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.

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

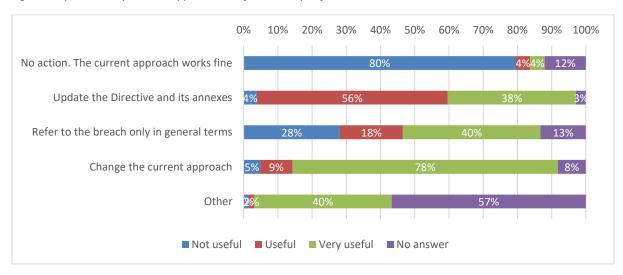
The majority of the respondents (80%) find the option of no action as 'not useful'. Eight out of the 41 who would support no action identify as business/industry and nine out of the 24 who would not change the current approach are also business. NGOs and practitioners represent only a small percentage 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 33: 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	390	20	21	59
unlawfulness in Article 2 and the list of relevant legislation in annexes) works fine.	80%	4%	38%	12%
Update the Directive and its annexes and include new environmental areas or legislation that is currently not covered but should be covered.	19	273	184	14
	4%	56%	38%	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	90	197	65
	28%	18%	40%	13%
Change the current approach: define environmental crime independently of a breach of environmental administrative law.	24	46	380	40
	5%	9%	78%	8%
Other	7	8	197	278
	1%	2%	40%	57%

Figure 9: 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 much exclude acts that have been permitted by the competent authorities.

Table 34: Main themes addressed in open replies to question 3

Main themes identified	Total references (n=229)	
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%

#### 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 35: 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%

#### 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 36: 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 'nonnegligible' quantities) in the Directive.	10	57	414	9
	2%	12%	84%	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	27	27	33
	82%	6%	6%	7%
Provide non-binding EU-guidance on the interpretation of vague elements in the definitions.	100	303	56	31
	20%	63%	11%	6%
Do not act at EU level but leave the interpretation of vague terms in the Directive to Member States and national courts.	427	23	4	36
	87%	5%	1%	7%
No action necessary. The elements in Article 3 of the Directive are clear enough.	413	6	2	69
	84%	1%	1%	14%
Other	10	6	18	456
	2%	1%	4%	93%

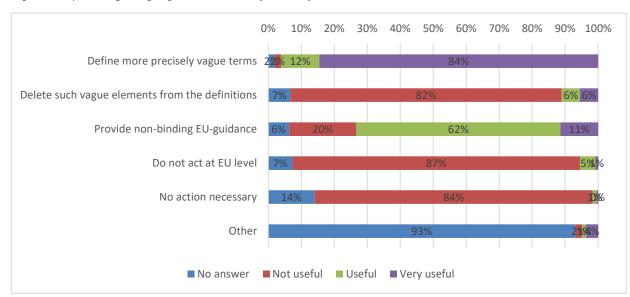


Figure 10: Options regarding vague terms in the definitions of environmental crime

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 37: Main themes addressed in open replies to question 5

Main themes identified	Total refe	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%	

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

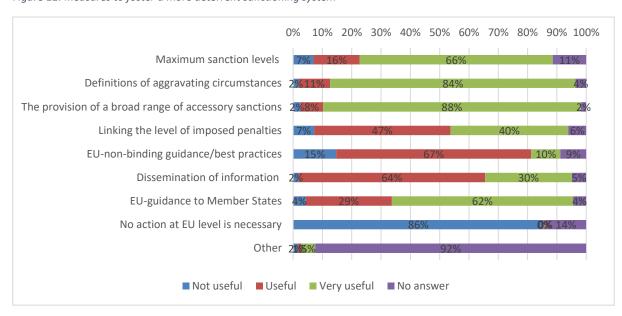
Most respondents (86%) support EU action; only three in total reacted positively to the concept of no EU action (however 68 or 14% did not answer the question). With regard to legislative approaches, most of those proposed were considered as 'very useful' by the majority of respondents. Support was slightly 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 38: 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	77	323	56
	7%	16%	66%	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	53	410	18
	2%	11%	84%	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 for the crime committed, seizure of profits and material used to commit the crime.	12	38	431	9
	2%	8%	88%	2%
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	228	197	30
	7%	47%	40%	6%
EU-non-binding guidance/best practices regarding sanction practices in the Member States.	72	326	49	43
	15%	67%	10%	9%
Dissemination of information on sanction practices and imposed sanctions with regard to environmental crime among Member States.	9	312	145	24
	2%	64%	30%	5%
EU-guidance to Member States to better coordinate their administrative and criminal sanctioning systems.	21	144	303	22
	4%	29%	62%	4%
No action at EU level is necessary.	419	2	1	68
	86%	<1%	<1%	14%
Other	8	6	23	453
	2%	1%	5%	92%

Figure 11: 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 39: Main themes addressed in open replies to question 6

Main themes identified	Total references (n=86)	
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%

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

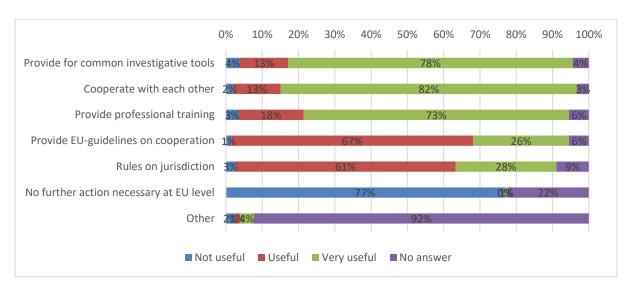
With regard to cooperation, most respondents were positive regarding possible legal provisions that would require cooperation via common investigative tools in all Member States (78% 'very useful') and via the relevant EU agencies (82% 'very useful'). A good amount of those against the proposed legislative 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 perceive 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 40: Number and percentage of replies to question 7

Option	Not useful	Useful	Very useful	No answer
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	65	384	22
	4%	13%	78%	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	64	400	16
	2%	13%	82%	3%
Include a provision in the Directive to oblige Member States to provide professional training on cross-border cooperation.	17	88	358	27
	3%	18%	73%	6%
Provide EU-guidelines on cooperation between Member States and how to make use of EU agencies such as Eurojust, Europol and OLAF.	7	327	129	27
	1%	67%	26%	6%
Include a provision in the Directive on rules on jurisdiction with regard to cross-border environmental crimes in the Directive.	13	297	136	44
	3%	61%	28%	9%
No further action necessary at EU level.	376	1	3	110
	77%	<1%	1%	22%
Other	12	7	19	452
	2%	1%	4%	92%

Figure 12: 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 41: Main themes addressed in open replies to question 7

ain themes identified Total references (n:		erences (n=49)
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%

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

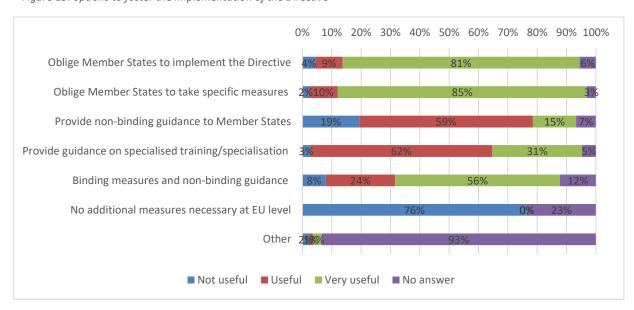
Most of the respondents consider EU action necessary to foster the practical implementation of the Directive – only one respondent opposed this – however 115 or 23% of respondents chose not to

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 42: Number and percentage of replies to question 8

Option	Not	Useful	Very useful	No
	useful			answer
Include in the Directive a general provision to	22	45	396	27
oblige Member States to implement the Directive.	4%	9%	81%	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	11	48	416	15
exchange information and cooperate with each	2%	10%	85%	3%
other, to oblige national authorities to cooperate				
with other national authorities, to take measures				
to raise public awareness of the harmfulness of				
environmental crime.				
Provide non-binding guidance to Member States				
on the establishment of overarching national				
enforcement strategies involving all levels of the	95	290	72	33
enforcement chain (administrative controls and	19%	59%	15%	7%
monitoring, tax authorities, police, prosecution,				
judiciary).				
Provide guidance to Member States on specialised				
training/specialisation of law enforcement	13	304	150	23
officials, criminal judges and prosecutors with regard to environmental crime issues.	3%	62%	31%	5%
A combination of binding measures and non-	39	116	275	60
binding guidance (as outlined above)	8%	24%	56%	12%
No additional measures necessary at EU level.	374	1	0	115
, 33 20 10001	76%	<1%	0%	23%
Other	11	6	15	458
	2%	1%	3%	93%

Figure 13: 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 43: 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%
Promotion of cooperation on enforcement, inspection and implementation	4	10%
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%

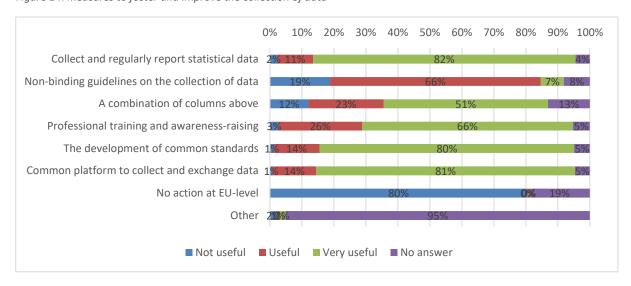
# Question 9: Measures to foster and improve the collection of statistical data on environmental crime.

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 44: 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	55	402	22
	2%	11%	82%	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	115	252	64
	12%	23%	51%	13%
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	128	323	26
	3%	26%	66%	5%
The development at EU-level of common standards on the collection of statistical data on environmental crime proceedings.	6	70	390	24
	1%	14%	80%	5%
The provision of a common platform to collect and exchange statistical data at EU-level.	4	67	396	23
	1%	14%	81%	5%
No action at EU-level.	394	2	1	93
	80%	<1%	<1%	19%
Other	11	3	10	466
	2%	1%	2%	95%

Figure 14: 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 45: Main themes addressed in open replies to question 9

Main themes identified	Total references	s [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%

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 46: Main themes addressed in open replies to question 10

Main themes identified Total references		es [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 47: 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. 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. 2c ENPE recommends that the opportunity should

ID	Reference	Role	Overview and comments
ID	Reference	Role	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.  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.  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.  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.  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. 2h ENPE recommends that forestry offences should clearly be included within the ambit of the environmental crime directive.  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 to ensure that the requirement to criminalise certain behaviours which have an adverse impact upon regimes designed to protect it, is sufficiently broad.  3b ENPE recommends that the Directive should provide that additional requirements

ID	Reference	Role	Overview and comments
			5: Certainty in the law is essential. Therefore vague
			notions and imprecise definitions should be
			removed from the Directive.
			6a ENPE recommends that the Commission widen
			the scope of the Directive to include offences
			committed by legal persons.
			6b ENPE recommends that Member States insert
			the formula 'effective, proportionate and
			dissuasive' as the standard for (criminal)
			sanctioning in their national legislation.
			6c ENPE recommends that the Commission provide
			guidance on the terms 'effective, proportionate
			and dissuasive' in a comprehensive document.
			6d ENPE recommends that Courts should have
			sentencing options available to them which deal
			with the remediation and / or repair of
			environmental crime.
			6e ENPE recommends that consideration be given
			to setting out minimum penalty thresholds for all
			Member States in the prosecution of
			environmental crime.
			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.
			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.
			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.  8b ENPE recommends that the EU Commission
			should take all possible steps to urge Member
			States to participate in the specialist environmental
			enforcement networks.
			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
			environmental prosecutors to deliver their

ID	Reference	Role	Overview and comments
			mandates appropriately. For example, EJN 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.  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. Further explanations and examples are also provided.
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 electrecution of birds
8	Une pleinte 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	20 propositions for amendments to the ECD by academics. The recommendations include: 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. 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 sanctions. 3.Whenever legislation or other general or individual environmental standards are adopted, they should specify, where appropriate, that this Directive applies. 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. 5.Exchanges and cooperation should be promoted. 6. In Article 1 "Subject", create a paragraph 2: Scope (suggestions are provided). 7. An ADDITIONAL article is created RELATING TO INQUIRIES AND PROSECUTIONS (suggestions are provided). 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

ID	Reference	Role	Overview and comments
	REFERENCE	Note	(suggestions are provided).  9. ARTICLE 3: INFRINGEMENTS (prefer: "QUALIFICATIONS") (suggestions are provided).  10. ADDITIONAL ARTICLE: RISK, PREVENTION AND PRECAUTION is created (suggestions are provided).  11. ARTICLE 4, INCENTIVES AND COMPLICITY is revised (suggestions are provided).  12. ARTICLE 5, SANCTIONS (prefer "PENALTIES") is revised (suggestions are provided).  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).  14. ADDITIONAL ARTICLE: REPAIR OF DAMAGE is created (suggestions are provided).  15. ADDITIONAL ARTICLE: ALTERNATIVES TO CRIMINAL SANCTIONS is created (suggestions are provided).  16. ADDITIONAL ARTICLE - ADMINISTRATIVE SANCTIONS is created (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 electrecution 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 tha 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-bycase basis considering: the nature, degree of culpability, frequency, harm caused, previous warnings and seriousness of non-compliance. It

ID	Reference	Role	Overview and comments
			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 association	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; -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; -measures to compel MS to report data to Eurostat together with EU standards for the collection and reporting of reliable data.
15	SERPONA	National law enforcement or professional network of law enforcement, police	Propositions for amendments to the ECD by the Spanish Nature Protection Service of the Civil Guard - SERPONA.  The position proposes: -to broaden the understanding of serious crime by establishing links with other crimes such as organised crime, corruption, document fraud; -to consider aggravated offences; -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; -to clarify vague terms (examples are provided)
16	Pays de l'ours ADET	NGO	Propositions by an NGO focused on definitions, clarifications, sanctions and cooperation. The position supports the points proposed by the Commission and specifically: - 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

ID	Reference	Role	Overview and comments
			introduction of penalties diversified per complementary activitiesStrengthening the cross-border cooperation
			between Member States.
17	GGA	Other	Example of a Dutch case on monitoring of a Nature Network Netherlands region in a part of North Holland.
18	Wildlife Justice Commission	NGO	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. The position highlights the role played by criminal networks behind the wildlife trafficking. It calls for:  • 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	Propositions by Swedish authorities focused on the scope and independent definition of environmental crime.  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

ID	Reference	Role	Overview and comments
			measures that will increase the minimum requirements of the Directive and supports: criminalising risky behaviour, making 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)	An academic paper summarising case studies from England, Wales, Germany and the Netherlands and focused on enforcement. Recommendations include:  •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	Propositions by an NGO focused on geographical scope and coverage of supply chain offenses.  The position calls for:  -A revision of the Directive should address its geographical scope with further clarity, explicitly expanding it. For instance, to address companies

ID	Reference	Role	Overview and comments
			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.  -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 consideredIt 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.
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	1	1

# **ANNEX 3: INTERVIEWS AND CONSULTATIONS WITH STAKEHOLDERS**

# **AUTHORITIES, NETWORKS AND NGOS**

#### Sweden

Organisations	Ministry of Environment (MoE), Ministry of Justice (MoJ), Prosecutors Office (PO), Police	
Type of consultation	Interview	
Date	05/07/2021	

Question	Answer
1. How many specialised units are employed at different levels of enforcement (Police/public prosecution/judiciary)? Is this sufficient?  2. What is the role of these units?	In the police, they have 9 teams spread out by region with 7 – 9 investigators per group, with focus on OSH crimes, serious hunting crimes and environmental crimes overall.  At the national level they deal with natural heritage and species protection (e.g. crimes linked to Nature Directives). There they have 7 – 9 specialised investigators plus around 4 analysts / coordinators. 95% of environmental crimes are investigated by these police units, under the leadership of a prosecutor. Some are investigated by customs (waste shipment) or coast guard (ship-source pollution, not in ECD).  There is some competition for resources between the OSH crimes, which have been prioritized politically somewhat over the past 10 years and the other environmental crime.  It is difficult to account for the distribution of time between the three crime types. The main part of the time are laid on OSH and environmental crimes. And there are regional differences.  In the prosecution: there is a national unit on environmental prosecution since 2009 with 21 prosecutors and 5 admin staff. Divided (4+1) across regions of the country. They deal 100% with environmental crime – but as with the police, this includes about 1/3 time spent on OSH cases.  When asked whether these resources seem sufficient: team leaders obviously want more investment, but this is not really an area prioritized for development. No control over the regions, those authorities allocate their own resources. Later it was added that they need more investigators within the police if there is more awareness about the serious nature of environmental crime. Prosecution estimated 2 more people (around 10% increase). This would reflect needs also for fisheries and timber-related crimes if ECD is expanded.  Noted that a lot of environmental crime cases are lengthy and difficult –
	take a lot of resources.
3. What is the cost associated with investigating environmental crime?	Investigative tools: the general consensus was that these are needed mainly when environmental crime relates to organised crime, and in some cases to serious hunting crimes that take place in remote areas. They don't consider their use for other types of crime. Not clear whether an EU provision requiring such tools be made available would change much in this regard as tools would only be used when they are useful. Satellite photos is an additional type of tool.

		Wiretapping can be costly to set up if 24/7 surveillance is required – telecom costs.
4.	What type of training is provided in relation to environmental crime at national level (or within a specialised unit in case this exists)?	More training is needed. A good amount of training is already provided, but could be more specialized (on environmental crime as well as environmental law more broadly). They would also like to improve the content, which is currently developed in cooperation with Uppsala university. At LEA level, there is little cooperation with any EU-provided content or training activity. The police lack knowledge and information about EU level training, they are usually unaware of the training.
		Police: Basic course of 192 hours/24 days for new investigators. An additional 40 hour advanced course is available for some, which was held every 2 years, they now want to do it annually. It attracts $12-20$ people per year, all unit members.
		There is also an annual seminar of $2-3$ days for all LEAs, with around 100 participants.
		Prosecution is quite specialized, so noted the importance of on-the-job learning.
		Judicial training: happens on-demand. No particular demand for training of judges in environmental crime. (Prosecution agrees, this is not a problem with judges, also concerns that too much specialisation could put defendants at an unfair disadvantage. Overall prosecution does not see a problem with environmental crime cases being handled at the general courts, this doesn't affect the outcomes as judges are qualified in criminal law and that is sufficient, there does not seem to be a need for specialisation of judges.)
		Training provided by Swedish judicial training academy and is flexibly available if demand should develop. They do have exchanges with EJTN.
5.	What is the cost associated with training?	They agree with our day rate estimated, after checking with their HR, which administers training in SE. The HR department estimates EUR 80 to EUR 250 per participant per day depending on the type of training.  In 2017 the basic course cost around 37,000 EUR for the 192 hour course.
		Moving more to e-learning; this might increase the offering at reduced costs.
6.	What types of awareness raising activities are used?	They think it is really important but not much to say about how it gets done. Seems to be the regional and local authorities, plus the police that would be most likely to carry it out. Prosecution prefers to remain neutral/objective. NGOs are active but more on decisions, permits, protected areas, less so about environmental crime.
		•

## Finland

Organisation	
Type of consultation	Interview
Date	23/06/2021

0 4	
Question	Answer
Cu tu t	

1. Please describe the process for creating the national strategy on environmental crime.

There has been a national strategy since 2014. A joint working group with key authorities drafts the national strategy and action plan.

The initial strategy, published in November 2014, took 3-4 months to produce. The strategy is small, with 7 alignments. A relatively small number of issues are covered. These are not changed substantially when the strategy is updated. The content of the strategy is produced by a working group. The working group meets three times per year.

The action plan uses a traffic light system. The working group evaluates the progress for each of the points in the action plan and assigns a colour.

There is no additional budget for this work, everything is done with the hours that are already allocated. Given that there is not a budget specifically for implementing the strategy, the process was in particular an opportunity for an exchange of ideas.

2. Which organisations are involved in producing the strategy

Ministries of environment and justice; representative of the police, public prosecution, border guard and customs; representatives of local and regional authorities; regional environmental centres; the Confederation of Finnish industries; the association for nature conservation.

Many of these organisations also meet in other working groups related to environmental crime. This means that less work is needed when updating the action plan than might have been required otherwise.

3. How many staff in the Ministry were involved in the process?

Four persons in the secretariat, working part time, over 3-4 months. A smaller amount of time is needed to update the strategy and action plan given that the foundation work is already done.

#### **ENPE**

Organisation	European Network of Prosecutors for the Environment
Type of consultation	Interview
Date	05/07/2021

## Question

#### **Answer**

- 1. How many specialised units are employed at different levels of enforcement (Police/public prosecution/judiciary)? Is this sufficient?
- 2. What is the role of these units?

Inspectors are a vital link because not all work is done by the police – administrative authorities are usually involved in permitting process, so a big trance of the work is performed by those authorities. They also help pick up illegal activities during inspections i.e. they are a key actor for the detection of environmental crimes. The relevant professional network is IMPEL.

In the NL there are 2 sorts of investigations: standard cases (reporting) and special cases with investigative tools/methods. The majority of the cases are standard cases carried out by inspectors. There are around 3000 people involved but not full time. The serious cases are handled by the police, the agency within the Ministry for Agriculture and Food Safety and the agency within the Environment Ministry.

In the NL, there are 400 police that on paper are dedicated to environmental crime, but in practice 140 are dedicated to agriculture and food safety crimes. In the NL, food safety and environmental crimes are handled by the same units. This is often the case also in other countries, e.g. in ES the same units handle environmental crimes as well as archaeological crimes.

In the NL, environmental cases are also handled by paralegals (30-40 paralegals are specialised on that). The exact number of specialised prosecutors at the moment is not known but this is likely 2-3% of the workforce. If there is an increase of environmental crime cases, the number of specialised prosecutors may rise to 5% of the workforce but more than that is unlikely.

Experience from a twinning project between AT-NL shows that there are 15 prosecutor offices in AT, with specialised prosecutors in some of them but they do not work full time on environmental crime but only when needed.

3. What is the cost associated with investigating environmental crime?

Investigative tools – currently not used very often. If there are more cases, they may be used more frequently and that would lead to more HR needs (e.g. even for interpreters). The costs would be substantial. As environmental crime is less significant than financial crime, it is likely that such tools will be used only in cases where there is a link between organised crime and environmental crime or there are significant financial gains that can be made from the crime.

- 4. What type of training is provided in relation to environmental crime at national level (or within a specialised unit in case this exists)?
- inspectors (all along enforcement chain) and has helped develop EU training. This is training developed by practitioners and for practitioners so it is practical and based on examples. It is necessary to have training once a year e.g. minimum 3 days per year for the prosecutors. The ideal would be 6-10 days per year.

Training – ENPE can provide training to judiciary, prosecutors, police,

5. What is the cost associated with training?

The ENPE training has been paid through LIFE (EUR 1 million over 5 years). It has trained around 1000 delegates over 5 years and organised different events.

6. What is the cost associated with a national strategy on environmental crime?

strategy in fragmented field, there is always a need for a central driving force; 2) need to implement the strategy. It may take several months to draft, consult and adopt it, with people from different government ministries and agencies. A strategy would be important to showing the training needs and prioritising resources.

National strategy – there are two issues to consider: 1) need to develop a

7. What types of awareness raising activities are used?

A revised ECD may create political momentum and result in more prosecutions of environmental crimes.

Awareness raising – IMPEL helps MS to ensure inspections are of good quality. ENPE events take place in different locations as a way to raise awareness and create networks.

The estimated costs based on procurement for the awareness-raising animation (Waste Shipment Regulation); the ENPE video (general overview and introduction to ENPE accessible via the ENPE website landing page), and the ENPE annual conference 'E-zine':

- Awareness raising animation (UK Govt. supplier framework) 3
  minute video animation including voice over and subtitles (1
  language) €9,000 (approx.);
- Video (ENPE Overview) 2 minute single language video (no animation) €1,000 (approx.);

• Conference 'E-zine' (electronic magazine comprising videos,
interviews, key figures from the conference) – €5,000 (approx.)
per publication.

## Birdlife

Organisation	European Network of Prosectutors for the Environment
Type of consultation	Written feedback
Date	24/06/2021

Question	Answer
4. What type of training is provided in relation to environmental crime at national level (or within a specialised unit in case this exists)?	The standard proposal on poisoning, which is applicable to other wildlife crime, is a two-day theoretical training for law enforcement officers.  In addition to this training, we have been organizing other three-day training courses on investigation of environmental crimes in which, in addition to the theoretical training, we also include practical training in the field. This type of training is more expensive as the agents must travel to a
5. What is the cost associated with training?	specific training center in Andalucia and the number of trainers is increased. The cost is around $\in 18,000$ for accommodation and food for around 40 officers, with 7 trainers ( $\in 1,540$ ), plus travel expenses from their places of origin (an average of $\in 100$ per trainee).
	We have also carried out training sessions for prosecutors, but in this case in collaboration with the State Prosecutor's Office, which invites us to their training centres.
	In addition, within the framework of LIFE Nature Guardians, we have organized training courses on environmental cybercrime and money laundering in relation to environmental crime. These courses have cost approximately €20,000 each.
	We have also carried out international training, either by travelling to the countries that request it or in online format. In the first case, the costs are the travel expenses from Madrid to the place of the course for three trainers, plus their daily allowance of 220€. Online the main cost is the simultaneous translation that we have used on some occasions.

# **BUSINESSES AND THEIR ASSOCIATIONS**

## **CEFIC**

Organisation	Cefic
Type of consultation	Interview
Date	28/06/2021

## **General introductory remarks:**

Lack of harmonised enforcement is the biggest issue with the ECD.

Other options like sanctions need to be taken into consideration or be corrected: e.g. not always sanctions needed, or at least on a case by case basis considering all important factors (warnings, type of harm).

Concerns about double sanctions with Environmental Liability Directive, this needs to be clarified in the legal framework.

Need for clarity in the definitions, how does the Commission approach the definitions.

However, enforcement is most important, penalties and clear understanding what MS need to do.

The main issue is lack of agreement between MS: lower and upper limits for penalties would be helpful for the industry.

Questio	on	Answer
1.	What environmental crimes impact your economic sector? Do you have any studies or detailed information about the costs of these impacts?	Each company has multiple different branches so they are differently affected by the national legislations.  Information related to market procedures cannot be shared within Cefic.  The key impact of environmental crimes is that revenue at company level but also for the public level are reduced. Then, there is also the environmental impact. For example, F gases are strong GHGs and they are being phased out at the moment. Illegal imports are related to emissions in the EU and those are not accounted. If because of the illegal competition companies make losses, they cannot invest in new technologies and employees may lose jobs.
2.	How could a strengthened Environmental Crime Directive benefit legitimate business activities in your economic sector?	This depends on the direction the strengthening goes but in general this is welcome.  New definitions and new scope are less clear to us at the moment and it is not possible to comment on them unless we have consulted properly with our members  Our perspective is that the current system works but is not understood properly by MS who would need to enforce it. Cross border cooperation is required to a much greater extent.  No need to add more complexity because the system works overall.  There is not enough distinction between purposefully breaching environmental law and those that aim to comply but have a difficulty in one question.
3.	What effect (positive or negative) would clearer definitions of legal terms around currently defined environmental crimes such as "substantial damage") have for businesses in your economic sector?	Welcome more clarity for better enforcement.  The other two options are less ideal. Clear legal terms may still not be totally clear to all MS.  Redrafting can also lead to other effects and is not considered necessary by the Members of Cefic. Not go too far in a redrafting.  No issue known with the legal terms in the past.
4.	What effect would increased enforcement of environmental crimes have on the legitimate business activities in your industry?	See introductory remarks and the position paper.
5.	What impacts do you expect for legitimate businesses activities if a broader definition of environmental crime was established that extends the scope to breaches of EU	One possibility is accessory sanctions (e.g. remedies of environmental damages) already exists under other legislation.

	environmental legislation currently not included?	In this respect we call to be cautious not to cause an overlap and not to create double sanctions.
6.	What impacts for legitimate businesses do you expect if the definition of environmental crimes is expanded to include damaging the environment independently of administrative environmental law (e.g. having a permit)?	Legal uncertainty would be the result. We don't understand the exact way this would be designed and this is an issue if environmental legal experts don't know this. What is the point of reference and how is damage defined should be clarified?  This would have impact on employment because our industry would become riskier for high ranked executives that have to fear personal liability  Operation and personal liability would be unclear or at risk.  In general, it is difficult to imagine, we would need more clarity: What does it mean, what kind of damage? We suggest to look at the debate about ecocide. There you have a clearer definition.  It has consequences on MS approach. They will take the ECD as a clear guideline.  Rules on environmental crimes had impact on more investment on due diligence. Cannot say how much this exactly amounts because of anti-trust rules.
7.	What (other) action would be necessary to better protect your economic sector from negative effects caused by environmental crimes?	Options are quite interconnected; redrafting can extend the scope and with that we need to be very cautious.
8.	Can you comment on any specific impacts or repercussions for SMEs?	Do not have any input to share on this.

# **ECSA**

Organisation	European Community Shipowners' Association
Type of consultation	Interview
Date	06/07/2021

Question	Answer
1. What environmental crimes impact your economic sector? Do you have any studies or detailed information about the costs of these impacts?	Shipping sector: international industry with trade worldwide. Regulated by International Maritime Organisation (IMO). Comprehensive rules that govern maritime safety and environmental protection. EU MS are parties to the treaties, EU maritime legislation take the international agreement into account.  IMO and EU rigorous enforcement mechanism to ensure
	compliance with the regulations on environment and safety through state inspection but also port state inspection, both are ensuring compliance with regulations.

Treaty on the prevention of the pollution from ships (Marpol). Disposal of garbage, fuels. Very well enforced. Seeing a dramatic improvement in standards. Issues are similar to other transnational organized crime like drug trafficking. International industry, legitimate shipping can be exploited by illegal gangs. Supply chains can be quite long with a potential corruption. Reputational costs for shipping companies. ICS and many of the members have signed Buckingham palace declaration and united for wildlife taskforce. IMO is working on guidelines for wildlife trafficking. Shipping used as a vector for environmental crime like trafficking. Ship can be detained in port if it is found to be in non-compliance with regulations. Oilspills etc. are not necessarily covered as crime. Covered by Marpol, Hong Kong Convention. 2. How could a strengthened **Environmental Crime Directive** benefit legitimate business activities in your economic sector? Not sure we have seen issues in our sector but clarity and 3. What effect (positive or negative) certainty are crucial because of the consequences to would clearer definitions of legal personal capacity. terms around currently defined environmental crimes such as So certainty is very important about what would be "substantial damage") have for considered criminal. businesses in your economic sector? Any changes could have unintended consequences. Example: Serious negligence is not consistently internationally defined, particularly in common law countries. Marpol takes a different approach: intentional pollution. For a spill to be criminal it has to be intentional or reckless. Need for a global level playing field to avoid being disadvantaged. Legal certainty is fundamental, more even as 4. What effect would increased implementation is always positive but the debate should be enforcement of environmental crimes about the root causes: is it that MS are given diverging have on the legitimate business interpretation to the ECD or lack of resources for activities in your industry? prosecution of environmental crimes. Guidelines for MS have been seen effective to achieve the harmonised implementation. Potential detentions of a ship are a huge deterrent already to shipowners. So, the real problem needs to be identified first. Breaches of enforcement can be remedied by infringement.

	If it were to be affected by the ECD, standardisation of penalties could be difficult as UNCLOS has specific provisions on this.
5. What impacts do you expect for legitimate businesses activities if a broader definition of environmental crime was established that extends the scope to breaches of EU environmental legislation currently not included?	Do not represent fisheries industry.  IUU has security issues so it would be a logical extension of the ECD.
6. What impacts for legitimate businesses do you expect if the definition of environmental crimes is expanded to include damaging the environment independently of administrative environmental law (e.g. having a permit)?	It is a tricky one that could have dangerous effects on the risk of not knowing that they could be held accountable. We can follow up.
7. What (other) action would be necessary to better protect your economic sector from negative effects caused by environmental crimes?	I don't think we had any suggestions on this either. It would be beneficial if the topics are tackled at source in the criminal networks rather than in the transport link of the chain.
8. Can you comment on any specific impacts or repercussions for SMEs?	Difficult without knowing in detail on the impacts of smaller operators.

# HWE

Organisation	Hazardous Waste Europe
Type of consultation	Interview
Date	04/06/2021

Question	Answer
What environmental crimes impact your economic sector? Do you have any studies or detailed information about the costs of these impacts?	Quantitatively is going to be difficult, because it is the black market. Figures exist but who knows if they are accurate.  80% of waste trade is illegal, but all of waste, not HW.  Illegally shipped and treated HW has a big impact.  In France this is not a high figure of the total waste generation. Statistics on production and collection do not show.  In other MS this is different. Indication is the difference between treatment capacity and generation. It can be exported but can also be dumped.  Carried out study a few years ago in parallel to implementation of HW management. Some MS have a bad enforcement of the EU laws and this always implies illegal waste management.

Amounts are very difficult because it is uncontrolled. IMPEL body has some estimates. In terms of cost, there are costs to our industry. Cost is more important for environment and society, not for our industry. What we see is that it is often small amounts (unless you look at the Mafia). Waste from households, craftsmen etc. There is a lot of illegal practice in this field. What is really contributing is platforms on the internet which are very unregulated. Article 3 of the directive: number b on waste does not tackle traders and brokers, which is a loophole. Talk about management of waste, which includes all steps as defined in the waste management directive. Do not know exactly. It could benefit the image of the HW 2. How could a strengthened industry. That would be the main benefit. Still many **Environmental Crime Directive** wrong opinions on waste management. This is in part due benefit legitimate business activities in to the crimes. Environmentally sound management is not your economic sector? widely known. Each time we want a permit, we face opposition from groups that only have in mind the criminal activities. Most of HW is correctly treated but this is not mentioned in news. Penalties linked to environmental crimes are low and difficult to put in place. For the Mafia it is cost effective to deal with waste in comparison to dealing with drugs or arms. Very easy for the mafia to escape sanctions. We have a case, of a HW treatment plants with a permit but developing very bad practices. Authorities told the plant to stop after about 10 years. Poisoning of employees was a harder case than environmental laws. 3. What effect (positive or negative) would clearer definitions of legal terms around currently defined environmental crimes (such as "substantial damage") have for businesses in your economic sector? It is feasible under the conditions that magistrate have a 4. What effect would increased better knowledge of the environmental legislation (IED, enforcement of environmental crimes waste treatment directive). They are not well known by have on the legitimate business prosecutors and lawyers. Environmental crime legislation activities in your industry? is even less well known. Law students should be introduced to environmental laws and crimes. Or create a dedicated brigade of enforcement to investigate and prosecute environmental crime. The whole society would benefit from this. We all would gain from this.

		Include non-legislative measures. To make prosecutors more aware and create some guidance would have a big effect.
legitii broad crime scope	impacts do you expect for mate businesses activities if a er definition of environmental was established that extends the to breaches of EU onmental legislation currently not ded?	-
busin defini expar envir admir	impacts for legitimate esses do you expect if the tion of environmental crimes is ided to include damaging the comment independently of inistrative environmental law (e.g. g a permit)?	For sure this is a threat. Everybody is scared of this. But it would also help to increase the awareness. So we are in favour of such an option but the wording needs to be chosen very carefully.  Ecocide: if we can talk about ecocide in the directive, this would help.  If we only focus on activities that are controlled that means that there is more attention put on the compliance of the plant with laws and also with the permit. This could be part of the definition of ecocide. Anything that has a negative impact on the environment. But ecocide should not only focus on economic operators but also the authorities who have to control and enforce the rules. They have to show that they care. Anything that implies derogation is usually a problem.  Inaction by MS to implement and enforce laws could be an ecocide.  Implementation of the recovery plans in the MS. Most are not related to better environment and health. This does not get the necessary attention.  The plant mentioned before had a perfect permit but it did not prevent it from doing crimes to the environment.
neces econo	(other) action would be sary to better protect your omic sector from negative effects d by environmental crimes?	Connection between agencies. An agency on environmental matters would really be helpful, at the EU level, an official level.
	ou comment on any specific ets or repercussions for SMEs?	It is always more complex to comply with new and complex rules. Nevertheless, it also protects them if they are complying with laws from bad practices of competitors. Protect legal activities also protects SMEs.  EPR: this has an effect on SMEs, which have much more difficulty to respond to tenders from organisations creating the EPR structure.  EPR organisms should also be covered by the ECD. Examples exist.

# PRE

Organisation Plastics Recyclers Europe

Type of consultation	Interview
Date	23/06/2021

Questio	on	Answer
1.	What environmental crimes impact your economic sector? Do you have any studies or detailed information about the costs of these impacts?	Mismanagement of plastic waste from collection, sorting and end of life, waste shipment.  Variety of EU legislation and contexts.  2 Years ago, massive exports from UK to Poland. Fires in Polish plants. Poland pushed more requirements on plants to stop the practice.  Landfilling costs in Poland are cheaper than most MS.  Waste is following the cheapest route. If landfilling is cheaper than sorting and treating it, this route will be chosen.  Environmentally, socially and economically.
2.	How could a strengthened Environmental Crime Directive benefit legitimate business activities in your economic sector?	Harmonised implementation of the ECD. So even if you import waste from another country, the same standards would apply. Grey zone on how the practices are treated nationally.  Transport: in one country it is labelled waste and in another a product. Legal basis differs and illegal activities.
3.	What effect (positive or negative) would clearer definitions of legal terms around currently defined environmental crimes such as "substantial damage") have for businesses in your economic sector?	The clearer definition we have, the better it would be for sure.  Substantial damage: clarity means that MS apply it correctly.  Landfilling in a wrong manner, is that in the scope of the definition if the country allows it.
4.	What effect would increased enforcement of environmental crimes have on the legitimate business activities in your industry?	Harmonised way is needed.  Sanctions vary between MS, this incentivises trade and illegal activities in certain MS with lower fines.  "Worth the risk" needs to be eliminated
5.	What impacts do you expect for legitimate businesses activities if a broader definition of environmental crime was established that extends the scope to breaches of EU environmental legislation currently not included?	No, waste is well covered already.
6.	What impacts for legitimate businesses do you expect if the definition of environmental crimes is expanded to include damaging the environment independently of administrative environmental law (e.g. having a permit)?	This would be a big win if this can get through. It would help to harmonise.  It would need to be on very specific practices.  If the definition is too broad, it could impact legal activities but in general this is a good idea.
7.	What (other) action would be necessary to better protect your	Export outside of the EU, waste is sometimes traded to non-EU countries from a trading hub. Those exports can be done in a wrong manner. When you export it in

economic sector from negative effects caused by environmental crimes?	accordance with the waste management directive, it would have to be treated.  Burning in far east are not in accordance.  Some MS are a bit more tough and make it difficult to export. Legislation and practices vary here as well.  Waste export has a regulation but it is implemented very differently. Actual implementation can vary a lot.
8. Can you comment on any specific impacts or repercussions for SMEs?	Often SMEs are responsible for malpractices. Less structured. The addition of all these creates a big impact.

# WKÖ

Organisation	WKÖ – Austrian Federal Economic Chamber	
Type of consultation	Written feedback	
Date	28/06/2021	

	Question	Answer
1.	What environmental crimes impact your economic sector? Do you have any studies or detailed information about the costs of these impacts?	We are not the appropriate respondent for this question. We are not aware of any cases in the past years in Austria.
2.	How could a strengthened Environmental Crime Directive benefit legitimate business activities in your economic sector?	The Environmental Crime Directive should better emphasize the legitimacy of authorized and legally permissible acts in the future.
3.	What effect (positive or negative) would clearer definitions of legal terms around currently defined environmental crimes such as "substantial damage") have for businesses in your economic sector?	Clearer definitions would be useful, but they should be included into national law implementing/in line with substantial EU environmental law such as Water Framework Directive, Ambient Air Quality Directive, Waste Framework Directive etc.
4.	What effect would increased enforcement of environmental crimes have on the legitimate business activities in your industry?	We are convinced that, according to experience, the Directive is strict enough. Enforcement is up to Member States, it is a national authority matter which is being dealt with differently. In Austria monitoring of existing EU environmental law and environmental crime is working. The level of licencing procedures is strict.
5.	What impacts do you expect for legitimate businesses activities if a broader definition of environmental crime was established that extends the scope to breaches of EU environmental legislation currently not included?	Scope extension, from our point of view, is being rejected since planning security is being reduced significantly and criminalisation of business activities in advance should not take place.
6.	What impacts for legitimate businesses do you expect if the definition of environmental crimes is expanded to include damaging the environment	It is a no-go for businesses to cut the connection of environmental crimes and administrative environmental law. Complete loss of legal certainty as well as loss of planning security would be the consequence. The EU

	independently of administrative environmental law (e.g. having a permit)?	principle of proportionality would be hurt, too. SMEs would be the most vulnerable group in this context since their economic existence and a possible image loss would be at stake.
7.	What (other) action would be necessary to better protect your economic sector from negative effects caused by environmental crimes?	Effective cross-border cooperation of authorities would definitely be an effective tool. Compliant businesses should be protected explicitly from prosecution up to the Environmental Crime Directive, similar to permit defence in the Environmental Liability Directive.
8.	Can you comment on any specific impacts or repercussions for SMEs?	Especially point 6 would expose SMEs in a way that would be a threat for their economic survival.