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IMPACT ASSESSMENT REPORT

Accompanying the document

Proposal for a
DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the protection of the environment through criminal law and replacing Directive 2008/99/EC

{COM(2021) 851 final} - {SEC(2021) 428 final} - {SWD(2021) 466 final}

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Glossary

[1] Details per Member State could be found in the study in annex.

Term or acronym	Meaning or definition
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CEPOL	European Union Agency for Law Enforcement Training
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CJEU	Court of Justice of the European Union
CoE	Council of Europe
CPS	UK's Crown Prosecution Service
CZK	Czech koruna
DG	Directorate-General
DGT	Directorate-General for Translation
Duty holder	Person or entity bound by environmental legislation
EA	Enforcement Action
EC	European Community
ECJ	European Court of Justice
EEB	European Environmental Bureau
EESC	European Economic and Social Committee
EFFACE	European Union Action to Fight Environmental

	Crime
EIO	European Investigation Order
EJTN	European Judicial Training Network
ELD	Environmental Liability Directive
ENCA	European Nature Conservancy Agency
ENEC	European Network against Environmental Crime
ENPE	European Network of Prosecutors for the Environment
EnviCrimeNet	Environmental Crime Network
EMPACT	European Multidisciplinary Platform Against Criminal Threats
EPA Network	Network of Heads of Environment Protection Agencies
ESTAT	European Statistics
EU	European Union
EUFJE	European Union Forum of Judges for the Environment
EUR	Euro
Eurojust	European Union Agency for Criminal Justice Cooperation
Europol	European Union Agency for Law Enforcement Cooperation

EUTR	EU Timber Regulation
GENVAL	Working Party on General Matters including Evaluations
GNR/SEPNA	Nature and Environmental Protection Service of the Republican National Guard
IFJ	Judicial Training Institute
IMO	International Maritime Organisation
IMPEL	European Union Network for the Implementation and Enforcement of Environmental Law
Interpol	The International Criminal Police Organization
IPA	Croatia's Instrument for Pre-accession Assistance
IPEC	Intelligence Project Environmental Crime
ISF	Internal Security Fund
ISF-P	Internal Security Fund (Police)
IUU fishing	Illegal, unreported and unregulated fishing
JHA	Justice and Home Affairs
KPI	key performance indicator
Market Abuse Directive	Directive 2014/57/EU of the European Parliament and of the Council of 16 April 2014 on criminal sanctions for market abuse (market abuse directive)

MARPOL	The International Convention for the Prevention of Pollution from Ships
Montreal Protocol	Montreal Protocol on Substances that Deplete the Ozone Layer
MS	Member States
NGO	Non-Governmental Organisation
N/A	not available or not applicable
OECD	Organisation for Economic Co-operation and Development
OJ	Official Journal of the European Union
OLAF	European Anti-Fraud Office
OPC	Open Public Consultation
OWiG	German Administrative Offences Act (Ordnungswidrigkeitengesetz)
Ozone Regulation	Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer
PIF-Directive	Directive (EU) 2017/1371 of the European Parliament and of the Council of 5 July 2017 on the fight against fraud to the Union's financial interests by means of criminal law
PoPs Regulation	Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

PSP	Public Security Police
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
REFIT	European Commission's regulatory fitness and performance programme
RIA	Regulatory Impact Assessment
RSB	Regulatory Scrutiny Board
SEO/BirdLife	Sociedad Española de Ornitología – BirdLife (Spanish Society of Ornithology – BirdLife)
Stockholm Convention	Stockholm Convention on Persistent Organic Pollutants
SWD	Staff Working Document
TECUM	Tackling Environmental Crime through Standardised Methodologies Project
TFEU	Treaty on the Functioning of the European Union
TFS	Transfrontier Shipment of Waste
UN	United Nations
UNEP	United Nations Environment Programme
UNODC	United Nations Office on Drugs and Crime
USD	United States Dollar
WEEE	Waste electrical and electronic equipment

1 INTRODUCTION: POLITICAL AND LEGAL CONTEXT

Environmental crime is a growing concern causing significant damage to the environment and to citizens' health within and beyond the Union.[2] Providing perpetrators with very high profits and relatively low risks of detection, organised crime groups operating across the Union's internal and external borders are increasingly attracted to environmental crime activities. Perpetrators often go unpunished despite the seriousness of the economic, social and environmental impacts environmental crime can have.

Over the past decade, the need of environmental protection has become a major concern for the EU, which gradually stepped up its efforts to combat offences that are harmful to the environment. The Commission has acknowledged that crimes like illegal deforestation, water, air and soil pollution, traffic in ozone-depleting substances, poaching, overfishing and other offences heavily damage biodiversity, harm human health and destroy whole ecosystems. Environmental crime often comes with corruption, money laundering, violence, organised crime and documents forgery.

Environmental crime also causes high economic costs including too low market prices and the loss of business of legal operators due to unfair competition from illegal operators (e.g. in the waste management sector). This further entails the loss of fiscal revenues.

According to estimates of UNEP and Interpol,[3] published in June 2016, the annual loss related to environmental crime has been estimated to range between US$ 91–258 billion. This makes environmental crime the fourth largest criminal activity in the world after drugs trafficking, human trafficking, and counterfeiting. It is growing at annual rates of between 5 and 7%. The top four environmental crimes are illegal trafficking in waste and in wildlife species, pollution crimes, and illegal trading in hazardous substances.[4]

Figures for the EU and the Member States are scattered and not collected according to comparable standards and are available only for certain sub-markets. A recently published study[5] provides estimates on the most profitable criminal markets in the EU among which are illicit waste trafficking and illegal wildlife trade (glass eels only). According to the study, in 2019 annual revenues deriving from illicit non-hazardous waste trafficking (both within national boundaries and abroad) range between EUR 1.7 billion and EUR 12.9 billion. For

[2] According to Interpol and the United Nations Environment Programme, environmental crime is the fourth largest criminal activity in the world, growing at a rate between 5%-7% per year. UNEP-INTERPOL Rapid Response Assessment: The Rise of Environmental Crime, June 2016.
[3] UNEP-INTERPOL Rapid Response Assessment: The Rise of Environmental Crime, June 2016.
[4] European Union Agency for Criminal Justice Cooperation. (2021). Report on Eurojust's Casework on Environmental Crime. Criminal justice across borders.
[5] Mapping the risk of serious and organised crime infiltrating legitimate businesses, final report, study commissioned by DG Home and Migration, March 2021.

hazardous waste trafficking, annual revenues range between EUR 2.1 billion and EUR 2.4 billion.[6]

A 2017 EUIPO study found that for the EU as a whole, the estimated total sales lost by legitimate manufacturers of pesticides due to counterfeiting amounted to 13.8% of sales or EUR 1.3 billion each year.[7] 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.[8] 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.[9]

1.1 1.1 The Environmental Crime Directive

The Environmental Crime Directive[10] (hereafter 'the Directive') is the main horizontal EU instrument to protect the environment through criminal law. The Directive's approach to defining a set of EU environmental crimes requires an infringement of relevant sectoral legislation as listed in two annexes to the Directive. Article 3 of the Directive describes additional constituent elements for various environmental crime categories that make infringing sectoral legislation an environmental crime.

The Directive obliges Member States to ensure effective, proportionate and dissuasive sanctions for environmental crime (Article 5). Determining the type and level of criminal penalties did not fall within EC competence at that time (pre-Lisbon). The Directive does not require criminal liability of legal persons (Arts. 6, 7).

1.2 1.2 Evaluation of the Environmental Crime Directive

The Commission has evaluated the Directive in 2019/20 and published its results in October 2020.[11] It has found that the Directive had added value, as it defined for the first time a common legal framework for environmental criminal offences and required effective, dissuasive and proportionate sanctions. However, the Directive did not have much effect on the ground: the number of environmental crime cases successfully investigated and sentenced

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[6] When examining the **volume of hazardous waste disappearing as a proportion of waste generated**, the UK (64%), Slovakia (57%), Lithuania (54%) and Austria (54%) record the highest, whilst Bulgaria (1%), Estonia (1%) and Greece (3%) record the lowest.

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

[8] Ibid., p. 16.

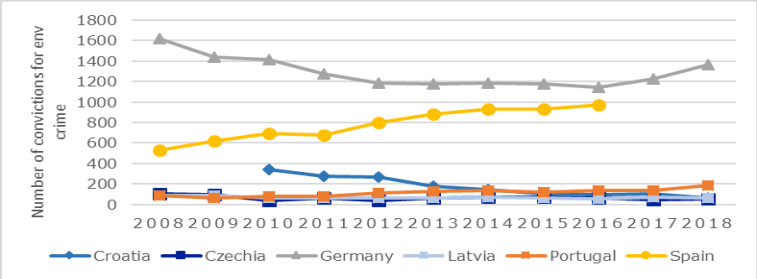
[9] Ibid., p. 17.

[10] Directive 2008/99/EC of the European Parliament and of the Council on the protection of the environment through criminal law (Environmental Crime Directive) of 19 November 2008, OJ L 328, 6.12.2008, pp. 28–37.

[11] Commission staff working document, Evaluation of 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) 259 final of 28 October 2020 (part I, part II, executive summary).

stayed at a very low level and generally did not show any significant upward trends over the past 10 years.

Figure: Number of convictions for environmental crime in HR, CZ, DE, LV, PT and ES[12] from 2008 to 2018.[13]



Moreover, the sanction levels imposed were too low to be dissuasive and cross-border cooperation did not take place in a systematic manner.

The Directive's lack of effectiveness in practice is partly due to the generic nature of its provisions. This can be explained by the EC-legislator's limited competences in the field of criminal law under pre-Lisbon conditions, which did not allow going into more detail, especially on sanctions.[14]

In addition, poor enforcement in the Member States contributes largely to the Directive not having much effect on the ground. The evaluation found considerable enforcement gaps in all Member States and at all levels of the enforcement chain (police, prosecution and criminal courts). Deficiencies in the Member States include a lack of resources, specialised knowledge, awareness and prioritisation, cooperation and information sharing and an absence of overarching national strategies to combat environmental crime involving all levels of the enforcement chain and a multi-disciplinary approach[15]. Moreover, the lack of coordination between the administrative and criminal law enforcement and sanctioning tracks often hinders effectiveness.

It was also found that the lack of reliable, accurate and complete statistical data on environmental crime proceedings in the Member States did not only hamper the Commission's evaluation but also prevents national policy-makers and practitioners from monitoring the effectiveness of their measures.

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[12] ES shows, however, a stable upwards trend. It must be noted that ES environmental criminal law criminalised every breach of sectoral relevant legislation. Moreover, ES has established functioning cross-border cooperation with PT and invested into specialisation of law enforcement authorities, the latter being regarded as most important measure for effective environmental crime measures.

[13] Source: Member States data sheet, provided by national ministries for HR, CZ, DE, LV, PT, and, for ES: 8th Round of Mutual Evaluations - 'The practical implementation and operation of European policies on preventing and combating Environmental Crime'. Report on Spain, 2019, p. 24.

[14] See: Judgment of the Court (Grand Chamber) of 23 October 2007.Commission of the European Communities v Council of the European Union. Case C-440/05, para 70.

[15] Evaluation report, pp. 32-33. See p. 33 of the Evaluation report for further details on sources.

Based on the results of the evaluation, the Commission decided to review the Directive. The Commission Work Programme 2021 schedules a legislative proposal for the revision of the Directive[16] in December 2021.

1.3 1.3 EU context

The current Commission adopted the Green Deal Communication along with a Biodiversity strategy. In July 2021, the Commission presented a package with concrete proposals for a Green New Deal, aimed at reducing emissions by 55% by 2030 and at making Europe climate neutral by 2050[17]. It states that 'the Commission will (…) promote action by the EU, its Member States and the international community to step up efforts against environmental crime'.

In 2016, the Commission adopted the EU Action Plan against Wildlife Trafficking[18] to improve environmental compliance in the field of wildlife trafficking. This was followed in 2018 by an Action Plan to improve environmental compliance and governance.[19] In this context, the Commission set up the Environmental Compliance and Governance Forum as a high-level expert group to steer the Action Plan's implementation and to serve as a platform for exchanges. Participants of the Forum are European networks of environmental inspectors (IMPEL),[20] specialised police (EnviCrimeNet), environmental prosecutors (ENPE),[21] judges (EUFJE)[22] focusing on national environmental crime strategies, specialised training of practitioners, sharing information and best practices, and cross-border cooperation.

The EU Serious and Organised Crime Threat Assessment (EU SOCTA) 2021 has identified "environmental crime" amongst the key crime threats facing the EU.[23] On this basis, environmental crime has been included in the EMPACT 2022 – 2025.[24]

The new EU Strategy to tackle Organised Crime covering the period from 2021 to 2025 – presented by the Commission in April 2021 – keeps environmental crime as one of the future priorities of the EU's fight against organised crime.[25]

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[16] 2021 Commission Work Programme, https://ec.europa.eu/info/publications/2021-commission-work-programme-key documents_en..

[17] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality COM/2021/550 final; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0550.

[18] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU Action Plan against Wildlife Trafficking, COM/2016/087 final; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2016%3A87%3AFIN.

[19]Commission Communication, EU actions to improve environmental compliance and governance, COM (2018) 10 final of 18 January 2018.

[20] https://www.impel.eu//.

[21] https://www.environmentalprosecutors.eu/.

[22] https://www.eufje.org/index.php?lang=en.

[23]https://www.europol.europa.eu/activities-services/main-reports/european-union-serious-and-organised-crime-threat-assessment.

[24] Already the preceding EMPACT 2018–2021 contained environmental crime as a priority, but with a more limited scope.

[25] EU Strategy to tackle Organised Crime 2021-2025; https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12735-Fighting-organised-crime-EU-strategy-for-2021-25_en.

The EU Security Union Strategy[26] presented by the Commission in June 2020 also identifies environmental crime as an increasingly profitable business for organised crime, requiring further actions

1.4 1.4 International context

EU action in the area of environmental crime takes place in a wider context of international agreements and moves to combat crime, such as the UN Convention against Transnational Organised Crime (UNTOC)[27] and the UN Conventions against corruption[28] and money laundering[29]. The UNTOC e.g. sets a framework for international cooperation to combat transnational organised crime groups. It applies to crimes that according to national law are punishable by a maximum sanction of at least four years.[30] However, most Member States do not provide for the required level of sanctions[31] and thus the Convention is not applicable to most environmental crimes.

The Council of Europe (CoE) is currently reviewing[32] its 1998 Environmental Crime Convention. The Convention has been the first international instrument to define environmental crime and require adequate sanctions.[33]

More recently, the UN General Assembly has called on its Member States[34] to make illicit trafficking in protected species of wild fauna and flora a serious crime to ensure that effective international cooperation takes place under the UN Convention.

Further, the G7 countries recently committed to strengthening international and transboundary cooperation to tackle and address illegal wildlife trade as a serious crime.[35]

The G20 countries recently reiterated their determination to step up efforts to end illicit threats to nature and crimes, including illegal logging and illegal wildlife trade, as well as to intensify cooperation to combat illicit financial flows deriving from crimes that affect the

[26] Communication from the Commission on the EU Security Union Strategy. COM(2020) 605

[27] United Nations Conventions against Transnational Organized Crime, General Assembly resolution 55/25 of 15 November 2000; the UN Security Council recognised that, as a transnational organized crime, environmental crime sometimes benefits non-state armed groups and terrorist organizations. More specifically: "the illicit trade in natural resources including gold and other precious metals and stones, minerals, wildlife, charcoal and oil". Resolution 2195(2014), 19 December 2014.

[28] United Nations Convention Against Corruption,UN General Assembly Resolution 58/4 of 31 October 2003.

[29] Financial Action Task Force (FATF), International standards on combatting money laundering and the financing of terrorism & proliferation, 2012.

[30] United Nations Convention against Transnational Organized Crime, Art. 3.

[31] EnviCrimeNet, Report on Environmental Crime, May 2016, p. 28.

[32] A working group has been established on how to revise the Convention to make it acceptable to Member States. The study would include substantial criminal law (including the link between criminal law and administrative law), sanctions (including reinstatement of the environment), cross-border cooperation and investigative tools (including concrete implementation methods). Accordingly, there is a large overlap with the Environmental Crime Directive.

[33] Council of Europe, Convention on the Protection of the Environment through Criminal Law, ETS n°172, 4 November 1998; R. Pereira, 'The External Dimensions of the EU Legislative Initiatives to Combat Environment Crime', *Spanish Yearbook of International Law*, 2015, p. 252.

[34] UN General Assembly Resolution on Tackling illicit trafficking in wildlife, A/RES/75/311 (23 July 2021).

[35] G7 UK Presidency 2021, Climate and Environment Ministers' Communique (21 May 2021).

environment, by implementing, inter alia, the global standards and recommendations of the Financial Action Task Force (FATF).[36]

A number of environmental sectors are regulated by international agreements and instruments notably the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),[37] the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)[38] or the Convention for Prevention of Pollution from Ships (MARPOL).[39] These international instruments have been transposed into EU sectoral legislation. Serious violations of these rules have been addressed by EU criminal law, including the Environmental Crime Directive and sanctions provisions in sectoral legislation.[40] In general, sectoral legislation leaves it to the Member States to decide whether the sanctioning regime for violations should be criminal or non-criminal.

2 PROBLEM DEFINITION AND DRIVERS

2.1 2.1 What are the problems and drivers that the review of the Directive seeks to address?

The review seeks to address six main problems inherent in the Directive's current limited scope and content that were identified during the evaluation of the Directive and which contribute to the Directive's ineffectiveness. These six main problem are described in more detail below, along with their regulatory and practical drivers. The order of presentation follows the structure of the current Directive and does not necessarily correspond to the importance of the problems in terms of their effects. Actually, the problems interact and have a cumulative impact on the Directive's (lack of) effectiveness.

2.1.1 *2.1.1 Problem 1: The Directive's scope is outdated and defined in a complex way, hindering effective investigations, prosecutions and cross-border cooperation.*

Criminal offences as defined by the Directive presuppose 'unlawful' behaviour defined as a breach of EU sectoral legislation listed in two annexes to the Directive. The listed legislation is linked to nine categories of environmental criminal offences described under Article 3 of the Directive (including pollution, waste management, shipment of waste, operation of a plant involving dangerous activities or materials, the handling of hazardous materials, wildlife crime, the handling of ozone-depleting substances). Most of these crime categories require further material elements that make a breach of sectoral legislation a crime - such as substantial damage to the environment or serious injury to persons. Some crime categories

[36] G20 Environment Communique (July 2021). FATF Standards identify environmental crimes as one of the designated categories of crimes for money laundering. This means that countries should criminalise a sufficient range of environmental crimes for money laundering in line with their risk environment, see Report, Money Laundering from Environmental Crime (July 2021).
[37] Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington, 3 March 1973.
[38] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 22 March 1989.
[39] The International Convention for the Prevention of Pollution from Ships (MARPOL), London, 2 November 1973.
[40] For example, CITES Regulation, Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on ship-source pollution and on the introduction of penalties for infringements OJ L 255, 30.9.2005, pp. 11–21.

criminalise the violation of relevant sectoral obligations without requiring any damage to be caused, e.g. Article 3 c) regarding the shipment of waste, or Article 3 i) regarding ozone-depleting substances, which both exclude negligible cases.

The corresponding environmental legislation in the annexes is largely outdated, as 46 out of the 72 pieces of listed legislation meanwhile have been repealed or replaced. New Union legislation, such as the Reach Regulation on chemical products or the Plant Protection Regulation on pesticides, and new crime categories, such as forestry crime, illegal logging and timber trade, ship-source pollution or trade in f-gases, have not been included since the Directive entered into force.

Independently of the Directive, Member States are generally required to have sanctions for infringements of EU sectoral legislation[41], but they can choose to have administrative-law sanctions or criminal-law sanctions or a combination of these. EU environmental legislation does not, and cannot, set specific levels and types of criminal sanctions, only a criminal law directive can based on Article 83 TFEU.

In addition, where crime areas are not covered by the Directive, it is for the Member States to decide whether or not to provide for criminal liability in their national legal frameworks and how to define the crime.[42] Where Member States do not at all criminalise a given environmental crime area, cross-border cooperation becomes difficult for lack of dual criminality. Thus, criminal investigations initiated in one Member State have to be discontinued or limited. The same issue occurs where Member States define differently an environmental crime category.

This situation adds to the complexity of environmental criminal law already driven by its dependency on administrative legislation. Law enforcement practitioners are confronted with a complex and scattered legal framework at both EU-and national level, which lacks an internal logic. This leads to environmental crime proceedings rather not being initiated, as the applicable rules are confusing and thus the prospects of success of a criminal investigations – in particular with regard to cross-border implications – are hard to evaluate.

There are no statistics on how many environmental crime cases were not successfully investigated due to this issue. Statistics, however, evidence that the number of investigations and convictions has remained at a very low level across Member States over the past decade. A large majority of the practitioners and their networks confirmed, within the targeted stakeholder consultations that gaps in and uncertainties about the scope and the complexity of environmental crime as described above contribute to the ineffectiveness of the Directive.

The Directive has not been updated in line with the development of EU environmental law and it does not respond to current challenges and new trends in environmental crime. It does

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[41] See Case 68/88 *Commission* v *Hellenic Republic* [1989] ECR 2965, paras 23, 24 and 25.

[42] EU Sectoral legislation contains requirements to sanction as well, but leaves typically to Member States whether the sanctions would be criminal or non-criminal.

not cover categories of offences linked to EU environmental legislation adopted after 2008 (see examples below).

In particular, the Directive does not cover such activities harmful to the environment and to human health as illegal trade in timber, unlawful manufacture, importation of placement on the market of chemical substances, including those which are banned or restricted, placing on the market of products breaching standards, which as a result of the product's mass use cause damage to the environment or human health, illegal execution of development projects which cause substantial damage, illegal recycling of ships, illegal abstraction of water, intentional introduction or spread of invasive alien species of Union concern, illegal placing on the market of fluorinated greenhouse gases. The acceleration of climate change, biodiversity loss and environmental degradation, paired with tangible examples of their devastating effects, have led to the necessity to step up enforcement action against illegal harmful activities accelerating such harmful effects. In these areas, even if sectoral law is advanced, there is still an important gap in terms of enforcement (see examples below). Infringers often face low risks of detection, and even lower risks of prosecution and sanctioning, while financially gaining from the avoidance of environmental safeguards. This also gives rise to organised crime harming the environment.

Also, for some offences under the current Directive, the protection is of limited scope and thus do not have the desirable effect to protect the environment. For example, this concerns offences linked to the protection of wildlife. In the last four decades, global wildlife populations fell by 60% as a result of human activities[43]. Globally, up to one million species are threatened with extinction. Biodiversity loss and ecosystem collapse are one of the biggest threats facing humanity in the next decade.

Example: Ship Recycling Regulation

The adoption of Regulation (No) 1257/2013 on ship recycling (SRR) introduced obligations for ship owners regarding the recycling of large commercial seagoing vessels flying the flag of EU Member States. This Regulation is aimed to 'prevent, reduce, minimise and, to the extent practicable, eliminate accidents, injuries and other adverse effects on human health and the environment caused by ship recycling'.[44] It seems, however, that the SRR has had so far limited effects because ship owners have managed to circumvent their legal obligations[45]. As the Regulation only applies to ship registered under EU/EEA flag, ship owners could easily re-flagged their ship and avoid any sanction for non-compliance with the previously mentioned regulation. Re-flagging appears in fact, to be the major problem of ship recycling

[43] World Wildlife Fund (2018), Living Planet Report - 2018: Aiming Higher.
[44] Regulation (EU) No 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) No 1013/2006 and Directive 2009/16/EC, article 1; https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013R1257.
[45] According to the NGO Shipbreaking Platform, European shipping companies own 40% of the world fleet but only 5% of end-of-life ships were registered under EU/EEA flag in 2020. See NGO Shipbreaking Platform, Press Release – Platform publishes list of ships dismantled worldwide in 2020; Press Release - Platform publishes list of ships dismantled worldwide in 2020 (shipbreakingplatform.org).

according to recent data (OECD report, 2019).[46] This has consequences for the economy, the environment and human health. Non-compliance with Article 6(2)(a) of that Regulation which requires the ship-owners to ensure that their ships destined for recycling are only recycled in the specific facilities included on the EU List of ship recycling facilities is currently not a subject to a strong regulative response.

The use of 'flag of convenience' has allowed ship owners to avoid the sanctions under SRR Regulation[47]. Besides, the level of sanctions has not deterred ship owners from such practice as most Member States have favoured administrative sanctions over criminal ones (e.g. Lithuania, Hungary, Latvia, Belgium).[48] Illegal ship recycling is sometimes linked to other criminal conducts such as money laundering and terrorism. The transboundary nature of the offences requires a stronger legal framework at EU level to ensure greater responsibility and justifies using criminal sanctions.

Example: EU Timber Regulation

Illegal logging and related illegal timber trade represent a persistent problem with global consequences as it leads to deforestation. These crimes belong to the most profitable crimes worldwide and cause costs valued at US$51–152 billion annually according to a recent WWF report.[49] According to another WWF report,[50] 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. These undermine efforts to reduce emissions from the forest sector and support sustainable management of forests.[51] An analysis of available statistics shows that especially illegal logging is a frequent offence in Member States like BG, RO, HU, LV, and LT.[52] To combat illegal timber trade, the EU has adopted the Timber Regulation (EUTR),[53] which prohibits the placing of illegally harvested timber and products and includes a provision on sanctions. However, the EUTR is not included in the annexes of the Directive and there is no relevant offence in Article 3 ECD. Member States have put in place different types of sanctions, including criminal sanctions introduced in some Member States. However,

[46] OECD (2019), Ship recycling: An overview OECD science, technology and industry policy paper; Ship recycling (oecd-ilibrary.org).
[47] European Commission (June 2016). Financial instrument to facilitate safe and sound ship recycling: Final report; financial_instrument_ship_recycling.pdf (europa.eu), p. 95.
[48] European Commission (2020). Relevant national laws relating to the enforcement of the EU Ship Recycling Regulation and applicable penalties; https://ec.europa.eu/environment/pdf/waste/ships/MS%20enforcement%20provisions%20SRR%20(website).pdf.
[49] WWF. (2019). WWF Enforcement Review of the EU Timber Regulation (EUTR). EU Synthesis Report. wwf_eutr_implementation_eu_synthesis_report_2019.pdf (panda.org), p. 3.
[50] WWF, 2016. Failing the Forests Europe's illegal timber trade. Available at: https://wwfeu.awsassets.panda.org/downloads/failingforests.pdf
[51] WWF. (2019). WWF Enforcement Review of the EU Timber Regulation (EUTR). EU Synthesis Report. wwf_eutr_implementation_eu_synthesis_report_2019.pdf (panda.org), p. 3.
[52] See also Council of the European Union, "HR and HU Replies to Questionnaire 10954/19 on the State of Environmental Law in the EU."
[53] Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market, OJ L 295, 12.11.2010, pp. 23–34.

there are large disparities[54] and too low sanctions are imposed in practice, which hinders the effectiveness and the credibility of the national enforcement systems[55] and undermines the effective implementation of EUTR.

Example: chemicals legislation

Numerous reports point out problems with the enforcement chemicals legislation, such as REACH[56], CLP[57] and POPs[58], and risks for human health and environmental which require a stronger legal framework.[59]

Enforcement challenges and low sanctions imposed for breaches hamper the effectiveness of legislation and are an obstacle for a level playing field. For instance, regarding REACH and CLP, there are large disparities between national sanctioning systems and in several Member States the most serious infringements are addressed by relatively low administrative sanctions only. A study from 2020 showed clear differences in the enforcement practices of the Member States, with two countries, namely Germany and Sweden, accounting for two thirds of the total referrals to the state prosecutor office, and one country imposing 40% of the administrative fines in the Union in the reporting period.[60]

The enforcement shortcomings prompted the Commission to commit to a 'zero tolerance approach to non-compliance'[61] as outlined in the Chemicals Strategy for Sustainability. In this regard, extending the scope of chemicals offence under the Environmental Crime Directive is crucial as 'currently almost 30% of the alerts on dangerous products on the market involve risks due to chemicals, with almost 90% of those products coming from outside the EU and

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[54] For example, fines also vary from one country to another 'ranging from €2,500 to €24,000,000, while in some cases there are no fixed fines', see WWF. (2019). WWF Enforcement Review of the EU Timber Regulation (EUTR). EU Synthesis Report. wwf_eutr_implementation_eu_synthesis_report_2019.pdf (panda.org).

[55] European Commission. (2018). Report from the Commission to the European Parliament and the Council 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 (the EU Timber Regulation) Biennial report for the period March 2015 - February 2017. COM(2018) 668 fin. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0668&from=EN.

[56] Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02006R1907-20211001.

[57] Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02008R1272-20211001.

[58] Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants (recast), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019R1021-20210315.

[59] European Commission. (2020). Communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Chemicals Strategy for Sustainability Towards a Toxic-Free Environment. COM(2020) 667 final, resource.html (europa.eu), p. 9.

[60] European Commission. (2020). Technical assistance to review the existing Member States reporting questionnaire under articles 117(1) of REACH and 46(2) of CLP Final report. Final report_REACH-CLP MS reporting_2020.pdf (europa.eu), p. 104.

[61] European Commission. (2020). Communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Chemicals Strategy for Sustainability Towards a Toxic-Free Environment. COM(2020) 667 final, resource.html (europa.eu), p. 17.

imported articles and online sales representing a particular challenge.[62] Hence, EU action appear to be necessary to ensure harmonization of the national enforcement systems and to strengthen the enforcement of REACH at the EU's borders.[63]

Example: Invasive Alien Species Regulation

The illegal spread of Invasive Alien Species (IAS) can seriously harm the environment (e.g. extinction of indigenous species) and the economy (e.g. reducing yields from agriculture, forestry and fisheries). IAS cost the European economy 12 billion euros per year[64] and are risky for the human health (e.g. serious allergies and skin problems; burns caused by the giant hogweed). IAS is one of the five major causes of biodiversity loss in Europe and in the world. According to the IUCN Red List, among the 1872 species considered as threatened in Europe, 354 are directly affected by IAS.[65] The increase of IAS is linked to intentional introduction (e.g. pets, horticulture) and absence of effective control measures.

Article 15 of the IAS Regulation provides that Member States shall have in place fully functioning structures to carry out the official controls necessary to prevent the intentional introduction of IAS of Union concern but several challenges appear in practice.

Article 30 of the IAS Regulation requests MS to ensure that infringements of IAS related offences are punished by penalties,[66] including fines, seizure of the non-compliant invasive alien species of Union concern or immediate suspension or withdrawal of a permit. Some Member States have introduced criminal sanctions but there are serious discrepancies among them concerning the types and levels of criminal penalties. For example, the lowest maximum imprisonment penalty is one month (Luxembourg) while Italy and Belgium (Flanders) provide for the highest maximum imprisonment term of three years and five years, respectively.[67] Sanctions are not comparable and in many instances not dissuasive which can hamper tackling illegal IAS related activities and effective cross-border cooperation. Challenges exist also as regards detection of breaches and identification of offenders.

Drivers

There are two drivers to the problem of the Directive becoming outdated over time and not covering all relevant legislation.

- The approach of the Directive to define environmental law is based on the breach of sectoral legislation referred to in the annexes. Although this reference is a dynamic one and refers to the legislation in annexes in its up-to-date form, new relevant sectoral legislation is not automatically covered.

[62] Ibid.
[63] Ibid, p. 18.
[64] Kettunen M. et al. (2009). Assessment of the impacts of IAS in Europe and the EU.
[65] Genovesi P, Carnevali L, Scalera R (2015). The impact of invasive alien species on native threatened species in Europe.
[66] Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species; https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1417443504720&uri=CELEX:32014R114.
[67] Viñuales J.E. 2019. Analysis of national provisions on penalties – Article 30. Technical note prepared by IUCN for the European Commission, p. 73.

- There is no easy and functioning mechanism to update the Directive and its annexes and bring new legislation under its scope.

Currently, recital 15 of the Directive states *"Whenever subsequent legislation on environmental matters is adopted, it should specify where appropriate that this Directive will apply. Where necessary, Article 3 should be amended."* In practice, although new legislation has been adopted since 2008, it does not refer to the Environmental Crime Directive nor has Article 3 ever been amended to include such new crime categories. Instead, sectoral environmental legislation includes its own rules on sanctioning and penalties that are often generic and leave the choice of whether and when criminal sanctions should apply to the Member States. Ultimately, this is an issue of incoherence between the Directive and sectoral legislation that is addressed below under section 6.3.5.

2.1.2 *2.1.2 Problem 2: Unclear definitions of environmental crime which may hinder effective investigations, prosecutions and cross-border cooperation*

Definitions in Article 3 contain flexible but unclear legal terms such as 'substantial damage', 'non-negligible quantity', 'negligible quantity', 'dangerous activity', and 'significant deterioration', and thus leave much room for interpretation. Their meaning also depends on the circumstances of the individual case and the environmental crime area concerned.. Differences in interpretation do not only occur between Member States, but even within Member States.[68] Uncertainty about the meaning of terms used to define environmental crime can lead to environmental crime investigations not be taken up[69]. Different views of what is a crime can also lead to investigations coming to a halt, hampering cross-border cooperation, for example that a European Investigation Order or European Arrest Warrant is not executed.[70] This contributes to a situation in 2020 where environmental crime - although deemed the fourth most profitable criminal activity in the world - only accounted for 1% of the cases dealt with by Eurojust[71], while only 2148 out of 1,2 million (0.2%) messages exchanged through Europol's SIENA platform[72] were related to environmental crime. There are no statistics on environmental crime cases that were not investigated or were stopped due to uncertainty about the legal terms used to define environmental crime. Yet, practitioners and their networks in the targeted stakeholder consultations confirmed that this problem is real.

Drivers

Member States have mostly not defined these terms further in their transposing laws. For example, the term 'substantial damage' that is used under Article 3 a), b), d) and e) has been

[68] For a detailed overview of the Member States' approach towards transposing the Directive on this point see SWD (2020) 259 final, section 5.1.1. (undefined legal terms) and section 6.1.1. (level playing field).
[69] Europol response to stakeholder consultation.
[70] Eurojust, Report on Eurojust's Casework on Environmental Crime - January 2021, p. 13.
[71] Ibid., p. 7.
[72] Secure Information Exchange Network Application (SIENA), a platform that enables the swift and user-friendly exchange of operational and strategic crime-related messages among law enforcement officers in Member States, Europol liaison officers and third parties with which Europol has agreements.

transposed by most Member States either literally or by using similar wording such as 'significant damage' or 'substantial harm', without further refining its meaning[73]. Where Member States did define this term, they did so in different ways. Some defined it financially (e.g. with regard to profits lost or to money needed to restore the *status quo ante*), while others focused on the quality of the environmental loss (e.g. in terms of size of the geographic area polluted or destroyed, in terms of the time and effort needed to restore the damage, in terms of damage duration)[74].

2.1.3 *2.1.3 Problem 3: Sanction levels are not sufficiently effective and dissuasive in all Member States*

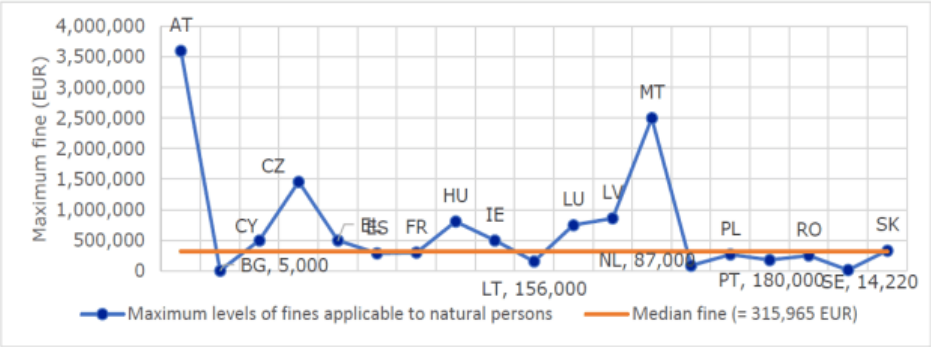
Although after the Directive entered into force, sanction levels went up significantly in the Member States, there are still Member States that do not provide for maximum sanction levels that ensure effectiveness, dissuasiveness and proportionality- as shown in more detail below.

> *Maximum sanction levels available in Member States national law vary largely and are often not dissuasive.*

The following graph illustrates large differences in available maximum fines for e.g. Article 3(h) offenses.

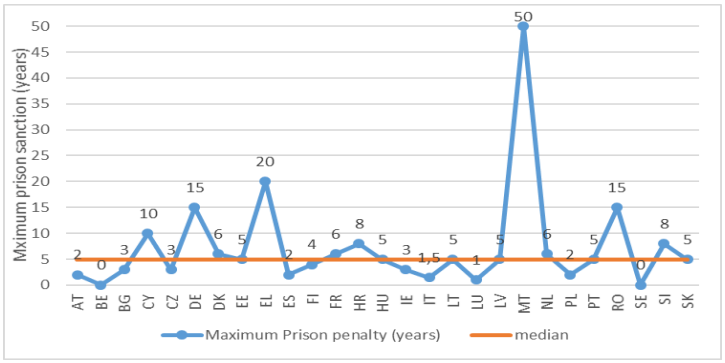
[73] See evaluation report for further details.
[74] CZ and SK define 'substantial damage' financially, with values ranging from €20,000 (CZ) to 26,660 (SK). CY, FI, LV, PT and RO use qualitative criteria, such as the damage being irreversible or long lasting. FR has issued detailed instructions in a Circulaire along the same lines.

Figure: Maximum levels of criminal fines, applicable to natural persons (EUR) in EU Member States for Article 3(h) offense, and median fine[75]



The levels of maximum prison penalties also vary significantly. The graph below illustrates large differences for crimes covered by Article 3(h). A common understanding of what are effective and dissuasive sanction levels has not emerged.

Figure. Maximum criminal prison sentences available in national law for Article 3 (h) offenses. 50 years=life imprisonment (Source: Evaluation report)



Natural persons

FR, IT, LT provide for maximum levels of financial penalties for natural persons below EUR 100 000 for some Article 3 criminal offenses, while BG, NL, RO, and SE provide for maximum fines below this threshold for all Article 3 offenses. The evaluation found that this amount was well below the average of all Member States together and unlikely to be dissuasive in all circumstances, given that environmental crime causes enormous harm and illegal profits can amount to millions of euros.

Also with regard to prison penalties, a number of Member States only provide maximum penalties of 3 years or less in their national law for environmental crimes. These penalty

[75] A number of MS are not represented in the graph; this is the case for DE and BE, for technical reasons: they have very high maximum fines applicable to natural persons (MEUR 10.8 in DE, MEUR 0.8 in BE at Federal level, MEUR 4 in Flanders, MEUR 8 in Wallonia and in Brussels). Other Member States are not represented on the graph for the following reasons: in DK, no minimum or maximum fine levels are set by law; in HR, EE, FI and SI, the level of the fine is linked to the offender's income, and in IT, the law only provides for a minimum fine, not a maximum one.

levels are low compared to minimum levels for maximum sanctions in other Directives on serious crimes, such as the Anti-Money laundering Directive (4 years),[76] the Counterfeiting Directive (5 to 8 years, depending on the crime),[77] or serious drug trafficking offenses listed in the Council Framework Decision (5 to 10 years, depending on the crime).[78]

Table 1, Number of article 3 offences per maximum prison sanction per Member States

Number of Article 3 offenses per maximum prison sanction per Member State

Maximum prison sanctions	AT	BE (fed)	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	Total MS
none	-	2 (+2 N/A)	-	-	-	-	gap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	**3**
0-1 years	2	1	-	-	2	-	-	-	-	1	-	-	-	-	1	1	-	5	-	-	-	-	1	-	-	-	-	**8**
1.5-2 years	2	-	-	-	1	-	-	2	-	3	1	3	-	-	1	3	1	-	2	-	-	2	1	-	4	-	1	**14**
3 years	-	1	1	-	5	-	-	-	-	1	-	3	1	1	5	-	1	1	-	-	-	-	1	1	-	1	1	**27**
+3 years	5	3	8	9	1	9	8	7	9	4	8	3	8	8	2	5	7	3	7	9	9	7	6	8	4	8	7	

Legal persons

Legal persons typically have much more financial flexibility and capacity to compensate financial penalties than natural persons, as the potential risk of financial penalties can be calculated and passed on to consumers.

As with sanctions for natural persons, maximum levels of fines for legal persons diverge significantly across Member States. E.g. maximum fines for offenses under Article 3(c), range from around MEUR 0.2 in LU to MEUR 250 in SE. Overall, many Member States remain at or below MEUR 0.5 for a number of Article 3 offences (BE, BG, CY, EL, FR, IT, LU, RO).

Moreover, although linking the level of fines to the level of illegal profits or the financial situation of the legal person can be an effective way to define proportionate sanction levels, only a few Member States use this approach in their national laws: NL, PL and AT base the level of fines on the annual turnover or income of the legal person[79]. HU takes into account the financial advantage gained from the offence or the financial situation of the legal persons.

Sanction levels imposed in practice are too low to be dissuasive.

Even where national criminal law provides for high maximum sanction levels, criminal judges do not make full use of the available sanction range, but rather stay in the lowest segment. Imprisonment sanctions are rare, and suspended in practice.[80]

Example: Smuggling in Rotterdam

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[76] Directive (EU) 2018/1673 of the European Parliament and of the Council of 23 October 2018 on combating money laundering by criminal law OJ L 284, 12.11.2018, pp. 22–30.
[77] Directive 2014/62/EU of the European Parliament and of the Council of 15 May 2014 on the protection of the euro and other currencies against counterfeiting by criminal law, and replacing Council Framework Decision 2000/383/JHA OJ L 151, 21.5.2014, pp. 1–8.
[78] Council Framework Decision 2004/757/JHA of 25 October 2004 laying down minimum provisions on the constituent elements of criminal acts and penalties in the field of illicit drug trafficking OJ L 335, 11.11.2004, pp. 8–11.
[79] Evaluation report, p. 32.
[80] Europol in an interview highlighted that even if certain prison sentences are available in principle, their suspension might impact the effectiveness and dissuasiveness of the sanctions.

In 2019, in the NL, the prosecution required an unsuspended prison sentence of 20 months for the import of six containers of illegal and environmentally harmful crop protection products of an estimated value of MEUR 5 and an estimated potential illegal profit above MEUR 4. The judge imposed a suspended sentence of 6 months and a fine of EUR 400 000[81], while the smuggling of small amounts of drugs in the NL is typically sanctioned by a year imprisonment.

Statistical data on the level of fines imposed are scarce (problem 5); notably some data exists for FR, IE and LV on average fines. For natural persons, in 2016, levels of fines for environmental crime were in the order of EUR 5500 in FR, EUR 3500 in IE, and EUR 2000 in LV.[82] In IE, between 2004 and 2014, average fines of EUR 1400[83] were imposed. In FI and FR, average prison sentences of 5 months were given in 2016, whilst it was 21.5 months in LV.[84]

For legal person, several studies (on DE[85] and other Member States[86]) raised doubts on the sanction levels imposed in practice. In IE, for the period 2004-2014, average fines amounted to EUR 7000[87]. In 2016, average fines were EUR 21 000 in FI, EUR 16 000 in FR and EUR 3500 in IE. In NL, the average criminal fine for companies was less than 1% of annual profit in 90% of cases[88]. Given the high profits for environmental crimes that can amounting to millions of Euros, these levels are inappropriate.

Additional consequences for cross-border cooperation (objective 4)

Access to special investigative techniques such as surveillance of telecommunications and undercover investigations is normally conditional on the seriousness of the environmental crime defined by a certain minimum or maximum level of penalties that is available for the suspected crime. Member States that regard environmental offences as minor will only have the standard investigative tools at their disposal. This can prevent cross-border cooperation,[89] for example if surveillance measures, which are often linked to the penalty threshold, ordered in one Member State cannot be continued or complemented in another Member State involved.

[81] 'Rechtssysteem schrikt pleger milieudelict onvoldoende af', NRC Handelsblad, 8 July 2021, Interview with Rob de Rijck, national coordinating prosecutor for environmental crime in the Netherlands.
[82] Evaluation report, p. 246.
[83] Michael J. Lynch, Paul B. Stretesky & Michael A. Long (2019) Environmental crime prosecutions in Ireland, 2004–2014, International Journal of Comparative and Applied Criminal Justice, 43:4, 277-293, p. 285.
[84] Evaluation report, p. 251.
[85] OECD as cited by Sina, S., "Environmental criminal law in Germany", in Farmer, A., Faure, M.G. & Vagliasindi, G.M. (eds.), Environmental Crime in Europe, Oxford, Hart Publishing, 2017, pp. 95-117.
[86] M. Faure, Environmental Liability of Companies, 2020, p. 84.
[87] Michael J. Lynch, Paul B. Stretesky & Michael A. Long (2019) Environmental crime prosecutions in Ireland, 2004–2014, International Journal of Comparative and Applied Criminal Justice, 43:4, 277-293, p. 285.
[88] Netherlands Court of Auditors, Enforcing in the Dark: Combating to environmental crime and violations, part 2, 2021, p. 56.
[89] Report on Eurojust's Casework on Environmental Crime – January 2021, p. 13.

Low maximum sanction levels can also hamper the use of EU- or international cooperation instruments. For example, the UNTOC – that sets out a framework for international cooperation for serious crime – makes the use of investigative tools provided therein subject to a maximum penalty of at least 4 years of imprisonment, and the European Arrest Warrant to a maximum penalty of at least 1 year of imprisonment. Here also, effective criminal proceedings and cross-border cooperation can be hampered, if not made impossible.

Stakeholders

Stakeholders consider that fines and imprisonment sanction levels imposed in practice are not dissuasive: 65% of public consultation respondents did not find sanction levels sufficiently deterring and only 10% considered them satisfactory[90]. Whilst law enforcement practitioners repeatedly pointed out the low, non-dissuasive sanction levels imposed in practice.[91]

Drivers

The main problem driver is the lack of specificity of the Directive, which only requires sanctions to be 'effective, proportionate and dissuasive'. Pre-Lisbon,[92] the EC legislator did not have the competence to regulate on sanction types and levels. This is now possible under the new Article 83 (2) TFEU. Hence, EU criminal law instruments adopted after the entry into force of the Lisbon Treaty contain minimum maximum levels of fines and prison sentences. For legal persons, there is often a catalogue of possible accessory sanction that Member States should make available, such as exclusion from public procurement procedures and grants.

In addition, lack of awareness of the harmfulness of environmental crime contributes to criminal judges imposing non-dissuasive sanctions (see below problem 6), as confirmed by the police and judiciary. Thus, many cases are dismissed in court, or only very lenient sanctions imposed.[93]

2.1.4 *2.1.4 Problem 4: Insufficient cross-border cooperation.*

The Directive did not prove to be a decisive element for fostering cross-border cooperation in practice. Environmental crime cases currently amount to only 1% of total Eurojust cases,[94] although environmental crime is the fourth most profitable criminal activity globally, and important environmental crime categories, such as waste trafficking and wildlife trafficking, frequently involve criminal activity in several Member States.[95] Europol and Eurojust

[90] Results of the open public consultation, Question 4, point c, 68% of respondents considered this the case to a large extent. The answers of businesses only are similar (50% agree, and 16% consider sanction levels to be sufficient).
[91] Evaluation report, p. 40, interview with Europol.
[92] The Commission had, in case C 176/03 (2005) been given the power to propose legislation in the area of community law ("first pillar") requiring Member States to impose effective, proportionate and dissuasive criminal penalties for environmental offenses, although the MS retained the choice to determine the precise quantum and nature of penalties (para. 49).
[93] IPEC (Intelligence Project on Environmental Crime), based mainly on a questionnaire sent to EU countries, non-EU countries, and international organisations.
[94] Note that environmental crime cases may be hidden in other crime cases dealt with by Europol, e.g. under the crime categories 'organised crime'.
[95] Eurojust, Report onEurojust's Casework on Environmental Crime, January 2021, p. 7.

reported small improvements in cooperation in recent years, but these remain overall insufficient. For example, while in 2020 Eurojust reported 1264 new cases on swindling and fraud, 595 on money laundering and 562 on drug trafficking, only 20 new cases on environmental crime were opened. In the same year, only 3 out of 74 newly signed Joint Investigation Teams and 6 out of 260 existing Joint Investigation Teams related to environmental crime.[96]

Cooperation and coordination are also necessary within Member States, since detection, investigation and prosecution may all involve different authorities. Weak domestic cooperation and coordination are also an issue mentioned under problem 6 below.

Drivers

The lack of a more harmonized approach to fight environmental crime creates legal and operational obstacles to Member State authorities to effectively cooperate and jointly investigate transnational, cross-border environmental crime. In particular, intrusive investigative tools are not available in all Member States. Further, as demonstrated above the limited scope of the Directive and vague terms used in the Directive to define environmental crime can result in dual criminality issues during cross-border investigations. The Directive does not contain provisions directly fostering cross-border cooperation such as harmonised rules on jurisdiction, investigative tools or the set-up of national contact points.[97]

The Directive does not include any provision obliging Member States to work better together, e.g. through Europol, Eurojust, OLAF and the professional networks during investigations. These agencies and bodies play a key role in facilitating cross-border cooperation on crime, including environmental crime. However, Eurojust as the main operational body to foster cross-border judicial cooperation depends on Member States requesting their support. Stakeholders confirm a lack of knowledge of practitioners of the role of Eurojust and Europol and of how to use the existing tools, such as Joint Investigations Teams.

Only few environmental crime cases lead to few cross–border cooperation. As shown further below, the lack of implementation contributes largely to this situation.

2.1.5 *2.1.5 Problem 5: lack of statistical data*

In all Member States, there is a lack of statistical data on investigations, prosecutions, convictions, dismissed cases, number of legal persons involved, and the level and type of sanctions imposed. This was shown in the evaluation of the Directive and in the results of the 8th Mutual Evaluations on the effectiveness of EU policies on environmental crime. At EU level, Eurostat has a mandate to develop comparable statistics on crime and criminal justice, but the national authorities are responsible for the official figures sent to Eurostat according to their own methodologies and documentation systems.

[96] Eurojust, Annual Report 2020, p. 27.
[97] Such provisions are present in other EU-criminal law instruments, see annex 6.

A lack of statistical data results in limited information on the entire flow of cases over the whole law enforcement chain, from administrative inspections and police and prosecution services to the criminal courts. Against this backdrop, Member States' performance cannot be compared. Such lack of data also makes it difficult for policymakers and practitioners to monitor the effectiveness of their policies, to identify obstacles in the law enforcement chain and to take targeted and informed decisions[98]. The evaluation found this lack of statistical data to drive other problems, notably the general public's lack of awareness of the scale and impacts of environmental crime, the lack of political prioritisation of environmental crime and the lack of the necessary budget, human and financial resources for law enforcement authorities.[99]

Drivers

Also this problem has several drivers. Firstly, in most Member States, relevant statistics are fragmented and based on multiple individual statistical sources, as they are collected separately by each individual authority involved in preventing and combating environmental crime, without coordination or integration.[100]

Secondly, each Member State establishes its own criminal laws, crimes, legal proceedings and justice responses, as well as specifications for official crime statistics. Such methodological differences make it very difficult to compare statistical data. The crime and criminal justice related metadata and quality reports[101] detail these key methodological differences:

- different stages of data collection (input, process or output statistics for offences recorded by the police; or before and after appeal for court statistics);
- different accounting units (offence, case, incident for police statistics, or number of people charged or proceedings for court statistics);
- counting rules for multiple (serial) offences of the same type;
- counting rules when an offence is committed by more than one person;
- use of principal offence rule, and others.

Thirdly, perpetrators are often prosecuted under other crime categories,[102], such as organised crime, fraud, falsification of documents, trafficking of goods or economic crime. Serious environmental wrongdoing is thus often hidden in existing statistics and its impact on the environment is seldom the focus of prosecutions.[103]

The Directive does not include any provision to address collection and reporting of statistical data, or provide a framework to collect data in a comparable manner across Member States.

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[98] See for example, the Ntherlands Court of Auditors, Handhaven in het Duister: De aanpak van milieucriminaliteit en overtredingen (2021), p.4; the lack of statistical data leads to a lack of insight into the problem and to inadequate policy interventions.
[99] SWD Evaluation of 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), p. 32.
[100] See the findings on statistical data in the final report of the 8th Mutual Evaluations, see Footnote 10.
[101] Crime and criminal justice ESMS (reference metadata in Euro SDMX metadata structure), compiled by Eurostat, available at: https://ec.europa.eu/eurostat/cache/metadata/en/crim_esms.htm#relatedmd1594302694764.
[102] Council of the European Union, Report on Belgium (8th Mutual Evaluations Round).
[103] Giovanni F. Perilongo and Emanuele Corn, 'The Ecocrime Directive and Its Translation into Legal Practice', 2017.

2.1.6 *2.1.6 Problem 6: ineffective enforcement chain*

Effective crime detection, investigation, prosecution and adjudication ("the enforcement chain") are essential for the Directive to be effective in practice. The evaluation found that offences under the Directive are not sufficiently investigated, prosecuted and tried in practice. Numerous studies (see evaluation report, section 5.1.4. – 'practical implementation') have identified the need for improvement at all levels of the enforcement chain (detection, investigation, prosecution, conviction) and in all Member States. Recently, the European Parliament in a 2021 Resolution on the liability of legal person for environmental damage stressed the need to ensure the effective enforcement of existing legislation on environmental crime (Recommendation 11).[104]

According to the results of the 2019 Council 8th Mutual Evaluations, all Member States have shortcomings in one or more points of the criminal law enforcement chain.[105] Every single point is important for the functioning of the enforcement chain as a whole. An overview on the situation in the individual Member States is provided in annex 4.[106]

Specific issues important for effective implementation such as cross-border cooperation, the collection of statistical data, the availability of appropriate investigate tools and adequate sanctioning in practice are addressed separately above under problems 3, 4 and 5.

Drivers

The reasons driving the problems concerning detection, investigation and prosecution of environmental crime in the Member States stem from weaknesses of enforcement efforts, lack of awareness and political prioritisation.

First, as described under problem 5, the lack of statistics on environmental crime and a lack of specialised knowledge of many law enforcement authorities on the harmfulness of environmental crime leads to a lack of awareness of the harmfulness and size of environmental crime with decision makers on both political and implementation level. This in turn leads to a lack of prioritisation. Necessary resources and efforts are allocated to other crime areas.

Enforcement authorities do not have the necessary financial and human resources, there is a lack of training and specialisation, data – and information collection and sharing. Integrated strategies tying together all levels of the enforcement chain (detection, investigation, prosecution, sanctioning) are missing in most Member States.

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[104] European Parliament resolution of 20 May 2021 on the liability of companies for environmental damage (2020/2027(INI)).
[105] Council of the European Union (2019), Final report of the Eighth round of mutual evaluations on environmental Crime.
[106] The overview takes account of changes made or announced by Member States in reaction to the recommendations to them in the framework of the 8th Mutual Evaluations Round.

Eurojust reports a the lack of specialised knowledge and experience, along with a lack of resources and the existence of other priorities.[107] The evaluation of the Directive also confirmed that also judges lack specialised knowledge and awareness of the harmful effects of environmental crime. This leads to judges unduly dismissing cases or imposing very lenient sanctions even where more severe sanctions are available.[108]

Training and specialisation have been mentioned by all practitioners and their EU-wide networks as being of paramount importance for successful investigations, especially as in the field of environmental crime often potentially large-scale, complex and international investigations are necessary and specialised knowledge is required. Training activities at national level are seen by practitioners as far from being sufficient, tailored and well-organised. The EU support to training, e.g. via the European Judicial Training Network, the relevant practitioners' networks and some LIFE and ISF-Police projects, is considered in general useful, in particular concerning establishing common understanding, identification of good practices and preparation of training materials, but not sufficient to compensate for the shortcomings at national level.

Although Member States have already today an obligation not only to transpose EU law by letter but also to ensure implementation in practice, the described problems have been long lasting. Therefore, the need for binding provisions on strengthening the enforcement chain was particularly stressed during the consultations by enforcement practitioners and other stakeholders, in particular as regards ensuring adequate resources and specialisation/training, cooperation, coordination, data collection and strategic approaches.

2.2 **2.2 How will the problems evolve without intervention (baseline)?**

As further described below, in recent years have efforts were made at EU level to improve environmental criminal law enforcement. Hence, improvements are likely in some areas. In others, in particular on problems deriving due to the Directive being outdated, the issues will worsen over time.

a) *Relevant emerging crime areas remain unregulated at EU level, while legal uncertainty persists regarding certain crime definitions* ***(problems 1 and 2)***

The issues of the Directive's scope being out of date and not containing all environmentally relevant areas and the vagueness of some of its crime definitions will continue to hamper its effectiveness and thus the effective enforcement against environmental crime on the ground. New environmental crime areas under the Article 3 and the annexes of the Directive can only be introduced through legislative action. As legislation in the environmental area is fast evolving, the problem of the Directive becoming outdated would further accelerate in the future.

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[107] Report on Eurojust's Caseworkon Environmental Crime, January 2021, p. 13.

[108] SWD Evaluation of 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), p. 45, based on stakeholder interviews and a questionnaire by IPEC (Intelligence Project on Environmental Crime).

Guidelines at Member State level on undefined legal terms, as recommended by the Council's 8th mutual evaluation report, may lead to a certain extent to a greater common understanding between Member States and help facilitate the work of law enforcement authorities.[109] However, national guidelines on interpretation would – in any event – not be binding for others and would also not solve the problem of differing interpretations of the Directive in national law.

*b) Insufficient sanctioning would persist resulting in limited deterrence (**problem 3**)*

There are large differences between the criminal sanctions provided for environmental crimes in Member States. The existing criminal sanctions are not sufficiently stringent to ensure a high level of environmental protection throughout the Union. As a result, sanctioning practice will continue to diverge across the EU in the absence of further intervention at Union level. The Commission issued 'Guidance[110] on combating environmental crimes and related infringements' (endorsed by the Environmental Compliance and Governance Forum in 2021) describes inter alia good practices in sentencing. The publication and promotion of this document may contribute to raise awareness on the importance of dissuasive penalties and more harmonised sanctioning in practice. So may the work of the Forum and its sub-group on sanctioning, created in 202, and the work of the European environmental enforcement networks, such as IMPEL, EnviCrimeNet, ENPE and EUFJE.

*c) Legal and operational obstacles for effective cross-border cooperation among Member States would remain (**problem 4**)*

Several initiatives helped to step up cross-border cooperation over the past few years.

Environmental crime became an EU Crime Priority within the current EMPACT 2018-2021.[111] In that context, Europol has set up a focal point and developed a multi-annual strategic plan and an operational action plan to facilitate cooperation in the area of environmental crime. Due to the increasing need for cooperation, Europol's environmental cases and messages exchanged through SIENA[112] increased sharply since the first operational year under the EU policy cycle (2018). Environmental crime remains also a priority also in the subsequent EMPACT 2022 – 2026.

Eurojust has issued a report on its environmental crime cases with the aim to highlight obstacles of judicial cooperation in this area and to share the best practices to overcome them.

The 'Guidance on combating environmental crimes and related infringements' mentioned above under b) devotes a chapter to cooperation and coordination mechanisms, including at

[109] Such guidelines on the term 'substantive damage' exist already for the Environmental Liability Directive.
[110] European Commission, Environmental Compliance Assurance Guidance Document Combating environmental crimes and related infringements.
[111] EMPACT - European multidisciplinary platform against criminal threats.
[112] Secure Information Exchange Network Application (SIENA), a platform that enables the swift and user-friendly exchange of operational and strategic crime-related messages among law enforcement officers in Member States, Europol liaison officers and third parties with which Europol has agreements.

European and international levels. Promotion of this Guidance can contribute to better awareness of existing tools and mechanisms. However, this cannot completely address the difficulties related to divergences between national legislation.

Digitalisation of communication and data exchange in judicial cooperation including criminal law proceedings should further facilitate cross-border cooperation. The Commission is working on a regulation, which will make the digital channel the default means of communication in cross-border judicial cooperation.[113]

Cross-border judicial cooperation is increasingly required by national authorities to address the complex and international set up of organized crime groups behind environmental crime.[114] But without further intervention at the Union level, legal and operational obstacles will however persist in cross-border cooperation among Member States' administrative, law enforcement and judicial authorities across Member States particularly regarding the increasing phenomenon on organised, transnational environmental crime.

d) *The lack of deterrent law enforcement and the impunity of criminals may persist (**problems 5 and 6**)*

The Council's 8th round of mutual evaluations addressed the issue of proper implementation of European policies on prevention and combating environmental crime. It found that law enforcement was deficient in various areas under scrutiny (such as statistical data collection, financial resources, national strategies to combat environmental crime, cross-border cooperation etc.). In its 2019 final report, it recommended that Member States improve implementation. At the point of finalising this Impact Assessment, 13 Member States have replied so far to inform on measures.

The Commission has also taken steps to improve the effectiveness of Member States' efforts to combat environmental crime. In 2018, the Commission set up a high-level expert group on environmental compliance, the Environmental Compliance and Governance Forum. It also adopted an Action Plan, which supports the work of the European environmental enforcement networks mentioned above. In this context, the 'Guidance on combating environmental crimes and related infringements' mentioned above under b) and c) was issued. It describes in detail good practices relevant to all parts of the enforcement chain from detection to sentencing and its intended publication and dissemination should help strengthen the operation of the enforcement chain. The LIFE Regulation and the Internal Security Fund-Police also provide

[113]Roadmap for Digitalisation of cross-border judicial cooperation initiative: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12547-Digitalisation-of-justice-in-the-EU_en.

[114] Eurojust, tasked with facilitating and fostering cross-border judicial cooperation, has issued a report on its environmental crime cases with the aim to highlight obstacles of judicial cooperation in the area of environmental crime, including best practices to address the identified issues, see https://www.eurojust.europa.eu/report-environmental-crime-stresses-need-further-cooperation, Among others, joint investigation teams (JITs) are an efficient instrument that, according to Eurojust, has not been used to its full potential (see above under chapter 2- problem description cross-border cooperation). JITs can assure the needed multidisciplinary approach to the investigations and ensure the exchange of information and evidence across borders and thus a broader and stronger prosecution in the affected Member States.

financial support to the European enforcement networks and national authorities, as they can raise awareness, share good practices and develop practical tools.

e) Conclusion

Overall, independent of this review, a range of non-binding measures and guidance already in place could be further developed to support effective criminal law enforcement. However, without further legislative intervention at EU level, the lack of a deterring enforcement system and impunity for environmental crime are likely to persist in EU Member States (see also below: section 5.1.2 –discarded options – non-binding measures).

3 WHY SHOULD THE EU ACT?

3.1 3.1 Legal basis

The legal bases for the proposed Directive are Articles 82(2) and 83(2) TFEU. Article 83(2) sets out the Union's competence to establish minimum rules with regard to the definition of criminal offences and sanctions in Union policy areas, which have been subject to harmonization measures~~,~~ if this is necessary for the effective enforcement. Article 82(2) TFEU sets out the Union's competence to establish minimum rules necessary to facilitate mutual recognition of judgments and judicial decisions and police and judicial cooperation in criminal matters having a cross-border dimension. It is relevant for provisions on rights of individuals in criminal procedure.

The current Directive is as a pre-Lisbon instrument adopted on the basis Article 175 TEC (now Article 192 TFEU) which had been a legal basis for EU policy on environment protection. According to an ECJ judgment this article comprised also the competence to ensure full compliance with Community legislation through criminal law (judgment of 13 September 2005, C-176/03, paragraph 48). In a second judgment, the ECJ clarified that the definition of types and levels of criminal penalties does not fall within the Community's sphere of competence (judgment of 23 October 2007, C-440/05, paragraph 70). But with the Lisbon Treaty, the Union has received a genuine competence for criminal law measures in EU policy areas, including the definition of sanction types and levels. (Article 83(2)).

3.2 3.2 Subsidiarity: Necessity of EU action and added value of EU action

Necessity of EU action

Criminal activities related to the environment very often have a cross-border dimension, as an environmental crime can impact several countries (for example the illicit trafficking of waste, wildlife or chemicals or the pollution of air, water and soil, see above section 1 – introduction) or have cross-border effects (e.g. in case of cross-border pollution).[115] Cross-border cooperation between law enforcement and judicial authorities is therefore essential.

[115] Report on Eurojust's Casework on Environmental Crime - January 2021, p. 8. See a UNEP and Interpol Rapid Response Assessment, 'The rise of environmental crime. A growing threat to natural resources, peace, development and security', 2016, p. 7.

The existing Directive aimed to provide such harmonised framework to facilitate cross-border cooperation. However, as detailed in the evaluation report, despite the progress in creating an EU-wide common set of definitions of environmental crimes and requiring more dissuasive sanction levels, Member States on their own have not been able to reconcile their respective understandings of environmental crime within the room for maneuver the Directive has left. Similarly, the insufficient sanction levels in a number of Member States prevent a level playing field across the EU and mutual recognition instruments from applying (such as the EAW and the EIO).

Despite the Directive, the number of cross-border investigations and convictions in the EU of environmental crime did not grow substantially. In the meantime, in contrast, environmental crime is growing at annual rates of 5 to 7% globally[116], creating lasting damage for habitats, species, health of citizens and revenues of governments and businesses.

Added value of EU action

With a more effective Directive, the EU can provide the harmonised framework for a common understanding of definitions of environmental crimes and for effective access to cross-border investigative tools. By providing more clarity on legal definitions and by approximating sanction levels, as well as by providing tools and obligations for cross-border cooperation among Member States, the revised Directive will create a more even level playing field with equivalent criminal law protection for the environment across the EU and facilitate cross-border cooperation on investigations and prosecutions. By facilitating cross-border investigations, prosecutions and convictions, EU action will provide for clear added value on countering environmental crimes which typically have transnational dimensions compared to what Member States acting alone can achieve.

As environmental crime often undermines legal and tax paying businesses, who share an unknown but likely large share of the estimated annual global loss related to environmental crime of between USD 91 and 259 billion[117], an effective EU legislative framework on environmental crime will have an effect on the functioning of the EU single market as well. Without such EU wide legislation, companies operating in Member States with limited definitions of environmental crimes or lenient enforcement regimes can have a competitive advantage over the companies established in Member States with stricter legal frameworks.

An effective EU wide policy on environmental crime may also benefit other EU policy objectives. Environmental crimes are often linked to other forms of crime such as money laundering, terrorism, tax fraud, forgery or other forms of organised crime[118] against which the EU has adopted a range of legislation in recent years. A more effective EU legislation on

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[116] UNEP and Interpol Rapid Response Assessment, 'The rise of environmental crime. A growing threat to natural resources, peace, development and security', 2016, p. 7.
[117] UNEP and Interpol Rapid Response Assessment, 'The rise of environmental crime. A growing threat to natural resources, peace, development and security', 2016, p. 17.
[118] UNEP and Interpol Rapid Response Assessment, 'The rise of environmental crime. A growing threat to natural resources, peace, development and security', 2016, p. 30.

environmental crime would contribute to effective criminal law enforcement strategies, at EU- and national level that address all relevant aspects of criminal interaction.

4 OBJECTIVES: WHAT IS TO BE ACHIEVED?

The methodological challenges encountered during the evaluation of the Directive, which also was subject to a Regulatory Scrutiny Board's opinion, provided valuable lessons for this impact assessment: Ultimately, the policy ambition is to better protect the environment. This fundamental ambition objective drives all EU legislation in the area of environmental legislation and it applies to criminal law measures as well. The concrete objectives, however, must be goals that can be achieved through criminal law and which allow to measure progress through appropriate indicators. This led us to drop the original general objective of reducing environmental crime and the specific objectives of reducing illegal trade, protecting fair competition and preventing 'safe havens' in the EU for criminals. Success of these objectives could not be measured against a baseline, as the amount of undetected environmental crime or illegal trade before and after the Directive is unknown. For the same reason, the extent of progress towards the former objectives of protecting fair playing businesses and preventing 'safe havens' was difficult to assess. Moreover, as explained in detail in the evaluation report, these objectives are influenced by many factors other than criminal law. The numbers of environmental crime and illegal trade and the prevention of 'safe havens' depend on the development of global trade (with steep upwards trends), on new opportunities through digitalisation and the interplay of criminal sanctioning systems with civil- and administrative sanctioning systems in the Member States.

Therefore, the focus of this review will be narrowed to what could be achieved by means of criminal law in the first place. As there is consensus that environmental crime is driven by high profits combined with a low detection risk, the objectives of this review must be to foster effective investigations, prosecutions and sanctioning.

Success will be measured through the numbers of environmental law cases successfully investigated and prosecuted, the numbers of convictions, and the type and levels of sanctions imposed that must become more effective, dissuasive and proportionate in practice. Developments have to be interpreted in context: today, in the Member States, there are only few environmental crime cases completed successfully and sanction levels are systematically too low. There have been no upward-trends in the past decade (see above, section 1.2 – 'evaluation of the Directive 'and the evaluation final report). In this situation, stable upwards trends in environmental cases in all Member States would point to the Directive's effectiveness. As environmental crime is growing globally at percentage between 5 and 7 % globally,[119] a matching growth rate of successful investigations and convictions would be considered a success. By contrast, if - at a later stage - environmental cases were to decrease, this might indicate that the Directive was successful in deterring criminals.

[119] See section 1 – introduction.

The evaluation has, however, also shown that statistical data on the numbers of investigations, prosecutions, convictions, dismissed cases and sanctions imposed needed as indicators to evaluate and monitor success of EU-environmental crime policies either do not exist, or are fragmented, not collected according to uniform standards or inaccurate. Improving statistical data collection must therefore also be an objective of the Directive (see also section 8 on monitoring the success of the Directive). The table below shows existing EU objectives as defined for the current version of the Directive versus the objectives proposed for the review of the Directive:

Table 2, EU objectives in the current version of the Directive versus the objectives proposed for the review of the Directive

Current		**Reviewed**	
General Objective current Directive	**Reduce environmental crime**	**Protect the environmental through criminal law by effective investigation, prosecution and convictions**	**General Objective proposed Directive**
First specific objective current Directive	To create a level playing field with respect to the offences criminalised and the relevant sanctioning systems, and to prevent safe havens	To improve the effectiveness of investigations and prosecutions by updating the scope of the Directive and by inserting a feasible mechanism to keep the Directive up-to-date	**First specific objective proposed Directive**
		To improve the effectiveness of investigations and prosecutions by defining more precisely or eliminating vague terms used in the definitions of environmental crime in Article 3	**Second specific objective proposed Directive**
Second specific objective current Directive	To ensure a system that is a deterrent, through criminal penalties that are effective, dissuasive and proportionate	To ensure that environmental crimes are sanctioned by effective, dissuasive and proportionate sanction types and -levels	**Third specific objective proposed Directive**
Third specific objective current Directive	To protect fair-playing businesses and reduce illegal trade in environmentally harmful products (such as illegal waste shipments) and wildlife trafficking	-	-
Fourth specific objective current Directive	To improve judicial cooperation	Improve the effectiveness of cross-border law enforcement cooperation and coordination on environmental crime	**Fourth specific objective proposed Directive**
-	-	Improve informed decision-making on environmental crime through improved collection and dissemination of statistical data	**Fifth specific objective proposed Directive**
-	-	Improve the operational effectiveness of national enforcement chains	**Sixth specific objective proposed Directive**

4.1 4.1 General objectives

The general objective of Directive is to contribute to the protection of the environment through criminal law by way of effective detection, investigation, prosecution and sanctioning of environmental crime. By this, it should ultimately contribute to the reduction of environmental crime, as effective law enforcement increases the risks of detection and punishment for criminals and reduces the chance to get away with the profits. Less environmental crime will help to preserve or restore a healthy and intact environment (see chapter 7 - impacts). Thus, the Directive will ultimately contribute to the overall goals set out

in Article 191 TFEU and the Green Deal and the Biodiversity Strategy to improve the state of nature and the environment and to protect human health.

The general objective is supported by a number of specific objectives that aim at more effective investigation, prosecution and sanctioning at different levels:

4.2 4.2 Specific objectives

The following specific objectives have been identified:

1. Improve the effectiveness of investigations and prosecutions by updating the scope of the Directive and by inserting a feasible mechanism to keep the Directive up-to-date in the light of the European Green Deal.
2. Improve the effectiveness of investigations and prosecutions by clarifying or eliminating vague terms used in the definitions of environmental crime
3. Ensure effective, dissuasive and proportionate sanction types and -levels for environmental crime
4. Foster cross-border investigation and prosecution
5. Improve informed decision-making on environmental crime through improved collection and dissemination of statistical data
6. Improve the operational effectiveness of national enforcement chains to foster investigations, prosecutions, sanctioning

5 WHAT ARE THE AVAILABLE POLICY OPTIONS?

In addition to the baseline of taking no further EU action on environmental crime (section 2.2), three possible main options have been considered. Two of them have been discarded (see below).

5.1 5.1 Options discarded at an early stage

5.1.1 *5.1.1 Repeal the Directive*

This option is a "roll-back" option repealing the criminal law measures of the Environmental Crime Directive. The sanctioning of breaches of legislation designed to protect the environment would be left to EU sectoral legislation and to national law. Sectoral legislation contains mostly only generic provisions on penalties, only requiring that sanctions be effective, proportionate and dissuasive (standard penalty clause).[120] Moreover, sectoral law leaves it to the Member States whether these penalties are criminal or administrative.

Compared to only administrative sanctioning systems, complementary criminal law enforcement systems would provide for more effective tools. Firstly, criminal sanctions are more dissuasive as they include imprisonment penalties, which are not available under

[120] Examples include the penalty clause in article 19 of the timber regulation, the penalty clause in article 50 of the waste shipment regulation, or article 79 of the directive on industrial emissions.

administrative law. With regard to legal persons, as they can better neutralise potential fines by passing on these costs to their customers and the costs of fines are often offset by the potential profits accrued through the violation,[121] the social stigma of criminalisation is important to enhance the deterrent effect as it brings about reputational damage that companies want to avoid. Secondly, criminal law also provides for more effective investigative tools such as controlled deliveries, wiretapping, surveillance and the confiscation of proceeds of crime, all this under judicial control. As environmental offences are often committed in the context of organised crime, corruption, fraud or money laundering[122] these tools must also be available for environmental crime as well to ensure effective investigations covering all aspects.

It is the unanimous position of all Member States and stakeholders that criminal law is indispensable to protect the environment. Repealing the Directive would send the wrong signal. It would deny the seriousness of this crime form, which causes enormous harm and globally generates illegal profits of an amount that equals organised crime. It would also counteract the growing awareness and prioritisation of the need to protect the environment and undermine the effectiveness of environmental protection which that can be strengthened only through concerted action and a holistic approach that includes criminal law.

Similarly, maintaining the Directive as such, i.e. without any change, would not address the shortcomings identified nor achieve any improvements at Union level, although guidance may help with its interpretation from the Union's perspective. Neither can one put into sectoral environmental legislation the substance of the Directive as the sectoral legislation is not based on Article 83(2) TFEU and hence would not be appropriate for criminal law measures, e.g. to define the level and type of criminal sanctions.

5.1.2 *5.1.2 Address the identified problems only through non-binding measures*

The second option would be to maintain the status quo or introduce only non-legislative measures such as EU guidance on interpreting definitions and sanction levels. This option corresponds largely to the baseline as detailed above under section 2.2. A number of non-binding measures have already been taken as detailed above under section 2.2. - 'baseline'. Additional guidance on interpreting vague terms in crime definitions and on data collection could further complement such measures.

However, the effectiveness of soft-law alone is uncertain and gaps in Member States' implementation are likely to remain. Moreover, legal clarity in the field of criminal law is fundamental and especially the definitions of environmental crime cannot be left to non-binding instruments. But also in the other problem areas, the effectiveness of non-binding measures is limited, precisely because they are non-binding. For example, on the individual

[121] Michael G. Faure (2020), Environmental liability of companies, p. 88 (external study requested by the JURI Committee), targeted business stakeholder consultation.
[122] FATF Report Money Laundering from Environmental Crimes, July 2021, p. 11; UNODC Global Programme for Combating Wildlife and Forest Crime | Annual Report 2020, p. 10.

recommendation to Member States during the Council's 8th Mutual Evaluations (see above under section 2.2.) so far only 13 Member States have reacted with different levels of ambition. Therefore, given the serious problems in the area, which have lasted for years, non-binding measures cannot be the appropriate response to the shortcomings of a Directive that includes mostly very generic provisions.

This is also the stance of the large majority of stakeholder, which consider non-binding measure useful or very useful but only in combination with anchoring binding provisions in the Directive. All groups and especially practitioners and NGOs have urged the Commission to be ambitious and improve the Directive revising the annexes.

Non-binding measures and guidance are, however, an important element for effective law enforcement. In the following, they are considered as an intrinsic part of any legislative option.

5.2 5.2 Relevant policy option: replacing the Directive

The only realistic option is to adopt a new Directive. An overview of the sub-options and cumulative measures under each specific objective can be found in the annex 10 (option table). The intervention logic is attached as annex 9.

6 DESCRIPTION, ASSESSMENT AND COMPARISON OF THE SUB-OPTIONS UNDER THE OPTION TO AMEND THE DIRECTIVE

Hereunder, the sub-options will be referred to as' options'.

Approach to the structure of section 6:

Under each objective, several options to achieve them have been identified. Their detailed description is provided under section 6 along with the assessment of the options. This approach provides the reader with a description of the option in close connection with the respective assessment. The options are assessed against the following criteria:

- **Effectiveness**: To what extent is the option likely to contribute to the objective? Are the options sufficiently clear to lead to harmonised transposition and implementation in the Member States and to comply with the principle of legal clarity?
- **Coherence**: To what extend the different options interact with other relevant areas and instruments of EU and international policy?
- **Efficiency**: What are the costs of each option and are they justified by the benefits?

It should be noted, that these criteria are not equally relevant for each of the options, so that not all of them will be assessed to the same extent under each option.

Approach to efficiency

To assess efficiency, cost are expected in relation to:

1. Measures proposed for each objective to lead to higher effectiveness and thus more environmental crime investigations, requiring additional staff in the Member States;

2. Broadening the scope of the Directive to include new environmental crime areas under the Directive which may lead to an increase in the number of environmental crime cases, also requiring additional staff;
3. The implementation of options such as enhanced training, improved cross-border cooperation, statistical data collection, strategy development and awareness raising measures which may cause some implementation costs but the expected mid- and long-term benefits would clearly prevail.

The presentation of the efficiency assessment is organised as follows:

- Transposition costs will not be presented for the individual options per objective. They are similar for all options and will therefore not play a role for the comparison of the options. Under section 6 for **objective**s **1, 2 and 3** efficiency is not assessed, as these objectives are considered not to incur costs further than for transposition costs. (see, however, costs of additional staff, bullet point below).
- **For objectives 4, 5 and 6,** direct costs related to implementation of the proposed measures are presented (i.e. those linked to cost category 3 above).
- **The costs of additional staff (**category 1 and 2 above) are presented under **objective 6**. However, these costs are to be understood as stemming from a more effective Directive based on the concerted effects of all measures taken under all objectives. Also the cost of additional staff required to handle the additional workload from the broadening of the scope of the Directive (objective 1) will be calculated under objective 6, as these costs cannot realistically be separated from costs for the additional staff needed for more cases due to improved effectiveness of the Directive.[123] As it is not possible to attribute shared costs of additional staff needed to individual options or objectives or to specific new legislation that will be included under the Directive these costs will not play a role for the comparison of the options.
- Benefits under efficiency are understood in terms of positive environmental, social and economic impacts and are discussed in section 7, as there will be no measureable differences between the options that could influence their comparison.
- The economic impact on businesses and SME is generally addressed in section 7, and more specifically under those options that have a specific impact on businesses.

A more detailed analysis of the methodology and results of the costs calculation can be found in Annex 2B for each of the options considered in the following part.

[123] The calculation of labour costs is based on the following assumptions:
- EU official daily labour cost of EUR 534 for 2020[123]), based on average monthly salary for grade AD8 with 25% overhead cost;
- Member State daily rate of EUR 294 for 2020, based on 2016 Eurostat Labour Cost Survey 'public administration and defense', adjusted for inflation and including 25% overhead.

6.1 6.1 Objective 1: Updating the scope of the Directive; introduce a simple mechanism to keep the Directive up-to-date also in the future

The options under the first objective seek to ensure that the Directive covers all relevant sectors of EU-legislation and to provide for a simple and flexible mechanism to update the Directive in the light of the European Green Deal.

6.1.1 *6.1.1 Option 1 a): Update the existing list of legislation in the annexes, add new relevant crime categories to Article 3*

Description

This option would maintain the current approach of Directive to define the scope of the Directive through sectoral legislation listed in annexes. Accordingly, the annexes would need to be updated by considering changes in legislation already included therein and new sectoral legislation that came into force after the adoption of the Directive.

In addition, corresponding new crime categories would have to be added to Article 3 where serious breaches of obligations deriving from new sectoral legislation do not fall under the crime categories in the current Directive. To illustrate, the EU Timber Regulation[124] prohibiting illegal timber trade is currently not listed in the annexes. Article 3 does not contain a crime category addressing this type of crime, either. It would therefore not be sufficient to add the Timber Regulation to the annexes. A corresponding new crime definition would have to be added in Article 3.

In the future, if new relevant EU sectoral legislation is adopted, it must be added to the Directive's annexes through legislative procedure. In the same legislative procedure, a corresponding new crime category may have to be added under Article 3, if the sectoral act is not covered by one of the existing crime categories under Article 3.[125]

Introducing comitology procedure would be possible only for non-essential elements in the Directive. However, it would be essential to enlarge the scope of a criminal law legislative instrument and add new environmental offences. According to Articles 290 and 83(2) TFEU, it is for the Union legislator to take such a decision

Similarly, where an amendment (or replacement) of legislation already listed in the annexes would amounts to a substantial change of obligations and related infringements126, the Union

[124] Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market, OJ L 295, 12.11.2010, pp. 23–34.

[125] The current approach in recital 15 of the Directive, whereby the Union legislator could "specify" in an act of sectoral EU law (e.g. legislation based on Article 192 TFEU) that Directive 2008/99 will apply, is now legally excluded. Only before the Treaty of Lisbon came into force, the Union legislator could take such a decision in the same act by which it sets out the relevant administrative rules. Since the Treaties now provide a separate legal basis for the approximation of criminal law, Article 83(2) TFEU must be considered a lex specialis to the relevant "sectoral" legal basis.

[126] For instance, if the approach taken by Union law on certain polluting activities moves from a "permission subject to a prohibiting decision" (i.e. a certain degree of pollution is permitted unless certain thresholds are exceeded or there is an

legislator will have to re-assess whether an effective implementation of the "new" obligation requires that infringements are to be considered a criminal offence, i.e. it will have to adapt and/or amend the relevant references in the Annexes (or possibly adopt a new act based on Article 83(2) TFEU.

Effectiveness

This option would therefore not be more effective than the current Directive with regard to future updates of the annexes and Article 3 definitions.

The Commission will have to become more pro-active in proposing to co-legislators amendments to keep the Directive up-to-date through legislative procedure (the status quo) and to ensure coherence with fast evolving sectoral legislation. The Commission would need to propose with sectoral legislative proposals also changes to the Directive, which would be based on a different legal base.

6.1.2 *6.1.2 Option 1 b) Change the approach to define 'unlawfulness' and define more precisely which breaches of sectoral legislation are criminally relevant.*

Description

Under this option, a generic reference to the relevant EU and national transposing legislation would be combined with a more precise offence definition without using annexes. The conducts that constitute the criminal offences would be described in specific provisions which, to ensure legal clarity, would entail both refinement of existing offence definitions and introduction of new offences (e.g. illegal timber trade) mirroring trends in environmental crime and legislative developments The annexes would be replaced by a 'general reference' to relevant sectoral legislation.[127]).

Effectiveness – Legal clarity

This approach would avoid the shortcomings of using a legal technique with annexes that become more and more outdated over time and not suitable to ensure legal certainty.[128]

Experience showed that references to legislation listed in an extensive annex (even without specifying the relevant deriving obligations) cannot guarantee the legal clarity principle. It is unclear which of the obligations and prohibitions have to be enforced by criminal sanctions

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administrative decision prohibiting the relevant activity) to an overall "ban with permit reservation" (i.e. the activity is prohibited unless there is a permit), the nature and extent of the unlawfulness in the sense of criminal law would change.

[127] Regulation 1367/2006 (Aarhus Regulation) provides an example how 'environmental legislation' could be defined. According to its Article 2 (1) f 'environmental law' means Community legislation which, irrespective of its legal basis, contributes to the pursuit of the objectives of Community policy on the environment as set out in the Treaty: preserving, protecting and improving the quality of the environment, protecting human health, the prudent and rational utilisation of natural resources, and promoting measures at international level to deal with regional or worldwide environmental problems;

[128]However, some stakeholders and Member States consider that such an approach would undermine the principle of legality (Article 49 of the Charter), as in criminal matters clarity and foreseeability were of fundamental importance. Although it is in the first place the definition of the criminal offences and penalties set out in national legislation that has to comply with the principle of legality, this principle is also relevant for Union legislation approximating criminal law.

and which ones are sufficiently protected through administrative sanctioning systems. In line with the principles of the proportionality of sanctions and the use of criminal law as 'ultima ratio' not every infringement of an administrative rule can and should be considered a criminal offence. Therefore, the unspecified reference to a list of EU-sectoral legislation does not add to legal clarity.

Instead, it should be defined more precisely under Article 3 which of the breaches of obligations deriving from relevant sectoral EU legislation could constitute environmental crime.

An approach for defining the scope of the Directive by a refined definition of "unlawfulness" and more precise description of the offences would ensure the necessary clarity, including for the Member States when transposing the Directive and for practitioners.

6.1.3 *6.1.3 Option 1 c): Define environmental crime in the Directive without the requirement of a breach of relevant EU sectoral legislation*

Description

This option would define environmental crime without the element 'unlawful' or 'illegal', thus without a reference to sectoral legislation. Instead, the damage caused to the environment or human health would be constituent for a criminal offence. Precedents at supranational level are the (repealed) 2003 Council Framework Decision that did not require unlawful behaviour in its Article 2 (a)[129] in case of serious harm for a person or death. The Council of Europe Convention on the Protection of the Environment through Criminal Law (1998) defines environmental crime as a stand-alone offence independent of a breach of sectoral law[130] for the most serious forms of crime.[131] The concept of 'ecocide' that is currently debated can also be understood as an approach to define serious environmental crime independently from breaches of sectoral legislation.

Effectiveness

This option would be effective in preventing the Directive from becoming outdated, as non-compliance with sectoral legislation would not be a crime-constituting element.

Proportionality

[129] Text: Each Member State shall take the necessary measures to establish as criminal offences under its domestic law:(a) the discharge, emission or introduction of a quantity of substances or ionising radiation into air, soil or water which causes death or serious injury to any person.

[130] The Convention was not ratified by a sufficient number of states and therefore did not enter into force. Recently, a Working Group (CDPC-EC) was set up to assess possible ways for the Council of Europe to move forward in the area of environmental protection through criminal law. The Working Group is currently exploring whether a new Convention should be drafted or if the original Convention should be amended. A first meeting was held on 20 and 21 April 2021, where it was agreed that the reasons for the failure of the existing Convention should be analysed in each Member State.

[131] Namely; the discharge, emission or introduction of a quantity of substances or ionising radiation into air, soil or water which causes death or significant injury or creates a significant risk of causing death or serious injury to any person. See article 2 (a) of the Convention on the Protection of the Environment through Criminal Law.

However, option 1 c) would have impacts that go further than ensuring that the Directive does not become outdated in the future. It could increase the level of environmental protection, but would mean a paradigm shift in loosening the administrative dependence of environmental crime, which has been the predominant approach in the EU. Thus, additional cases would be criminalised that are currently not covered by the Directive. However, some businesses, in particular SMEs, would not have the capacity to carry out extensive risk assessments or take other mitigation measures.

Economic impacts on businesses

Criminalising environmental impacts independently from sectoral law could increase the business risks for enterprises and result in higher costs for due diligence and legal capacity, issues currently driven only by administrative legislation. This risk could be elevated for SMEs as described above. Businesses also claim that issues with administrative permissions being issued too easily and administrative law favouring the interest of an industry over the health of the citizens must be solved by stricter rules at the administrative level and not compensated for by criminal law at the expense of the businesses.

6.1.4 *6.1.4 Comparison of the options/preferred option*

Option 1 a) is effective only in updating the Directive in the course of this review. It does not spare the EU legislator future updates of the annexes and Article 3 to include new crime legislation and corresponding crime categories.

Option 1 c) would change the approach to define environmental crime by eliminating the link to sectoral legislation and thus remove the cause for the Directive becoming outdated. However, it would come at higher costs for legal businesses, although this option could probably help reduce negative social and environmental impacts (see also section 7 below). However, this option could only be justifiable and proportionate; in cases where very serious harm was caused that goes beyond what could be justifiable by permits or other administrative authorisations. It could therefore not replace, but only complement offences linked to breaches of sectoral legislation. Thus, it cannot be generally effective in preventing the Directive from becoming outdated.

Option 1 b) would remove the annexes and thus the need to update them. Legal clarity would be ensured by adding more precision to the crime definitions under the Directive, in particular with regard to the element ‘unlawful’ that must describe in more detail which types of obligations in sectoral are essential to be enforced by criminal law (see below under objective 2).

Also Option 1 b) does not provide for a simple mechanism to apply if new crime categories under Article 3 should be added, e.g. following the adoption of new sectoral legislation The definition of new environmental crime categories must be done, as under the current Directive, by the European legislator.

Conclusion

Option 1 b) is the preferred option.

6.2 6.2 Objective 2: Clearer definitions of environmental crime

The definitions of environmental crime categories under Article 3 use terms such as 'substantial damage', or 'negligible or non-negligible quantity' that make the existence of environmental crime dependent of the severity of the damage caused. As there is no common understanding how to delineate e.g. substantial damage from non-substantial damage, these terms leave much room for different interpretations (see above section 2.1.2)

Less ambiguous crime definitions would also have positive impact on other specific objectives. They would facilitate cross-border cooperation (objective 4), but also cooperation between different authorities along the law enforcement chain within a Member State (objective 6). A similar understanding of the scope of an environmental crime definition would also foster the collection of comparable statistical data in the Member States and thus contribute to objective 5.

The options assessed below are mutually exclusive, insofar as only one option can apply per crime category under Article 3. However, as Article 3 comprises several crime categories, the options can exist in parallel as different approaches to define environmental crime might be chosen for different crime categories.

6.2.1 *6.2.1 Option 2 a): Define unclear terms more precisely in the Directive*

Description

The option to define environmental crime more clearly in the Directive would foster a common understanding of how to determine the amount of damage that constitutes environmental crime. It would be necessary to explain in more detail the meaning of vague terms such as 'substantial damage', and 'non-negligible quantities'.

Under this option, the Directive could include general criteria to better determine notions, such as 'substantial damage', 'negligible quantity' or 'non-negligible quantity'. The following criteria are an indication of what would be relevant:

- baseline condition of the affected environment;
- severity and spread of the damage;
- amount of material losses (in terms of tax losses, or legal profits, or restoration costs)
- non-material value of natural objects, rareness of the natural objects impacted or destroyed,
- degree and duration of the negative impact on the environment,
- reversibility of the damage and costs of restoration;
- extent to which relevant regulatory thresholds are exceeded;
- conservation status of species concerned.

In addition, under this option, it should be carefully considered whether all terms used in the crime definitions of Article 3 must be defined or whether some of them could be eliminated.

Effectiveness

This option would improve the clarity of the Directive. However, it is not possible – nor would it be desirable – to come up with too detailed definitions that would produce unambiguous results in any given set of circumstances. Such definitions would lack flexibility and thus be prone to creating loopholes. For example: defining a precise threshold for financial losses (in terms of lost taxes, legal profits, or costs to restore the financial damage) that would constitute 'substantial damage' would not take into account the economic situation in the Member States and would not adapt to fluctuations of currencies over time. Eventually, in practice it is not always possible to attribute a value to the environmental harm or loss.

6.2.2 *6.2.2 Option 2 b): Eliminate undefined terms, including by criminalising risky behaviour (endangerment crime)*

Description

Environmental criminal offences could be defined without the constituent element of a damage or the risk of such damage. This approach would be relevant in cases where an activity is considered per se as dangerous and harmful so that it would be justified to criminalised it as a risky behaviour. The offence description would then be based on relevant prohibitions, binding requirements and other obligations defined in sectoral law. For example, sending big ships for recycling in unauthorized facilities (or the illegal recycling activity) could be seen as such a generally prohibited dangerous and risky activity which could be criminalized without a requirement of causing damage or likelihood of causing damage.

Effectiveness

Article 3 c), f), g) and i) of the current Directive already include variations of endangerment crimes that address certain actions considered per se risky for the environment. It could not be observed that these crime forms are successfully investigated more often than other crime forms. It must, however, be noted that changes of just one element - such as the definition of environmental crime – are not expected to measurably translate into higher numbers of prosecutions and convictions. As could be demonstrated in the evaluation, the effectiveness of environmental crime investigations depends on many factors (reflected by the six objectives in this review) and a multipolar approach is needed to improve the situation.

This option would also alleviate the burden of proof. In practice, it has always been difficult to establish whether a substantial damage has occurred and whether the offender acted with the intention to cause serious damage. Moreover, proving the causal link between action and damage is often problematic in practice, for example if a company releases dangerous substances into a nearby river already polluted or where the damage becomes manifest only over time. In practice, these obstacles have led to environmental crime not being investigated. Under this option is would also be possible to prosecute cases of pollution that do not have an immediate effect but which might lead to damage in the long term. Endangerment crimes are therefore the preferred option of practitioners. Especially, Europol advocates for this option.

However, this approach has its limits, because defining all environmental crime as endangerment crime would not fit all situations and objectives, this approach would therefore not be suitable for all possible scenarios and crime categories under Article 3 of the Directive.

Economic impacts on businesses

Businesses have reservations on the definition of endangerment crimes that criminalize violations of administrative provisions or the breach of conditions of an authorization. They claim that overstepping rules can happen accidentally and without the purpose of gaining illegal profits at the expense of the environment. It would mean a disproportionate burden for otherwise legally operating businesses – especially for SMEs – as being the subject of criminal proceedings. This would be the case already today, as e.g. in the field of illegal shipment of waste mistakes in accompanying documents and certificates are criminalized. Businesses suggest that only those companies disrespecting administrative rules systematically, repeatedly and with the intention to gain illegal profits, should be held criminally liable. For other companies, administrative sanctions would be sufficient.

6.2.3 *6.2.3 Option 2 c): a combination of option 2a) and 2b)*

This option is a combination of option 2 a) (clarification of undefined notions in the Directive) and 2 b) (eliminating or reducing the use of undefined terms) for the various crime categories under Article 3.

Option 2a) appears to be indispensable for cases in which great harm is produced that can be proven in environmental crime proceedings. Endangerment crimes would catch cases where the legislator has decided that the infringement of sectoral rules would put the environmental at an intolerable risk even without damage or likelihood of damage occurring from each individual infringement.

Both types of description of criminal offences are used in the current Directive, and thus option 2c would maintain the current architecture. It would have to be carefully analysed which approach should be used for any new criminal offences to be possibly introduced in a revised Directive.

6.2.4 *6.2.4 Stakeholder opinions*

Overall, the vast majority of stakeholders supported clarifying undefined terms in the Directive itself. At the same time, a large majority also favoured providing (complementary) non-binding guidance. A significant number of the industry stakeholders (about one-third) considered the option of providing non-binding guidance not useful.

Most Member States endorsed legally binding definitions in the Directive itself but also acknowledged that it might be difficult to strike a balance between sufficiently clear definitions and the need to maintain a necessary degree of flexibility to cover all possible scenarios. A large majority of the Member States welcomed (additional) soft law measures.

Europol advised to clarify or even remove undetermined concepts and stressed that it may not be realistic to require that the Directive contains all possible definitions. NGOs agreed that the

revised Directive should provide clear definitions on key terms and opted for additional non-binding guidance documents. According to many academic stakeholders, it would need detailed and clear definitions to enable national legislators to formulate clear offences.

6.2.5 *6.2.5 Comparison of the options/Preferred option*

The preferred option is option 2c), as the combination of different techniques for the definition of criminal offences allows a tailored approach to different type of environmentally harmful activities and risky behaviour.

As indicated above, a refined definition of "unlawfulness" would continue to represent part of the legal technique used for the definition of criminal offence and the scope of the Directive. It would clarify that criminal offences under the Directive are serious breaches of EU legislation related to the protection of the environment as well as relevant national law or administrative regulation or decision giving effect to this legislation. The combination of a refined definition of "unlawfulness" and the more precise definition of criminal offences would ensure fulfilment the requirements of the principle of legal certainty.

6.3 6.3 Objective 3: Improving the proportionality and dissuasiveness of sanction types and levels

The current Directive requires 'effective, dissuasive and proportionate sanctions' without further specification. This generic approach has not led to sufficient harmonisation of sanction levels in the Member States. Sanction levels available at national level are not in all cases effective and dissuasive. Therefore, maintaining the Directive as such, i.e. without any change in the area of approximation of sanctions, would not address the shortcomings identified nor achieve any improvements at EI level.

The following options are not mutually exclusive but could reinforce each other:

6.3.1 *6.3.1 Option 3 a): Introduce minimum maximum sanctions levels*

Description

Minimum maximum sanctions define maximum sanctions that Member States must at least provide for in their national law concerning a specified offence. They must be distinguished from minimum sanction levels that oblige criminal judges to not hand down sanctions below that threshold. The latter are more effective in ensuring an appropriate level of sanctions imposed in practice and are part of a number of Member States legislations. However, in other Member States such minimum threshold would meet constitutional problems as they do not allow the judge to remain below that level even if that would be justified a given case. Member States have therefore strongly resisted attempts to introduce such minimum sanction levels into their national law. As Article 82 para. 2 TFEU requires respect for the Member States legal traditions and systems in the field of criminal law, a possible option to propose minimum sanction levels was dismissed from the start.

By contrast, minimum maximum sanctions in criminal law instruments are an established practice for harmonising sanctions in EU criminal law (see PIF Directive, Market Abuse Directive, Euro counterfeiting Directive).

More specifically, the proposed minimum-maximum level of sanctions will be graduated according to the severity of the criminal offences referred to in Article 3, so that the Directive will provide for more severe penalties where the conduct has caused or is likely to cause death or serious injury to persons. Furthermore, the Commission will take into account the sanction thresholds in other criminal law Directives adopted on the basis of Article 83(1) and (2) TFEU and the significance of the legal interests protected to ensure coherence.

Coherence

Minimum maximum sanction thresholds would ensure coherence of the Directive with other instruments in the criminal area. These instruments often apply only to serious crime defined by the level of maximum sanctions available according to national law.[132]

- The European Arrest Warrant does not currently apply to environmental crimes if national law does not provide for a maximum level of at least 1 year imprisonment sanction (or if a sentence has been handed down of less than 4 months). Maximum penalties in BE, IT, LU, and SE are lower than 1 year for some Article 3 offences.[133]
- The Directive on the European Investigation Order (EIO) does not set any penalty level for the issuing of an order. Nevertheless, Article 6(2) provides that "the investigative measure(s) indicated in the EIO could have been ordered under the same conditions in a similar domestic case"; therefore if the issuing Member State provides in its national law for a maximum penalty level to be met in order for an investigative measure to be carried out, this applies also in the case of the EIO.
- The 2000 UN Convention against Transnational Organised Crime (UNTOC) that promotes effective investigations including confiscation and seizure as well as international cooperation to combat serious crime that is transnational in nature and involves an organised criminal group. The UNTOC would only apply to environmental crime where it is punishable by a maximum of at least 4 years of imprisonment. This threshold is not reached in a number of Member States and for a number of environmental crime areas under Article 3 (see annex 4 - baseline).

Effectiveness

Experience with other EU criminal law instruments is that minimum maximum – although sending a strong signal that the respective crime category is considered as serious - have limited effect on sanction levels imposed in practice. Also with regard to environmental

[132] The 6th Anti Money Laundering Directive (AML Directive) came into effect in December 2020. It now explicitly applies to environmental crime irrespective of minimum or maximum thresholds of penalties in the Member States.
[133] Evaluation Report, p. 31.

crime, even in Member States, which provide for high maximum sanction levels, sanction levels imposed remain too often in the lowest segment of the available scale.[134]

Therefore, this option would not be effective, if not supported by other measures.

6.3.2 *6.3.2 Option 3 b): Option 3a) plus aggravating circumstances and accessory sanctions*

Description

Therefore, in addition to option 3a), defining aggravating circumstances and accessory sanctions could contribute to harmonising sanction levels also in practice and thus ensure their effectiveness.

Examples of aggravating circumstances in other criminal and non-criminal instruments include the severity of the damage done,[135] the amount of illegal profits generated or expected, the involvement of organised crime groups[136] or corruption, action taken by the offender to obstruct administrative controls, the use of false or forged documents, intentional or reckless action, committing the crime with the intention to generate illegal profit, or repeated illegal action of the same nature.[137]

Article 19(2)(a) of the Timber Regulation (EUTR) gives some indication of the criteria that Member States can take into account in determining the type and level of financial penalties to apply to EUTR breaches. The list includes environmental damage, value of the timber products placed on the market, tax losses, economic detriment and economic benefits resulting from the infringement.

Examples of accessory sanctions are also found in other EU criminal law instruments that entered into force post-Lisbon. Accessory sanctions can include temporary or permanent closure of sites used to commit a crime, the winding up of a legal entity involved in the crime. confiscation of proceeds and seizure of instruments used to commit the crime, exclusion from public procurement procedures and grants, publication of a criminal conviction, withdrawal of

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[134] See also evaluation report, page 46: "*Stakeholders from the police and judiciary in particular said that sanction levels in theory were sufficient, but the problem was practical application by the judicial authorities, due to a lack of knowledge of the harmfulness of environmental crime and to specialisation. The deterrent effect is undermined if many cases are dismissed or only very lenient sanctions are imposed even if more severe sanctions are available under national law or where sentences handed down are suspended. In an interview, Europol highlighted the importance of ensuring that offenders actually serve their sentence".*

[135] Chapter 29 section 1 paragraph 2 of the Swedish Environmental Code regulates "severe environmental crime" (as opposed to "environmental crime" in paragraph 1) and reads as follows: "If the offence is severe, the sentence shall be 'severe environmental crime' and the penalty shall be a term of imprisonment for at least six months and at most six years. When considering whether the offence is severe, special attention shall be paid to the fact if it has caused, or might have caused, lasting damages on a large scale, if the act otherwise was of a particularly dangerous nature or if it included a deliberate risk-taking of a serious kind or if the offender, when particular attention or ability was needed, committed a neglect of a serious kind.".

[136] To make the Directive coherent with The Each Member State shall take the necessary measures to ensure that the fact that offences referred to in Article 2, as determined by this Member State, have been committed within the framework of a criminal organisation, may be regarded as an aggravating circumstance.

[137] The Netherlands Court of Auditors remarks in its report 'Handhaven in het Duister', p. 34, that a small number of companies (6%) is responsible for most environmental crimes (56%).

permits and authorisations, the disqualification of directors, compensation of victims, the obligation of companies to install due diligence schemes, placing under surveillance of legal entities involved in the crime. Especially with regard to environmental crime, the obligation to restore damaged nature could play a decisive role. In the following, two accessory sanctions are presented in more detail:

The restoration of nature as accessory sanction – coherence with the ELD

The obligation to restore nature has no precedence in other EU criminal legislation and would be a sanction typically connected to environmental crime. The 4 Networks (IMPEL, EnviCrimeNet, ENPE, and EUFJE) in a common statement on 21 May 2021 have strongly recommended that in all Members States, criminal judges should be entitled to impose, apart from financial penalties and imprisonment sanctions, also remedial sanctions such as the restoration of nature[138]. This would imply an integrated approach of both administrative and criminal sanction types creating systemic coherence. Such an integrated approach including especially the restoration of nature has also been called for in a 2021 resolution of the European Parliament[139], as well as by NGOs.[140]

Such an approach exists in some jurisdictions:

Australia has adopted a model of 'reparative justice' through the New South Wales Land and Environment Court Act, which provides a combination of punitive and reparative sanctions, the latter including the obligation for the offending company to publicise the offence and its consequences, to carry out specified projects for restoration or the enhancement of the environment, to pay a specified amount to the Environmental Trust, or to organise a training course for its employees. Source: UNEP[141]

Under current EU legislation, the restoration of environmental damage is provided for in the Environmental Liability Directive (ELD).[142] The ELD establishes a framework of environmental liability, based on the "polluter-pays" principle, to prevent and remedy environmental damage by obliging the operator to restore nature to its previous condition.

An obligation to restore damage under the Environmental Crime Directive could overlap with the ELD. It is therefore important to ensure coherence between the two instruments. The conditions under which the obligation to restore nature are different under the two instruments, the latter requiring a criminal conviction. In addition, the environmental scope of application of the two instruments overlap but are not identical. However, there is a high potential for synergies: the ELD includes procedural rules and the obligation for Member

[138] Also EU environmental law has regulated on restoration of environmental damage in the Environmental Liability Directive that is not a criminal law instrument.
[139] https://www.europarl.europa.eu/doceo/document/A-9-2021-0112_EN.html; Report on the Environmental Liability of Companies.
[140] In particular the NGO European Forum for Restorative Justice, in response to our targeted stakeholder consultation.
[141] United Nations Environment Programme (2018),The State of Knowledge of Crimes that have Serious Impacts on the Environment, p. 58.
[142] https://ec.europa.eu/environment/legal/liability/ for more information on the ELD.

States to appoint a competent authority to enforce the ELD. It also contains a definition of the concept 'restoration of the environment' and how to achieve it.[143] These definitions and structures could also be used, if the obligation to restore damage were to be imposed during criminal proceedings/by a criminal judge. The Environmental Crime Directive could make reference to the ELD in this regard.

The confiscation of proceeds coherence with the Freezing and Confiscation Directive

Practitioners but also other stakeholders have particularly emphasised that effective and dissuasive sanctioning would require that the enormous illegal profits and other benefits are removed in full. This can be achieved by ensuring that the Directive is coherent with Directive 2014/42 EU (the Freezing and Confiscation Directive). Currently, the scope of the Freezing and Confiscation Directive's scope does not include environmental crimes. However, it does apply to legal instruments that reference the Freezing and Confiscation Directive. It would therefore be sufficient to include a simple reference in the Environmental Crime Directive to make it coherent with the Freezing and Confiscation Directive and improve its effectiveness with regard to sanctioning.

Effectiveness

Accessory sanction and aggravating circumstances will directly impact the sanctioning in practice. The existence of aggravating circumstances can contribute to judges imposing higher and more dissuasive sanction, using the full range up to the maximum sanction threshold, where appropriate. In the same way, aggravating circumstances could also lead to a more harmonised sanction practice across the EU.

Accessory sanction will also contribute to more effective and dissuasive and proportionate sanctions, as they provide the criminal judge with a toolbox from which he could choose the most appropriate and dissuasive ones adapted to the individual case. Accessory sanctions could be even more dissuasive than financial penalties, in particular with regard to legal persons. For example: confiscation or forfeiture can serve as a very dissuasive tool, as the value of property and assets confiscated can reach amounts surpassing the benefits of a crime.

Case study – glass eels

The Regional High Court of Nantes, in a decision of 7 February 2019, sentenced the traffickers to 2 years imprisonment and to fines. The Court also sentenced certain offenders to a 5-year ban on carrying out a professional activity related to fishing glass eels. Property, assets and bank accounts of an amount of EUR 700 000 were confiscated, including a boat, a motorbike, a car, a luxury watch and more than EUR 300 000119. The imposed financial

[143] Remedying of environmental damage, in relation to water or protected species or natural habitats, is achieved through the restoration of the environment to its baseline condition. The ELD aims at ensuring that the environment be physically reinstated. This is achieved through the replacement of the damaged natural resources by identical or, where appropriate, equivalent or similar natural components, or, as appropriate, by the acquisition/creation of new natural components. If measures taken on the affected site do not allow achieving the return to the baseline condition, complementary measures may be taken elsewhere (for instance, an adjacent site).

penalty only amounted to EUR 30 000.

6.3.3 *6.3.3 Option 3 c): Option 3 b) plus an obligation to link the level of fines to the financial situation of legal person and/or illegal profits*

Description

A provision could be included into the Directive obliging Member States to take into account the annual turnover of a company and illegal profits generated or expected when determining the appropriate level of a financial penalty.[144]

Effectiveness

The financial situation of legal persons generally differs considerably from that of natural persons. Legal persons/companies to a higher degree than natural persons are able to outbalance financial fines, e.g. by off-setting them against the illegal profits generated/expected or as counting them as part of operating expenses.[145] The ECJ has held on several occasions that a dissuasive sanctioning system must take account of the financial situation of the offender[146]. Similar arrangements exist for example in EU (non-criminal) competition law[147] or in sectoral legislation, but also in national environmental criminal law.[148]

Council Regulation (EC) No. 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing lists certain behaviours as serious infringements. For this category of infringements, Article 44(2) of the Regulation provides for an approximation of the maximum levels of administrative fines foreseen in relation to serious infringements, requiring Member States to impose a maximum sanction of at least five times the value of the fishery products obtained by committing the serious infringement.

For environmental offenses covered by the Directive committed by legal persons, some Member States already link criminal fines to the financial situation of the offender. In HU, the maximum level of fine for all Article 3 offenses is three times the financial benefit gained or expected. If the benefit gained or expected through the criminal act is not a financial advantage, the court imposes the fine considering the financial situation of the legal entity. In

[144] Cefic cautioned that there must not be a duplication of the competition law situation, which also connects fine levels to annual turnovers. Here is the purpose of the fines also to prompt cartel members to leave the cartel.
[145] M. Faure, Environmental Liability of Companies, 2020, p. 88
[146] See for example Judgment of 27 March 2014, LCL Le Crédit Lyonnais, C-565/12, EU:C:2014:190, para 50 and 51In this case the ECJ stated that to assess if a penalty is dissuasive it is necessary to compare: (a) the situation of a person behaving in compliance with the law, with (b) the same person's situation after acting against the law and then receiving a penalty. If, under this comparison, the offender is at an advantage when not complying with legal obligations and when penalties are applied, the penalty system is not dissuasive enough.
[147] Cartel law.
[148] Namely in HU, NL, PL, AT, Evaluation report p. 38-39.

NL 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 [3].

In PL and AT, maximum fines are limited by the income or profit of the legal entity. PL sets a maximum fine of 1,250,000, but this fine should not exceed 3% of the yearly income of the entity for all Article 3 offenses. AT makes a distinction between fines for for-profit (between EUR 50 and 10,000 per day) and non-profit (between EUR 2 and 500 per day) legal persons for all Article 3 offenses, with maximum fines of 7,200,000 (or 720 daily units) for all Article 3 offenses except for 3(g) offenses (which have a maximum fine of 3,600,000).[149]

Impact on businesses

Sanction systems linked to economic parameters (such as the financial situation of a company) can result in higher fines for large companies. This represents a risk for legitimate businesses that accidentally cause damage through their operations. However, such sanction systems are already in place in several Member States for environmental criminal or administrative law.[150] Additionally, more harmonisation between administrative and criminal sanction systems contributes to creating a more even playing field for legitimate businesses across Europe. In the public consultation, businesses said that a blanket approach based on the financial situation of companies, independent of the type of conduct involved would not be appropriate. Instead, the nature, degree of culpability, frequency, harm caused, any previous warnings from a regulator and seriousness of non-compliance should all be considered to define the appropriate sanction.

6.3.4 *6.3.4 All options: non-binding guidance e.g. on determining of illegal benefits, calculation of illegal profits, financial situation of legal persons etc.*

The option to harmonise sanction levels only through non-binding measures was discarded above under section 5.1.2. Guidelines and benchmarking could, however, complement binding anchor provisions in the Directive and contribute to further harmonising sanctioning of environmental crime and its effectiveness in practice.

Sanctioning principles have been formulated in the context of the Commission's Action Plan to foster environmental compliance and governance.[151] These could be further developed. Special guidance could also be necessary to harmonise sanction levels of financial penalties through e.g. adopting a methodology how to take into account illegal profits and the financial situation of a legal person. For example, if not already regulated in the legislative text (see example above), such guidelines could determine the minimum- or average percentage of the product value or of the economic benefit resulting from the infringement and/or of the annual turnover of a company. Guidance could also be necessary to help determine the value of a

[149] Evaluation report, p. 38-39.
[150] As illustrated in section 2.1.3.
[151] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: EU actions to improve environmental compliance and governance {SWD (2018) 10 final.

benefit or profit obtained from the criminal activity. As such guidelines already exist or are planned for, e.g. in the context of the Environmental Liability Directive, this could lead to synergies. Stakeholders in general have expressed great support for a combination of binding and non-binding measures to improve and harmonise sanctions.

6.3.5 *6.3.5 Coherence with EU sectoral legislation - relationship between criminal and administrative sanctioning systems*

As illustrated above, the provisions on sanctions in the Directive can overlap with penalty clauses used in sectoral legislations listed in the Directive's annexes or other administrative national or EU-legislation. These instruments do not contain any provisions on the relationship of parallel administrative and criminal sanctioning tracks that would ensure their coherence and the *ne-bis-in-idem* principle[152]:

The Commission is currently reviewing a number of these sectoral instruments.[153] This gives the opportunity to ensure their mutual coherence and coherence with the Environmental Crime Directive. To prevent overlaps and diverging rules with regard to sanctioning, EU sectoral legislation should only regulate administrative sanctioning systems.[154] Administrative sanctioning systems would continue to apply according to the sectoral legislation or according to the national law of the Member States. The combination of administrative and criminal sanctions should not breach the *ne-bis-in idem* principle (see for this issue also under section 6 – heading overarching national strategies).

The Environmental Crime Directive and EU sectoral legislation should provide for corresponding accessory sanctions types. This would ensure that under both sanctioning tracks there is sufficient flexibility to react appropriately to the individual case.

6.3.6 *6.3.6 Stakeholder opinions*

All measures are supported by a large majority of the stakeholders. A large majority sees a need for provisions on minimum maximum sanction level, aggravating circumstances and accessory sanctions. The usefulness guidance material, compilation of best practices and enhanced and better tailored training was also largely confirmed.

Almost all Member States could endorse the introduction in the Directive of minimum levels for maximum sanctions for environmental crimes. Some Member States have reservations against the definitions of aggravating circumstances and accessory sanctions as well as linking the level of imposed penalties to the profits or turnover of a company.

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[152] The application of the *ne bis in idem* principle laid down in Article 50 of the Charter presupposes that the measures which have already been adopted against the accused by means of a decision that has become final are of a criminal nature. The CJEU has held that Article 50 of the Charter covers also cases where the double punishment stems from a combination of criminal and administrative penalties provided that the administrative penalty is criminal in nature (CJEU, judgment of 26 February 2013, *Åkerberg Fransson*, C-617/10, EU:C:2013:105). In this respect, the CJEU – aligned itself with the '*Engel* criteria' developed by the ECtHR – has identified criteria, which alternatively and not cumulatively, are relevant for determining whether an administrative sanction is criminal in nature.

[153] See annex 10.

[154] Notwithstanding the right of Member States to criminalise breaches of sectoral legislation in their national law.

For one third of the practitioners responding to the public consultation the minimum maximum sanction levels are not useful. One third of the industry stakeholder considers the minimum maximum sanction levels to be not useful. The four networks in a joint statement highlight the need of minimum maximum sanction levels. In Eurojust's view, cross-border investigations and prosecutions of environmental crime in the EU would benefit from the application of more uniform and dissuasive penalties for such crimes across the EU. According to Eurojust, it is essential to remove/confiscate the proceeds of environmental crime more systematically.

A large majority of the Member States, the practitioners and of NGOs advocate for linking the level of imposed penalties to the profits or turnover expected or the profits generated and to the financial situation of business involved in committing the crime. A minority of the industry stakeholders favours this option. One third of the industry stakeholders does not consider this option or the definition of aggravating circumstances and accessory sanctions, to be helpful.

The academic stakeholders strongly support new forms of sanctions for companies, such as the obligation to repair the damage to the environment. Academia have long advocated that a toolkit of administrative and traditionally criminal sanctions be made available to criminal judges. The Fundamental Rights Agency emphasises that sanctions against legal entities must be sufficiently dissuasive, stipulated in national law and effectively implemented.

6.3.7 *6.3.7 Comparison of the options/preferred option*

The preferred option is option 3 c), which includes the other two options. Each individual option can only develop its full potential with regard to effectiveness, if flanked and complemented by the other options. While minimum maximum sanction levels ensure that a common sanction level is available in the Member States that appropriately reflects the harmfulness of environmental crime, aggravating circumstances aim at imposing appropriate sanction levels also in practice. Accessory sanctions introduce sanction types other than the fines and imprisonment and target in particular legal persons, which often find accessory sanctions more dissuasive than criminal or administrative fines. They can be of different nature and designed to remove the illegal profits from the offender, or to stop future activities e.g. by seizing the means, which were used to commit the crime. To increase also the dissuasiveness of fines, the level of fines imposed will have to take account of the financial situation of legal person, at least where this appears appropriate. Finally, as it is particularly important to remove illegal profits, which can be enormous and are a key incentive to commit environmental crime, fines must at least reach the level of the profits generated. In this way, a full EU criminal sanction system can be created that has all tools at its disposal to come to the most effective and suitable sanction or mix of sanction in the individual case.

6.4 6.4 Objective 4: Improving the effective cooperation and coordination between Member States

Practitioners highlighted that effective cross-border cooperation is essential for investigations of environmental crime[155] to succeed. The current Directive does not contain provisions targeting cross-border cooperation.

In the following, a package of measures that support each other will be assessed. We have chosen not to discuss each of these measures as an individual option as each measure tackles different aspects of the problem area and therefore cannot be regarded as alternative options. They are different elements of the same bundle, parts of a package, to address properly all facets of the objective.

We could not identify additional options or alternative packages of options. All conceivable measures as suggested by stakeholders and have been included in the package below. Also in other criminal law instruments there were no other solutions with regard to the problem at hand.

6.4.1 *6.4.1 Option – introducing a package of provisions directly fostering cross-border cooperation*

The Directive could contain additional provisions directly fostering cross-border cooperation. Examples of such measures exist in other criminal law instruments[156] and oblige Member States to

a. provide for investigative tools for organised crime and other serious crime forms *(*such as telephone interceptions, video surveillance, tracking, undercover agents and controlled deliveries); Member States which currently do not allow to use these investigative tools for environmental crime investigations would be obliged to do so.
b. cooperate through EU-agencies and other bodies mandated to facilitate cross-border cooperation such as Europol, OLAF, Eurojust and professional networks such as ENPE, IMPEL and EnviCrimeNet.
c. install national contact points for cross-border cooperation. National contacts points could facilitate coordination, information sharing and joint planning at national level as well as contact and cooperation through Europol and Eurojust.

6.4.2 *6.4.2 Effectiveness, legal feasibility and coherence*

Investigative tools

Access to the most effective investigative tools in all Member States would facilitate effective cross-border cooperation, such investigative tools are normally conditional on the seriousness of the crime and in some Member States conditional on whether the environmental crime is linked to organised crime. Under this option, there would be no further conditions to apply

[155] See Annex 8.
[156] See Annex 6.

investigative tools also to environmental crime. Effectiveness is limited insofar, as this provision does not harmonise the investigative tools available for environmental crime overall. Member States would therefore only obliged to make available tools that exist already in their national law. This is justified for proportionality considerations and the principle to respect Member States legal traditions and systems when harmonising rules to facilitate judicial cross-border cooperation (Art. 82 (2) TFEU).

Cooperation through EU-agencies like Eurojust, Europol and OLAF

An obligation to involve EU-agencies that are mandated with facilitating cross-border cooperation could help increasing the frequency of cross-border cooperation and thus contribute to investigations that are more effective. These agencies may only act when requested by the Member States.

National contact points

The creation of national contact points could help further foster intense and regular EU-wide contacts on the operational level and tear down barriers that existed to so far in tackling cross-border environmental crime cases. This measure could build on the existing professional networks of environmental law enforcement practitioners and prosecutors whose work has already paved the way for better cross-border contacts at national level.[157]

Stakeholder opinions

All measures are supported by a large majority of most stakeholder groups. However, the large majority of businesses that replied to the public consultation do not consider harmonisation measures are necessary. The joint statement of the four networks emphasises the need for cross-border cooperation within the EU. NGOs support the use of existing mechanisms of cooperation with European Agencies (Eurojust, Europol).

6.4.3 ***6.4.3 Efficiency***

Investigative tools

Should the specialised investigative tools be used more widely also due to the broader scope of environmental crime, or due to an overall increase in awareness about environmental crime and prioritisation of such investigations, additional costs for the use of these tools are likely. There is no quantitative data available on the costs of using investigative tools available in the Member States. However, prosecution officers 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. The benefits in terms of improvements in the efficiency of investigations and prosecution and the further social and environmental impacts (see section 7) would nevertheless be very high, hence this measure is deemed efficient.

[157] See for more details: Smith, L. and K. Klaas. (2015). Networks and NGOs Relevant to Fighting Environmental Crime. Study in the framework of the Efface research project, Berlin: Ecologic Institute. Available at: www.efface.eu.

Cooperation through EU-agencies and bodies mandated to facilitating cross-border cooperation such as Europol, OLAF and Eurojust; install national contact points for cross-border cooperation;

Using reference data from previous impact assessments, a range of 12 – 20 days per contact point annually was estimated. Contact points are assumed to be required in five different areas (administrative authorities, police, customs, prosecution and courts) per Member State. Costs are presented in the table below.

Table 3, estimated annual costs of establishing and maintaining focal points in the Member States

Annual costs	**Low**		**High**	
Per focal point	12 days	€ 3 523	20 days	€ 5 872
Per Member State (5 focal points)	60 days	€ 17 615	100 days	€ 29 358
All Member States (EU27)	620 days	€ 475 594	700 days	€ 792 656

Many Member States have representatives in professional networks of law enforcement practitioners specialised in environmental crime (i.e. IMPEL, ENPE, EUFJE and EnviCrimeNet). These representatives could formally take on the role of national contact points, so that synergies could be used and cost reduced.

6.4.4 *6.4.4 Conclusion*

The measures proposed under this option are each effective on their own merits, but combined they support and reinforce each other. As shown above under section 2.2 - baseline, mandatory provisions in the Directive are necessary to support the effectiveness of already numerous existing non-binding measures and trainings that support cross-border cooperation.[158]

6.5 **6.5 Objective 5: Improving data collection, statistics and reporting on environmental crime**

The options to improve data collection and dissemination and statistics in the Member States are:

Legislative options:

Option 5 a): Oblige Member States to collect data, prepare statistics and actively disseminate them, and regularly report to the Commission statistical data related to environmental crime.

[158] Support offered by existing agencies such as Europol and Eurojust, but also from EU-wide operation professional networks in the field of environmental crime, EU- action plans to foster practical implementation of environmental law including cross-border cooperation and measures taken under the EMPACT policy cycle have not been sufficient to make a real difference.

Option 5 b): Oblige Member States to collect and report statistical data according to harmonised common standards

Further measures to support both options:

- Provide for EU-guidelines on the collection, sharing and reporting of statistical data on environmental crime.
- Provide for non-binding EU guidelines on developing common standards for collecting, sharing and reporting of statistical data.
- Professional training for national law enforcement authorities on the collection, sharing and reporting of statistical data. based on EU-training modules
- Provide for a common EU platform to be used by Member States for sharing and reporting of statistical data/use of the existing e-justice portal.

6.5.1 *6.5.1 Option 5 a): Oblige Member States to collect and regularly report to the Commission statistical data on environmental crime proceedings combined with further supporting measures*

Description

Under this option, Member States would be obliged to collect and process relevant data, compile statistics, and report such statistical data themselves to the European Commission, but they can choose how they will do it.

Efficiency

Provisions obliging Member States to collect data on scale of environmental crime and efforts to combat it, prepare statistics and report to the Commission specific statistical data on criminal proceedings exist in other Directives.[159] The legal concepts, criminal justice systems, data and methods of crime statistics vary greatly between European countries, as well as the efforts to collect accurate and complete statistical data at all. The lack of standardised instruments and methodology limit the comparability of crime statistics.

Supporting measures

The option could therefore be supported by non-binding measures such as guidelines and training. Such measures already exist today and could be stepped up. E.g. the 'Guidance on combating environmental crime and related infringements'[160] provides guidance on data collection and information sharing. Although this helps Member States to get understand techniques and best practices, it is does not ensure that all Member States comply.

[159] Specifically: Directive 2019/713/EU Article 18 on counterfeiting of non-cash means of payment; Directive 2013/40/EU Article 14 on attacks against information systems; and Directive 2014/42/EU Article 11 on the confiscation and freezing of assets.

[160] https://circabc.europa.eu/ui/group/cafdbfbb-a3b9-42d8-b3c9-05e8f2c6a6fe/library/4936f98d-ace0-438b-8bd7-0afc9946dbfa/details.

An EU-format or platform at EU level to share and report to the EU the statistical material collected could make it easier for Member States to share and report their statistical data. A platform would use standard IT tools and a common reporting format. Especially, combined with an obligation of the EU to publish annual reports on the developments of law enforcement proceedings in the Member States based on the statistical data reported could lead Member States to see the benefits of reliable, accurate and comparable data in the field of environmental crime. Synergies with existing EU-portals disseminating crime statistics could be used. Such portals exist for example at: Eurojust, Europol, Eurostat (section on Crime and Criminal Justice statistics), EMCDDA (European Monitoring Centre for Drugs and Drug Addiction).

However, without a standardised format, it will be difficult to compile comparable statistical data on a European level given the language differences, the different procedural rules at each stages of criminal proceedings and the variations e.g. on the conditions for dismissing a case across Member States. Although 19 Member States already publish data on environmental crime in various national publications[161], this data collection is fragmented across different authorities in each country, without much central national coordination The Directive would therefore have to go further and be more specific in its demands, to be really effective.[162]

6.5.2 *6.5.2 Option 5 b): Option 5 a) plus an obligation of the Member States to collect and report statistical data according to harmonised common standards*

Under this option, Member States would be obliged to collect and process relevant information and data, compile statistics and transmit statistical data according to minimum common standards[163] for the annual collection, compilation and transmission to a national coordinating office. The exact definition of minimum standards as opposed to fully harmonised standards could be determined at EU level with participation of Member States using comitology procedure.

Feasibility and effectiveness

This option would be feasible, given that current crime and criminal justice statistics systems in most Member States already have experience in reporting crime and criminal justice data to Eurostat. Thus, the majority of Member States have achieved already some level of data standardisation. Data following minimum common standards would still provide limited

[161] According to baseline research: Final Report on the Evaluation of 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.

[163] Issues requiring a common understanding would be e.g. common counting units and rules (e.g. offences rather than investigations or cases; persons suspected for several offences be counted for each type separately or not), use of a common classification of environmental crime (or sub-categories) for statistical and reporting purposes to be prepared by the EU working group, 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.).

comparability among countries.[164] However, if data on persons suspected and convicted for trafficking in species referred to the same counting units, the same category of crime and the same reporting standards across countries, trends in conviction rates for trafficking in species would be reliable and comparable.[165]

Effectiveness could be fostered further through transparency resulting from the dissemination of statistical data. Thus, it would be public which Member States are not providing comparable statistical data. Moreover, regular Commission reports on the results and interpretation of the statistical data on environmental crime proceedings in the Member States provide valuable information and could be an incentive for Member States to step up their efforts in collecting comparable statistical data.

Political support

As Member States will have to invest in adjusting their data collection systems and workflows, and will have to participate actively in setting up and defining common standards, this option is, however, dependent on the political will in the Member States to do so. As the lack of statistical data in the area of environmental crime has been a well-known challenge in the past decade and addressing these shortcomings was also recommended by the 8th Mutual Evaluation, there is a momentum to take steps towards more effective data collection. But Member States were in the past very reluctant to accept obligations to harmonise criminal statistics.

Stakeholder opinions

All improvement options are supported by a large majority of stakeholders; almost all of the respondents to the public consultation are in favour of obliging Member States to collect and regularly report statistical data, of developing common standards at EU-level, establishing a common platform to collect and exchange statistical data and of boosting professional training and awareness raising. A large majority is also in favour of non-binding guidelines on data collection as well as of developing common EU standards on the collection of statistical data. But the majority of the Member States is not in favour of any legal obligation for Member States, although one third of the Member States supports the establishment of a common platform to collect statistical data.

For half of the practitioners non-binding guidelines as well as the combination of binding and non-binding measures are not useful. The majority of the practitioners thinks a legal obligation is necessary. The four networks stressed the need for consistent reliable data. Europol agrees with obliging Member States to collect and share data and to establish a

[164] Full effectiveness would require a fully harmonised environmental criminal law and -procedural law and fully harmonised statistical and reporting standards, which is unrealistic.

[165] Absolute numbers should not be compared between Member States when reporting, recording and substantive criminal law are not fully harmonized – for example, a lower number of convictions for trafficking in species in one country may simply be the result of most perpetrators of this crime being fined under civil law judgements, or under criminal law sanctions under a different crime category (such as smuggling in goods).

common platform, for instance that it would host. The NGOs favour setting up a centralised system for data sharing purposes.

6.5.3 *6.5.3 Efficiency*

Option 5 a): Oblige Member States to collect and regularly report to the Commission statistical data related to environmental crime.

To establish a baseline for effort required from Member States to centralise the collection of their existing statistical data on environmental crime, Member States have been grouped into six categories based on the number of agencies currently involved with statistical data on environmental crime. To account for differences among the Member States, the number of days estimated to implement this option is based on the number of agencies within the Member State that would need to provide data. The definition of implementation activities and approximate effort in person days has been developed based on expert judgement by practitioners with experience in crime statistics and are detailed in the supporting study.

The overall costs would be approximately 909 person days or EUR 312 338 of one-off costs for the set-up and annual costs of 588 person days and EUR 198 610, as broken down in the following tables by Member State and at EU-level.

Table 4, Member State cost for Option 5a)

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

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

** 1 day per agency

*** 3 days per agency

Option 5 b): Oblige Member States to collect and report statistical data according to harmonised common standards to be defined by the Commission.

This option differs from the previous by emphasising the application of minimum common standards for the collection, compilation and reporting of statistics on environmental crime. It assumes the setting up of an EU Task Force of independent and EU experts to define and maintain the common standards, and work directly with Member States to ensure implementation, as well as a Member State working group to handle national specificities. The same baseline used in Option 5 a) is also used to distinguish between efforts required in different Member States. The overall costs would be approximately 1 948 person days or EUR 689 789 of one-off costs for the set-up and continuous costs of 1 165 person days or EUR 412 999 per year, as broken down in the following table.

Table 5, Member State costs for Option 5 b)

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

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

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

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

Costs are estimated for the Commission to determine minimum standards for data collection via preparation of an implementing act and assisted by a Commission consisting of representatives of the Member States. The following activities would be required over a 9-month period:

1. Preparation of a draft design or proposal for statistical standards, building on the existing study prepared by the contractor for the impact assessment

2. Three meetings of the MS working group to review drafts
3. Bi-lateral meetings with those Member States (approximately 10) who would require additional input / negotiation to harmonise their current statistical data collection activity
4. Review and revision of the draft and preparation of an interim (draft final) version of the standards
5. EU level inter-service review of the standards and expected results
6. Finalising the document

There are two possibilities for the Commission to carry out these activities. The Commission could choose to have the work carried out by an external Intra-muros, Full-time costs are estimated using the average monthly salary for AD8 plus an overhead cost. The total estimated cost is **EUR 86 508**.

The Commission could also engage a contractor via an ongoing framework contract. Costs are estimated using the average typical framework contract rates proposed by contractors for the current DG JUST Lot 1 contract and include all overheads and associated costs. The total estimated set-up cost are **EUR 138 771.**

Recurrent costs would stem from maintaining the standards and the production of regular reports based on the statistical data transmitted by Member States, estimated at **EUR 12 861** (24 days) and **EUR 21 238** (40 days) = **EUR 34 188. (64 days).**

6.5.4 *6.5.4 Comparison of the options/preferred option*

The preferred option is option 5 b). This option is more costly and demands more engagement of the Member States and the Commission, but it is more effective than option 5 a). The problem of incomplete, inaccurate and incomparable data has persisted for a long time and hindered the evaluation, monitoring and informed decision-making with regard to environmental crime. The simple obligation to collect and report statistical data on crime as present in other EU-legislation has not lead to a sufficient improvement of the situation, even if combined with some guidelines and training. Therefore, more efforts are required at EU-level to binding common standards for the data collection in Member States.

6.6 *6.6* Objective 6: Improving the effective operation of the enforcement chain

As outlined in the 2020 evaluation report, there are large deficits in detection, investigation, prosecution and adjudication of environmental crimes covered by the Directive in all Member States. Generally, it is primarily a Member States responsibility to take the necessary action to implement EU law effectively.[166] However, the problem has long been persisting and existing non-binding guidance and other supportive measures have so far not led to tangible results (see above section 2.2. - baseline).

[166] Article 4(3) TEU, Articles 288(3) and 291(1) TFEU.

The effective enforcement at national level is crucial for successfully combating environmental crime whereas the evaluation of the Directive has identified the lack of effective enforcement at national level as a serious obstacle to combating environmental crime and a reason for the Directive to be not effective on the ground. The 8th round of the Council Mutual Evaluations also came to this result, as well as numerous studies and reports in the field over the past years. Recently, the EP has called for better practical implementation in the field of environmental crime.

6.6.1 *6.6.1 Insert in the Directive obligations that directly strengthen the effectiveness of the law enforcement chain*

Description

As under objective 4 (see above 6.4.), a set of provisions aimed at ensuring effectiveness of the enforcement chain is assessed. As under objective 4, the individual measures are not treated as separate options because they address different aspects of the objective and are to be seen as mutually supportive. The measures are inspired by input from enforcement practitioners and similar provisions in other EU-criminal law instruments (see annex 6). The Directive would include provisions to oblige Member States to

a. support specialisation among the enforcement chain, including the setting up of specialised units in police and prosecution services; establish specialised court chambers
b. provide regular and appropriate training along the enforcement chain,
c. ensure effective cooperation and coordination between relevant authorities within and between MS, including exchange of information
d. take measures to raise public awareness of the harmfulness of environmental crime,
e. set-up a national strategy[167] to combat environmental crime which help, inter alia, to ensure coherence between administrative and criminal enforcement and sanctioning.

This does not exclude developing guidance material on issues related to detection, investigation, prosecution and sanctioning of environmental crime and develop training materials for specialised training and specialisation of law enforcement officials, judges and prosecutors. In this regard, the existing European environmental enforcement networks, such as IMPEL, EnviCrimeNet, ENPE and EUFJE, can play an important role. Already existing guidelines could be further developed (see above section 2.2. - baseline).

Specialisation

In particular, the creation of specialised units in police and prosecution as well as specialised chambers at criminal courts would be most effective for improving environmental crime law enforcement. This has unanimously been emphasised by practitioners, their networks and – EU-agencies in stakeholder consultations. In ES, the specialisation of the police and prosecution is considered as one of the determining factors in achieving successful

[167] Guidance already exists on strategic approaches; see Guidance on Combating Environmental Crimes and Related Infringements, Chapter 14 under the Action Plan on Compliance and Governance.

convictions of environmental crime[168] (see table under section 1.1) However, it is a core Member States competence to decide how to structure their respective law enforcement systems. Therefore, only recommendations to the Member States would be possible.

Training

The widespread lack of appropriate regular training and specialisation along the enforcement chin calls for strengthening training activities. Although some Member States currently provide some form of training in relation to combating environmental crime, (see more information in annex 4), practitioners in consultations had emphasised the strong need for more and better targeted training for all practitioners along the enforcement chain as well as the need to ensure that this is priority. They stressed that the current level of training does not ensure sufficient expertise in the highly technical and complex field of environmental crime. It is therefore assumed that all Member States, will need to provide additional training on environmental crime for all practitioner groups.

Effective training must be targeted, regular, practice oriented and follow high quality standards across professions and Member States. Ideally, national training for law enforcement and the judiciary would be complemented by sessions bringing together cross-professional audience from different Member States. Training would have to cover all the above mentioned objectives of the Directive. Training in the Member States could be supported by the EU through further development of existing and creation of new training modules on combating environmental crime, with involvement of the European environmental enforcement networks. Examples of existing obligations to provide training in EU-criminal law instruments can be found in annex 6. An overview of the baseline on training provided by each Member State is given in annex 4.

Awareness raising

The range of awareness raising activities is wide. It includes public information campaigns in media, schools and businesses, creating channels for citizens to report environmental crime to the public authorities the organisation of events, seminars and the fostering of research projects.

Today, according to the country reports of the 8th mutual evaluations, AT, CZ, IE, IT, NL and SE provide information to both the general public and private businesses. DE, FI, LV, PT and SK take actions targeting private enterprises or public, including the installation of communication channels to report environmental crime. BE, BG, DK, FR, LT, LU, PL take some action to educate children. CY, EE, EL, ES, HR, HU, MT, RO, SI_carry out little or no awareness raising activities.

Overarching crime strategies – coherence between administrative and criminal sanctioning systems

[168] Fajardo, T., Fuentes, J., Ramos, I., and Verdu, J. (2015). Fighting Environmental Crime in Spain: A Country Report. Study in the framework of the EFFACE research project. Granada: University of Granada, p. 10.

A national strategy on combating environmental crime would set out clear priorities and a framework for cooperation between different actors involved in fighting environmental crime. It would also assign responsibilities and structured mechanisms for cooperation and coordination. It would also define targets for furthering expertise through training and establishment of specialised units and running of awareness raising activities, ensuring sufficient resources and developments of supporting tools for practitioners.

Such a strategy would also have to ensure administrative and criminal sanctioning tracks as part of an overall approach to combat environmental offences.[169] Member States must provide for clear rules on communication, information sharing and delineation of tasks between administrative and judicial authorities.

Effectiveness of the measures

Each of the individual measures is effective towards reaching objective 6. They are closely interconnected and the implementation of one measure may significantly facilitate and reinforce the effect of other measures. E.g., awareness raising of the harmfulness of environmental crime can foster the developing national strategies on environmental crime and vice versa. Creating specialised units can be spurred by an obligation to develop overarching crime strategies. As a package, these measures support each other and amplify mutually their impacts.

Binding provisions on better implementation are most likely be accepted by Member States, as there are precedents in other recent EU criminal law- and other legislative instruments.[170] Additional EU guidance could provide Member States with best practices and thus step up the effectiveness of this option. Existing guidelines such as the ones developed under the Environmental Compliance and Governance Forum, and practical tools, such as the ones developed by the European professional networks (see above under baseline), could be further developed.

6.6.2 *6.6.2 Stakeholder opinions*

All proposed measures are supported by a large majority of the stakeholders, which in the pubic consultation requested and welcomed legal obligations in the Directive to take specific enforcement related measures strengthening the role of the enforcement chain.[171] In addition, a large majority supports also non-binding EU guidance, e.g. training and specialisation along

[169] The offences created by the Directive and the sanction provisions deriving from it coexist with sanction provisions in national law that are legally required by standard penalty clauses listed in the annexes to the ECD. It should be ensured that these are coherent with the criminal sanctions introduced at national level as transposition of the Directive as well as with administrative sanctions for legal persons introduced as transposition of the Directive. Moreover, it is possible that an infringement of a piece of sectorial EU legislation (and relevant transposing legislation) could be addressed by both administrative sanctions (pursuant to a standard penalty clause) and criminal sanctions (pursuant to the Directive). The choice of which sanction to use may be a matter of the severity of the harm but also of the different burden of proof between use of administrative law and use of criminal law.

[170] See Annex 6.

[171] Member States have not been particularly consulted on this issue. They are in any event obliged to implement the Directive in an effective way, even if not explicitly mentioned in the Directive.

the enforcement chain. Almost all practitioners (Europol, Eurojust, joint statement of the four networks) recommended the specialisation at every stage of the enforcement chain and enhanced regular training as the most important measure. As environmental crimes are often not in the focus and hidden as part of other crime categories such as organised crime there would be a need for establishing dedicated teams to detect and investigate them. The NGOs and academic stakeholder almost anonymously agree to further specialisation in the field and exchange of best practice.

6.6.3 *6.6.3 Efficiency*

In the following the costs for Member States and where relevant for the EU are assessed for measures that could be envisaged under option 6 b). For details, see the annex 2B and the supporting study.

Training

Most Member States already provide training on environmental crime to some or all of the targeted practitioners, as detailed in the annex 4. This existing training would need to be stepped up and offered to a larger group of practitioners. Based on the level of training already provided in the Member States, additional training between 1 to 3 days per year is assumed to be necessary The cost estimates provided here represent an ambitious form of in-person training, with full annual updates of the content. Costs are expected to decrease through the provision of online training courses/e-learning modules and over time as less new content needs to be developed. It is expected that initial investments will lead to greater benefits over time.

Table 6, Member States cost estimates for additional training along the enforcement chain[172]

	Police and prosecutors	***Criminal judges***	***Custom officers***	***Inspectors***	***Total***
All MS/EUR	***2,861,964***	***64,668***	***2,271,670***	***2,780,145***	***7 979 446***

A reduction of these costs for the Member States can be expected, as training is organised by organisations e.g. CEPOL or professional national networks such as ENPE and EJTN as well as Eurojust which cover the bulk of their costs from supranational funds such as the LIFE Programme, the Internal Security Fund (ISF) Police and the Justice Programme. Some Member States currently directly use EU funds, including technical assistance funds from the European Structural and Investing Funds (ESIF) and grants from the LIFE programme Training material developed at EU level could be adapted and used at national level which would also save costs.

Further reduction of the costs for Member States can be achieved by greater focus on virtual training and the development of online training modules[173]. Moreover, synergies could further

[172] Details per Member State could be found in the study in annex.

[173] It is estimated that setting up and developing one e-learning module, which can be used multiple times by multiple users, costs between EUR 5 000 and EUR 60 000.

reduce costs, if the numerous, but isolated and fragmented training activities along the law enforcement chain would be better coordinated at national level.

Specialisation/ improving cooperation and information exchange within Member States

Several Member States already have specialised units dealing with environmental crimes in police and prosecution.[174] The cost of setting up specialised units would stem from staffing them with either existing personal or with newly recruited ones, who would have to be trained regularly. Specialiation would already per se foster better cooperation and information exchange between the different levels of the enforcement chain in Member States. The costs of additional staff and training have been taken into accout below (additional staff) and above (training).

Awareness raising measures

For targeted awareness raising measures, it is assumed that Member States will carry out information campaigns addressing businesses whose activity may have a strong impact on the environment and the public. 11 Member States report that they already carry out awareness raising activities on environmental crime, including 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 – more details are provided in the annex 4. It can be assumed that all Member States would make additional effort. Indicative costs for individual activities based on the experience of the ENPE and reference data from other impact assessments in the area of criminal law are provided in the table below.

Table 7, 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	€5 000 per publication	ENPE
Awareness raising among generalist professionals of criminal law for relevant provisions + preparation of practitioners' guidelines compiling the best practices (EU level cost including meeting organisation, travel expenses, working time of officials)	€3 080 000	Impact Assessment of the Directive on the protection of the financial interests of the EU[175]

[174] This is based on information available in the 8th Round of Mutual Evaluation country reports as well as information obtained through additional consultations with stakeholders.

[175] 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, p.31-40.

Activity	Cost	Source
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-

National strategies on combating environmental crime

According to the 8th Round of Mutual Evaluations country reports, a national strategy on combating environmental crime is a very useful tool but well developed strategies exist currently only in a few Member States, such as Finland, the Netherlands, CZ and SK. . Costs for developing an environmental crime strategy would be limited because the relevant activities, such as consultations, preparation of documents, organisation of workshops to get input from experts, are not costly.

Table 8, estimated cost of developing national strategies in the Member States

An example is provided below for Finland but the costs but could be significantly lower for several Member States[177].	€864 289	€324 108

Costs of an increase in staff in Member State police and prosecution offices

As explained at the beginning of section 6, costs stemming from more effective investigations and from a broader scope of the ECD would mainly be the need for additional staff in the Member States to carry out the investigation and prosecution of additional environmental crime cases. To calculate costs, it is assumed that a higher volume of cases would primarily impact the practitioners along the enforcement chain dealing with investigation, prosecution and conviction. Using the lowest percentages of the total police and prosecutors in the Member States (0,02% respectively 0,17%) as a proxy for the amount of additional capacity that each Member State would be likely to add, based on the current numbers of police and prosecutors in each country, annual costs have been estimated at EUR 4,069, 175 in total for all Member States.[178]

6.6.4 *6.6.4 Conclusion*

All measures assessed are effective and in a package of measures support each other to achieve the objective. We have chosen not to discuss each of these measures as an individual option. The reason is that each measure tackles different aspects of the problem area and therefore cannot be seen as alternative options. They are different elements of the same bundle to address properly all facets of the objective.

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

[177] Based on interviews with representatives of the Finnish government regarding the elaboration of Finland's national strategy and action plan on environmental crime, costs are estimated to 3 months of full time equivalent for 2 staff plus two one-day meetings of a 10-person working group. Costs for updating are estimated as one month of work for 2 staff plus a one-day annual meeting of the working group.

[178] More information can be found in the supporting study.

7 INDIRECT IMPACTS OF A MORE EFFECTIVE ENVIRONMENTAL CRIME DIRECTIVE

As outlined above, the options above are effective and efficient with regard to improving the Directive's overall effectiveness on environmental protection through criminal law. More and more effective investigations, prosecutions and convictions are supposed to contribute to reducing environmental crime. The impact of a more effective Directive on the environment, economy and social life will be overall positive. The impacts as described in this chapter were taken into account for the efficiency assessment (cost/benefit analyses) in section 6.6.5, as the positive impacts of reduced environmental crime can be regarded as benefits.

Criminal law is only a part in a comprehensive EU strategy to protect and improve the status of the environment, which is a priority for the current Commission. The Green Deal Communication and the Biodiversity Strategy set out a whole range of measures of environmental protection that will pull together in a holistic approach, reinforce and influence each other. Criminal law measures will come in as a last resort when other measures have not been sufficient to ensure compliance. Therefore, environmental indicators on e.g. the degree of air pollution or biodiversity would rather measure the effectiveness of the overall strategy to improve the environmental status, not just of the approach on environmental crime.

Therefore, in this impact assessment there will be no quantification of the impacts of an isolated instrument such as this Directive. Instead, hereunder there will be a qualitative description of the impacts and benefits of an improved environmental protection to which the reviewed Directive will contribute. Positive impacts and benefits on life on earth are immeasurable and beyond quantification. A more detailed outlook is presented in annex 5.

Environmental impacts

A more effective Directive that leads to better law enforcement by criminal law will contribute to an improved environment through its preventive effects of high rates of detection and effective sanctioning of environmental crime. Where there is an effective criminal law system in place, environmental crime does not pay out.

Social Impacts

The positive environmental impacts of better environmental crime law enforcement would have immediate positive social impacts on human life, health and well-being.[179] Moreover, e.g. the reduction of wildlife crimes can have positive consequences for specific countries, where organised crime and terrorist groups use illegal wildlife trafficking to finance illegal arm trade and terrorism. Their activities destabilise whole societies. Moreover, in source

[179] WHO, 2014. 7 million premature deaths annually linked to air pollution. Available at: http://www.who.int/mediacentre/news/releases/2014/air-pollution/en/; the latest available figures (updated 2018) from the WHO website indicate 4.3 million annual deaths due to ambient air pollution and 3.8 million deaths due to household air pollution; https://www.who.int/health-topics/air-pollution#tab=tab_3.

countries, residents and rangers protecting biodiversity often suffer threats of violence.[180]

Economic impacts on society and businesses

Overall, the estimated profits of between USD 91 and 259 billion globally from environmental crimes are losses to societies through losses of tax revenue, revenue loss for fair playing businesses and undermining of governance.[181]

Businesses confirmed that stepping up criminal liability for companies would not produce additional compliance costs further to the costs necessary for investments to receive certifications or authorisations according to sectoral legislation and requirements from the strict liability regime set out in the Environmental Liability Directive. Businesses have confirmed that effective criminal law enforcement would protect them against unfair competition from illegal business whose activities affect negatively prices and profits in the whole sector.

Fundamental Rights impacts

The Directive is likely to have a positive impact on the level of environmental protection, which is the subject of Article 37 of the Charter of Fundamental Rights of the European Union. Improving the environment will contribute to the improvement of physical well-being (health) of citizens, that is comprised by Article 1 of the Charter[182] on human dignity. Therefore, it will also positively influence the right to life (Article 2 of the Charter), the right to physical integrity (Article 3), the children care and well-being (Article 24), the right to healthy working conditions (Article 31) and the right to preventive and other health care (Article 35).[183]

This Directive – being a criminal law instrument – will have to be transposed into national law respecting the fundamental rights and observing the principles in the Charter of Fundamental Rights of the European Union (the Charter) as recognised in the TEU. Specifically, it should be transposed and applied with due respect for the right to protection of personal data (Article 8), the freedom to conduct a business (Article 16), the presumption of innocence and right of defence (Article 48), the principles of legality and proportionality of criminal offences and penalties (Article 49), and the right not to be tried or punished twice in criminal proceedings for the same offence (Article 50). In implementing this Directive, Member States should ensure procedural rights of suspected or accused persons in criminal

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

[181] UNEP and Interpol Rapid Response Assessment, 'The rise of environmental crime. A growing threat to natural resources, peace, development and security', 2016, p. 17.

[182] This impact of environmental protection on human dignity has been highlighted by the 1972 Stockholm Declaration and Conference; 'The Environment and Human Rights'; Introductory Report to the High-Level Conference: Environmental Protection and Human Rights, Strasbourg, 27 February 2020.

[183] Fundamental Rights Agency (FRA) input into the review of the Environmental Crime Directive (Directive 2008/99/EC on the protection of the environmental through criminal law, Vienna 27 April 2021.

proceedings. Their obligations under this Directive are without prejudice to their obligations under Union law on procedural rights in criminal proceedings

8 PREFERRED PACKAGE

Which options can best achieve the specific and general objectives?

Under **Objective 1**, option 1 a) is the preferred option. It proposes to amend the Directive by updating its annexes and adding new relevant legislation. New crime categories under Article 3 of the Directive will have to be created under Article 3 that correspond to the new legislation in the annexes. However, it is not possible to ensure further updates in the future through comitology. The Commission will have to optimise its internal process to ensure parallel updates of the Directive following relevant developments of sectoral legislation.

Under **Objective 2**, both assessed options will be combined. Thus, there are no changes to current architecture of Article 3. However, more precision on the definitions of environmental crime (option 2 a)), such as '*substantial* damage' and *'negligible or non-negligible quantity'*, will improve the clarity of the Directive. The criminalization of risky behaviours (endangerment crimes – option 2 b)) will have the further beneficial effect to alleviate the burden of proof in cases whether it is difficult to establish the actual damage. It will have to be considered with the relevant sectoral units of the Commission which new endangerment crime categories could be added that would correspond to new legislation to be added under the annexes. Hence, both options combined will increase the effectiveness of investigations and prosecutions of environmental crime.

Under **Objective 3**, the package of measures on sanctions (option 3 c)) – minimum maximum sanctions, aggravating circumstances, accessory sanctions, dependency of the level of fines of illegal profits and financial situation of the offender) will lead to more effective and more uniform sanction levels in national penal codes and in practice. In addition, the minimum maximum levels of imprisonment sanctions will allow for access to investigative tools, which only are available for crime that is punishable by a certain minimum maximum level of penalties. This leads to more effective investigations and facilitates cross-border cooperation.

Under **Objective 4**, the package of measures under option 4 b) (approximation of investigative tools, obligation to cooperate through EU-agencies, installation of national contact points) will complement and reinforce each other and lead to more effective investigations as many environmental crime cases have transnational aspects and can only be successfully conducted cross-border.

Under **Objective 5**, option 5 b) will lead to a commonly defined minimum standard for the collection of data on environmental crime procedures and thus facilitate the collection of accurate, complete and data that is comparable across the EU.

Under **Objective 6,** the package of implementing measures proposed (option 6 b) – training/specialization, awareness raising, overarching national strategies) are likely to have positive effects on the effectiveness at all levels (inspectors, police, prosecution, criminal judges) of the enforcement chain.

As the Directive needs improvement in all six problem areas, it is considered that the combined preferred options under each objective results in the best overall package. We therefore decided to assess the options for each problem area individually and did not assess different combinations of packages.

In combination, the preferred options can reach cumulative impacts that go beyond what could be achieved by the individual preferred options

Cross-border cooperation will be fostered not only by the measures under objective 4 but also through the broader scope of the Directive that allows such cooperation in more environmental areas. More precise definitions of what constitutes environmental crime under objective 2 will reduce different perceptions in the Member States that so far hampered or even ended cooperation. The definition of maximum sanction levels does not only ensure more dissuasive sanctioning but also opens the door for effective cross-border investigative tools provided for in legislative instruments that require a certain sanction level for a crime category to be applicable. Under objective 6, better training and specialisation according to the same standards in the Member States also directly facilitate cross-border cooperation.

The ability of law enforcement practitioners to better anticipate a case's chances for success, leading to more cases being picked up, is strengthened by more precise definitions of environmental crime (objective 2) and better training and specialisation under objective 6. Improved cross-border cooperation (objective 4) and the availability of more dissuasive sanction types and –levels (objective 3) are further factors that could facilitate the decision to invest the considerable resources needed to tackle environmental crime cases.

The effectiveness and dissuasiveness of environmental criminal investigations will not only be achieved through more appropriate sanctioning through the preferred option under objective 3. Also, more and more effectiveness investigations through the combined effects of the preferred options under objectives 1, 2, 4 and 6 as described above will contribute to a deterrent criminal system with regard to environmental crime.

In this way the preferred options do not only serve best the respective objectives but cumulated strengthen also the other specific objectives thus strengthening the overall effectiveness of the Directive beyond each individual specific objective.

Cost Impact of the preferred package

Table 9, Cost for the Commission implied by the Directive

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

Table 10, Costs for Member States implied by the Directive

Table of the costs for Member States				
Costs of transposition objective 1 to 6	Total cost for all MS in l	475 594		
Objective	Prefered option	Implementing measures	One-off / Set-up / Recurring costs	Total costs for all MS (if different figures in the same cell = means there are low-medium or high option)
4: Improving the effective cooperation and coordination between Member States	introducing a package of provisions directly fostering cross-border cooperation	Investigative tools	Recurring	Data not available
		Set up of national contact points at all level of the enforcement chain and cooperation through EU agencies	Recurring	475 594 / 792 656
5: Improving statistical data collection and reporting on environmental crime	/MS to collect, and transmit statistical data /Development of minimum standards to compare comparable data /two-annual report ng the Commission on data received by MS	Set up national coordination procedure	One-off	146 201
		Definition of minimum standards	One-off	281 833
		Maintenance of standards	Recurring	35 229
		Coordination, collection and reporting	Recurring	220 182
6: Improving the effective operation of the enforcement chain	Insert in the Directive obligations that directly strengthen the effectiveness of the law enforcement chain	Training	Recurring	7 978 446
		Raise public awareness (depends on the choice made by the MS)	3 min video	9 000
			2 min video	1 000
			per electronic message	5 000
		National strategy	Set up	864 289
			Recurring	324 108
		Increase of staff	Recurring	4 069 175

REFIT potential

This impact assessment did not identify any potential to simplify the Directive or to reduce unnecessary costs.

The Directive – being a criminal law instrument – does not produce any additional costs for citizens, business and SME. That has been confirmed during the stakeholder consultations.

The proposal will contain a number of additional provisions aimed to add precision to the currently only very generic Directive, clarify its scope, crime definitions and ensure the effectiveness, proportionality and dissuasiveness of penalties. This will simplify and facilitate practical implementation by Member State authorities and thus ensure the Directive will reach its objectives.

The proposal also contains new provisions obliging Member States to take specific measures to ensure the Directive's effective implementation in practice (especially to provide training, awareness raising measures and strengthen cross-border cooperation, provide the necessary resources etc.). Although this appears to be new obligations that produce costs for the Member States, these provisions actually only explicitly requires what is in any event a Member State obligation: Member States are not only obliged to transpose the Directive into national law. They also have to take the necessary practical implementation measures. The evaluation has shown that practical implementation is deficient in all Member States and along the whole enforcement chain. The obligations in the Directive are therefore necessary to ensure Member States compliance. The implementation measures required in the proposal are measures, which practitioners have identified as most pertinent to enable them to enforce the

Directive. Especially training has been mentioned as essential need to improve law enforcement with regard to environmental crime

9 MONITORING MEASURES

The general objective of the Directive – to which all specific objectives contribute - is to protect the environment through criminal law by effective investigations, prosecutions and convictions. The effectiveness of the Directive must thus be measured against the number of investigations, prosecutions, convictions and sanction levels in each Member State. Objective 5 – 'collection of complete, accurate and EU-wide comparable data' aims at fostering effectiveness of law enforcement through the transparency resulting from the dissemination of statistical data which at the same time serve to measure the success of the Directive. The table below provides suggestions of monitoring indicators:

Specific objective	Indicator	baseline	success
1.broadening the scope of the Directive	Number of: - Investigations - Prosecutions - Convictions - Dismissed cases.	Where information is available, there have been no upward trends in the Member States[1].	Stable upward trends in each Member State. Ideally an increase of between 5 and 7 %, i.e. the rate at which environmental crime is estimated to grow each year (UNEP-report[2])[3]
2. define more precisely environmental crime types under Article 3	As above	As above	As above
3.foster effective, dissuasive and proportionate types and levels of sanctions	- Levels of financial fines imposed on natural persons - Levels of imprisonment sanctions - Levels of financial fines imposed on businesses - Types and numbers of accessory sanctions imposed on natural persons and on natural persons	There is currently no or only very few and scattered statistical data on sanctions imposed on environmental crime. The available data and interviews with practitioners show that sanctions are too low to be dissuasive.	Given the current situation in which sanctions imposed are generally taken from the lowest segment of available sanction levels. Success implementation would show that sanctions imposed use the full range of available sanction types and levels. Accessory sanctions imposed should show that all sanctions types are used. We would like to see that restoration of damage and the removal of profits are applied systematically.
4.More cross border cooperation	- Number of environmental crime cases at Eurojust and OLAF, - Number of JITS at Eurojust - Number of SIENA cases/messages at Europol - Number of contacts with national contact points, to be installed e.g. at professional networks	Current level of Eurojust, OLAF, SIENA, professional networks Numbers are generally low, e.g. environmental crime at Eurojust only accounts for 1% of the total. New JITS per year have been 2 since 2017[4].	Success would be an increase of cross-border cooperation manifested in the figures at Eurojust, OLAF and Europol. Environmental crime is the fourth largest crime category globally The number of environmental crime cases at Europol and Eurojust should thus account for higher portion of the total of cases handled by these agencies.
5.More effective enforcement chain	Same as for the 1st objective In addition - number of MS that have overarching crime strategies - number of MS that have specialised units/court chambers - number of MS that have increased their law enforcement personnel - Number of police, prosecutors, judges, customs officers, administrative inspectors that have received training	Same as for the 1st objective Current situation: see under section 6 and the baseline annex.	Same as for the 1st objective - All MS implement the measures in column 2 - Increase of law enforcement personnel for environmental crime (police and prosecutors) each by at least 0.2% respectively 0, 17%.[5]

The Directive should contain a provision obliging Member States to regularly report to the Commission the statistics they will be obliged to collect under objective 5. The Commission would then be able to provide regular reports to the European Parliament and the Council highlighting trends. After a sufficient period of time, an evaluation support study could be commissioned to evaluate success based on the indicators above. The professional networks

could assist in monitoring the application and the success of the Directive and be encouraged to produce regular reports.

Given that the process of producing comparable statistical data in the Member States could take some time, Member States should be encouraged to introduce internal processes to gather information to monitor and evaluate progress. This could be done in the framework of the obligation under objective 6 to produce national overarching strategies to combat environmental crime.

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Brussels, XXX
[…](2021) XXX draft

COMMISSION STAFF WORKING DOCUMENT

Annexes for the

Impact Assessment revision of the Environmental Crime Directive (Directive 99/2008/EC)

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ANNEX 1: PROCEDURAL INFORMATION

1. Lead DG, Decide Planning

Lead DG: DG JUSTICE AND CONSUMERS ("DG JUST")

Associated DG: DG ENVIRONMENT ("DG ENV")

Decide Planning: PLAN/2020/8802

2. Organisation and timing

Procedural Steps:

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

ISSG Meetings:

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

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

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

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

3. Evidence, sources and quality

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

The impact assessment relies and builds on the Evaluation of the Directive, which took place in 2019/2020. To this end, the Commission published an Evaluation Staff Working Document ({SEC(2020) 373 final} - {SWD(2020) 259 final}), and an Executive Summary of the Evaluation in October 2020. The Evaluation of the Directive received a positive opinion from the RSB[184].

The Commission gathered also evidence following a consultation strategy, which included an open public consultation[185] and a stakeholder consultation[186].

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

4. External Study

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

5. Regulatory Scrutiny Board

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

RSB comments	How RSB comments have been addressed in the IA
1) The report should provide greater clarity and additional information on the choices to be made for the essential elements, such as the coverage of the	a) More precision on new environmental crime areas to be included under the Directive have been added in chapter2.1.1. b) Better explanations on the method to update

[184] https://ec.europa.eu/info/news/evaluation-environmental-crime-directive-2020-nov-05_en.
[185] In more detail, see Annex 7
[186] In more detail, see Annex 8.

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

ANNEX 2A: METHODS

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

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

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

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

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

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

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

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

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

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

ANNEX 2B: ANALYTICAL MODELS - COSTS

INTRODUCTION AND OVERALL METHODOLOGICAL APPROACH

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

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

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

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

Sources of information

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

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

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

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

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

Standard Cost Model and estimation of labour costs

Many of the implementation costs entail human resource costs at the EU level (European Commission, EU agencies) and the Member State level (competent authorities, practitioners). Costs associated with administrative burden have been estimated using the Commission's Standard Cost Model (SCM), outlined in the Better Regulation toolbox[3]. 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[187], using the latest available data and methods detailed in the EU Better Regulation Guidelines (in particular Tool #60 The standard cost model for estimating administrative costs). The approach is detailed in the box below.

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

Approach to calculating labour costs for EU and Member State administration

In order to obtain daily wages from monthly salary data or hourly wage data, the wages are converted based on the assumption of 215 person days of fulltime equivalent (FTE) in a year[188] or alternatively 1 720 person hours of FTE in a year[189], 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[190]). 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[191]. 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[192], which can be comparable to the EU labour cost. A 25% overhead cost is then added to obtain an average Member State daily labour cost of EUR 294 for 2020. This is alternatively EUR 5 260 per month or EUR 63 119 per year.

Limitations

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

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

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

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

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

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

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

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

TRANSPOSITION AND THE DEVELOPMENT OF EU-LEVEL GUIDANCE DOCUMENTS

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

Transposition of legislation

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

In order to estimate the cost of the human resources, reference data about the amount of person days needed for transposition is taken from the Impact Assessment of the Directive on combating fraud and counterfeiting of non-cash means of payment[193]. This average amount per Member State is assumed to be between 20 and 60 person days. Using the Member State daily labour cost defined in section 6.1 (i.e. EUR 294), the overall cost of transposition is estimated to be in the range of EUR 5 872 – 17 615 per Member State as summarised in the table below.

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

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

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

Preparation of EU-level guidance

Some EU-level guidance already exists with regard to environmental crime[194]. 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[195]. The main cost would be the human resource costs that the European Commission services need to invest to prepare, adopt and disseminate the material (any implementation costs for Member States or other stakeholders are considered separately). These costs would be one-off as no recurring costs are likely once the document is adopted. The costs are estimated as a unit cost per document and can be considered under different policy objectives or sub-options, as shown in Table 2 (Section 3.1).

In order to estimate the cost of a non-legislative guiding document, reference data about the amount of person days needed for development and publication of, for instance, an implementation report, guidebook on national legislation or a communication, is taken from the Impact Assessment of the Directive on combating fraud and counterfeiting of non-cash means of payment[196]. The necessary effort is assumed to be between 30 and 60 person days. Using the EU daily labour cost defined in section 6.1 (i.e. EUR 534), the overall cost of developing one non-legislative guiding document is estimated to be in the range of EUR 16 026 – 32 052 at the EU level as summarised in the table below.

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

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

[194] For example, the recently published European Commission, 2021, Guidance Document on combating environmental crimes and related infringements.
[195] Guidance on harmonised standards for statistics (Objective 5) is included in the cost estimate for this option as it is considered integral to the implementation of the option.
[196] Impact Assessment Accompanying the document Proposal for a Directive of the European Parliament and the Council on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA, SWD(2017) 298 final, Annex 4.2, p.185-191.

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

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

Investigative tools

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

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

Comprehensive quantitative data on the costs of the use of investigative tools in the Member States is not available. However, representatives of prosecution offices from two Member States noted in interviews that these techniques can be costly, particularly for translation and telecommunication services. Media reports have also noted the relatively high cost of wiretapping efforts, mostly linked to telecommunication services. Indicatively, Belgium spent EUR 6 million on 7 475 wiretaps in 2017, giving an average cost of approximately EUR 800 per wiretap[197]. The number of wiretaps used has consistently increased in the preceding years, partially due to terrorism investigations. In the UK, at least GBP 6.7 million (EUR 7.9 million) was paid in 2014 by British police forces and government authorities to

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

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

Focal points, cooperation with EU agencies

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

This is subject to several assumptions:

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

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

Reference data about the amount of person days needed for focal points in the five relevant institutions along the law enforcement chain is taken from the Impact Assessment of the Directive on combating fraud and counterfeiting of non-cash means of payment[200]. The

[198] Financial Times, 2016, 'UK police pay millions of pounds for telecoms surveillance', Daniel Thomas, 8 January 2016, https://www.ft.com/content/1728997e-b3b3-11e5-8358-9a82b43f6b2f.
[199] European Commission, 2021, Guidance Document on combating environmental crimes and related infringements.
[200] Impact Assessment Accompanying the document Proposal for a Directive of the European Parliament and the Council on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA, SWD(2017) 298 final, Annex 4.2, p.185-191.

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

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

Annual costs	**Low**		**High**	
Per focal point	12 days	€ 3 523	20 days	€ 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

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

Baseline and assumptions for costs of options 1 and 2

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

To establish a working baseline for the purposes of understanding the efforts different Member States would need to undertake if they were required to collect and report statistics on environmental crime, information was collected from available desk sources, including the 8th Round of Mutual Evaluation country reports and others[201].

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

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

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

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

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

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

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

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

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

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

days has been developed based on expert judgement by practitioners with first-hand experience with the practical activities and tasks associated with data collection and reporting for crime statistics[202]. The estimates defined in the following analysis are approximations for standard activities based on rough evaluation of past data collections. The estimates are assumed to provide a good representation of the minimum amount of effort necessary, but they do not take into account possible variations that may occur between Member States beyond those represented by differences in coordination costs which are accounted for through the number of relevant institutions. Nevertheless, it can be assumed that any possible variations are unlikely to significantly impact the overall implementation costs.

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

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

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

National level:

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

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

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

EU level:

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

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

Table 6: Member State costs for Option 1

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

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

** 1 day per agency

*** 3 days per agency

Table 7: EU-level costs for Option 1

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

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

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

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

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

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

- Application of common counting units (e.g. offences rather than investigations or cases).
- Use of a common classification of environmental crime to be prepared by the EU working group (ECECS – European Classification of Environmental Crime for Statistical Purposes which should be a satellite classification of the ICCS[203]) for reporting purposes – this requires Member States that do not already collect data according to a common crime classification to carry out a detailed mapping of existing crime categories to the ECECS and report data according to these common categories.

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

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

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

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

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

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

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

EU level:

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

National level:

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

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

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

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

Table 8: Member State costs for Option 2

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

* Round tables: 1 person for 2 round tables (1 day each) per MS + Reviewing results by task force: 4 days per MS + Translating/ transposing standards: 3 days per MS + Round table for feedback: 1 day per agency
** Preparation: 3 days per agency + Minor changes in current statistics: 3 days per agency + Round table before start of reporting: 2 persons for 1 day each per agency
*** Reporting: 1 day per agency + collection: 1 day per agency + validation: 2 days per agency

Table 9: EU-level costs for Option 2

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

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

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

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

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

Provide training along the enforcement chain

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

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

Training provided by Member State authorities

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

Four groups of practitioners have been identified as the primary recipients of training on environmental crime: **judges, police and prosecutors, customs agents and administrative authorities responsible for environmental inspection.** Member States currently provide varying degrees of training for each group. It is assumed that training for all practitioners would be necessary, as the lack of necessary expertise in one or more parts of the enforcement chain may produce a vicious circle and undermine efforts in other parts of the chain[204]. It may also be desirable to provide common training to different types of practitioners in one group, to foster better cooperation across institutions within a Member State.

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

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

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

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

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

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

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

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

For customs:

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

- **Group B:** Member States in this group provide a degree of training on environmental crime as part of the initial training of customs officers/new recruits or ad hoc training only (BG; EE; IE)
- **Group C:** Member States in this group provide no training to customs (CY; DK; HR; HU; LT; LU; SI; SK)
- **No information is available** for the following Member 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 10: National baseline groups

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

Although many Member States (17 in total) currently provide some form of training in relation to combating environmental crime, previous studies[205] and stakeholder consultation

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

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

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

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

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

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

Initial desk review found the following sources of reference data:

- The French Higher Institute of the Environment (ISE) provides training on environmental issues (also to French law enforcement officers). According to the online training catalogue for 2018, the lowest cost for one day of training was EUR 900 for 12 participants and the highest cost for one day of training was EUR 1 200. This means the cost per participant ranged from EUR 75 to EUR 100[206].

Commission, 2020, Evaluation of the Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law (Environmental Crime Directive), SWD(2020) 260 final.

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

- Based on the call for proposals for Grant Agreements for the implementation of CEPOL Residential Training Activities in 2021, the cost per participant per day of training is on average EUR 239[207].
- 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[208].
- 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[209].

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

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

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

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

MS	Continuous training for police and prosecutors	Continuous training for judicial branch

[207] https://www.cepol.europa.eu/sites/default/files/Annex_3_CEPOL_Training_Catalogue_2021.pdf.
[208] https://www.psni.police.uk/globalassets/advice--information/our-publications/disclosure-logs/2011/human-resources/training_costs_police_officers.pdf.
[209] SWD(2020) 259 final part 2.

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

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

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

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

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

[210] Council of the European Union, 2019, 8th Round of Mutual Evaluations -'The practical implementation and operation of European policies on preventing and combating Environmental Crime': Report on Austria, 10079/1/19 REV 1.
[211] Ibid - Report on the Czech Republic, 14129/1/18 REV 1.
[212] Ibid - Report on Germany, 11430/1/18 REV 1.
[213] Ibid - Report on Finland, 8430/1/18 REV 1.
[214] Ibid - Report on Finland, 8430/1/18 REV 1.
[215] Ibid - Report on France, 6734/18 DCL 1.
[216] Ibid - Report on Poland, 15079/1/18 REV 1.

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

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

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

Judges

Given the lack of data available on the specialisation of judges in Member States, estimates for the number of judges that would be targeted by training were based on the current practice in Poland, whereby on average 50 judges receive training annually on environmental crime[217]. Based on Eurostat data (CRIM_JUST_JOB[218]) on the total number of professional judges in Member States, this represents 0.5% of judges in Poland.

Police and public prosecutors

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

Customs

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

[217] Council of the European Union, 2019, 8th Round of Mutual Evaluations - 'The practical implementation and operation of European policies on preventing and combating Environmental Crime': Report on Poland, 15079/1/18 REV 1.
[218] https://ec.europa.eu/eurostat/databrowser/view/crim_just_job/default/table?lang=en%20b.

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

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

Table 12: Calculations for number of customs targeted by training

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

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

Administrative authorities

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

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

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

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

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

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

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

Table 13: Calculations for number of inspectors targeted by training

MS	Number of inspectors based on 8th Round of Mutual Evaluation reports	National population[224]	Inspectors per inhabitant
EE	6[225]	1 330 068	0.0000045
HR	77[226]	4 036 355	0.000019
LT	433[227]	2 795 680	0.00015
RO	621[228]	19 186 201	0.000032
Average number of inspectors per inhabitant applied to all other MS		0.000053	

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

[224] Eurostat, 2021, Population on 1 January by age and sex, DEMO_PJAN, Available at: https://ec.europa.eu/eurostat/databrowser/view/demo_pjan/default/table?lang=en.
[225] Council of the European Union, 2019, 8th Round of Mutual Evaluations -'The practical implementation and operation of European policies on preventing and combating Environmental Crime': Report on Estonia, 6767/1/19.
[226] Ibid – Report on Croatia, 9178/1/19.
[227] Ibid – Report on Lithuania, 10080/1/19.
[228] Ibid – Report on Romania, 8783/1/19.

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

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

EU funding for training on environmental crime

Most of the training provided at EU-level on environmental crime is funding by EU programmes. In the majority of cases shown in the baseline annex on EU-level training for environmental crime, the training providers receive funding through EU programmes – typically the Justice Programme or the LIFE programme, so the costs are borne by the EU and the networks themselves[229]. There appear to be very limited costs for the Member States in relation to EU level training.

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

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

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

- **The LIFE Programme**

The LIFE Programme co-finances projects in the field of environmental protection, such projects have included initiatives to reinforce training of national practitioners. For example, between 2016-2021, the LIFE programme financed 60% (grant of EUR 538 945) of a project implemented by the Polish General Directorate for Environmental Protection, whose main aim was to improve training on environmental crime for practitioners along the enforcement chain[230]. 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[231]. 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[232].

- **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[233]. Beneficiaries of ISF grants can be state and federal authorities, local public bodies, NGOs, and private companies. As an example, between 2015 and 2017, the ISF Police funded a project entitled Tackling Environmental Crime through Standardised Methodologies (TECUM) with a grant of EUR 780 489. This project was implemented by BS Europe, the Italian Carabinieri, the Spanish SEPRONA, the

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

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

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

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

National Environmental Guard of Romania, and CEPOL, with the aim of filling operational gaps in the cross-border fight against environmental crime[234].

- **The Justice Programme**

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

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

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

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

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

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

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

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

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

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

Awareness raising with businesses is likely to involve the establishment of a list of businesses to target. This may be composed of pre-existing lists of businesses with particular environmental permits, for example, and is therefore likely to require little in human resources. Targeted information campaigns could include sending of guidelines (paper or email) to businesses. The campaigns would likely involve the organisation of conferences or workshops to provide information about environmental obligations. This may be done in partnership with other organisations, such as relevant NGOs[235]. During inspection, inspectors can provide information, including printed guidelines, to businesses. Investment of human resources would be required to write guidelines, if they do not already exist, and send them; also to organise conferences or workshops. If organised in person, conferences would incur costs from renting of venue, provision of food etc.; these would be mostly not incurred if

[235] See Italy country report, p. 15.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

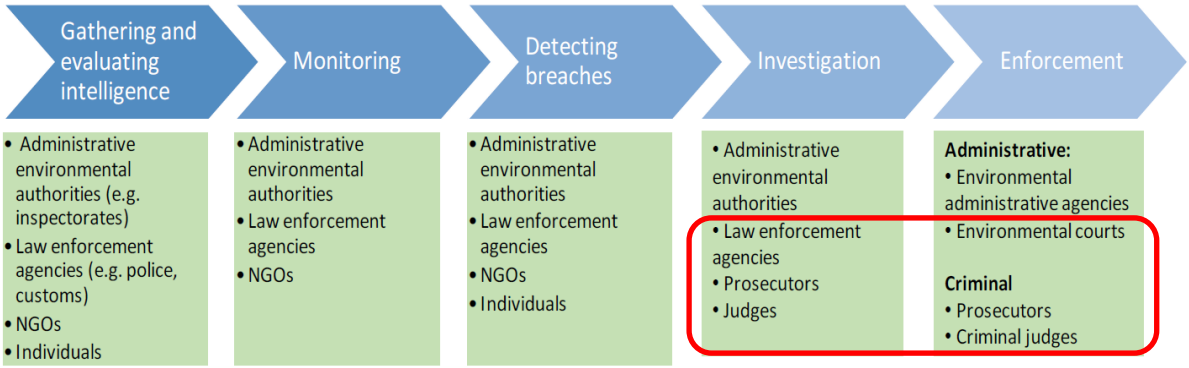
MS	Baseline	One-off cost	Annual costs
FI	**A**	-	-
FR	**C**	€ 37 578	€ 14 092
HR	**C**	€ 37 578	€ 14 092
HU	**C**	€ 37 578	€ 14 092
IE	**B**	€ 37 578	€ 14 092
IT	**B**	€ 37 578	€ 14 092
LT	**C**	€ 37 578	€ 14 092
LV	**C**	€ 37 578	€ 14 092
LU	**C**	€ 37 578	€ 14 092
MT	**C**	€ 37 578	€ 14 092
NL	**A**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

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

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

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

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



Source: European Commission, 2021, 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[238]. 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[239]. (This does not, however, exclude the possibility for additional training of judges to improve their knowledge on environmental crime generally and the impacts of the revised ECD.) It was, therefore, more suitable to base calculations of the expected cost of an increase

[238] In addition, some Member States have also highlighted the lack of sufficient number of cases to warrant having a judge dedicated to environmental crime.
[239] Interview with representatives of the Swedish authorities and practitioners.

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

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

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

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

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

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

It was then assumed that the lowest observed percentage of police and prosecutorial staff working on environmental crime (0.20% and 0.17% respectively, cells shaded grey[240]) from across the Member States could be considered a reasonable proxy for the amount of *additional* staff that each Member State would be likely to take on to carry out a larger volume of work on environmental crime. The average of the available baseline data has also been calculated (1.0% for police and 3.5% for prosecutors), and these data are used to

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

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

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

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

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

*The sources for the data on numbers of police officers and prosecutors in the Member States are as follows:
Police: data from Eurostat, https://ec.europa.eu/eurostat/databrowser/view/crim_just_job/default/table?lang=en%20b, except Ireland, found at: https://www.garda.ie/en/faqs/. All police data are 2018 except Italy latest figure available 2016.
Prosecutors: data are for 2018 and taken from Council of Europe, https://public.tableau.com/app/profile/cepej/viz/CEPEJ-Explorerv2020_1_0EN/Tables.

These estimates are highly dependent the following uncertainties:

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

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

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

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

ANNEX 3: WHO IS CONCERNED AND HOW?

1. PRATICAL IMPLACATIONS OF INITIATIVE

1.1. Member State public authorities

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

1.2. The European Commission

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

1.3. EU businesses

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

1.3.1. SMEs

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

1.4. EU citizens

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

2. SUMMARY OF COSTS AND BENEFITS

Overview of benefits – preferred option

I. 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 industries will recover if there is less criminal activity.	Not quantifiable, but point was raised by a majority of businesses consulted.

Overview of costs – preferred option

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

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

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

Table of the Costs for the Commission

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

Table of the costs for Member States

Table of the costs for Member States				
Costs of transposition objective 1 to 6	Total cost for all MS in l	475 594		
Objective	Prefered option	Implementing measures	One-off / Set-up / Recurring costs	Total costs for all MS (if different figures in the same cell = means there are low-medium or high option)
4: Improving the effective cooperation and coordination between Member States	introducing a package of provisions directly fostering cross-border cooperation	Investigative tools	Recurring	Data not available
		Set up of national contact points at all level of the enforcement chain and cooperation through EU agencies	Recurring	475 594 / 792 656
5: Improving statistical data collection and reporting on environmental crime	/MS to collect, and transmit statistical data /Development of minimum standards to compare comparable data /two-annual report ng the Commission on data received by MS	Set up national coordination procedure	One-off	146 201
		Definition of minimum standards	One-off	281 833
		Maintenance of standards	Recurring	35 229
		Coordination, collection and reporting	Recurring	220 182
6: Improving the effective operation of the enforcement chain	Insert in the Directive obligations that directly strengthen the effectiveness of the law enforcement chain	Training	Recurring	7 978 446
		Raise public awareness (depends on the choice made by the MS)	3 min video	9 000
			2 min video	1 000
			per electronic message	5 000
		National strategy	Set up	864 289
			Recurring	324 108
		Increase of staff	Recurring	4 069 175

ANNEX 4: BASELINES

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

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

Information has been collected from the following sources:

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

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

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

Member State	IIU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
CY	Administrative and criminal sanctions in law, administrative sanctions mostly used in practice Illegal fishing actions that are criminal offences are specified in the Fisheries Law, the relevant Regulations, and the Sponge Fishing Law (Chapter 146) and e.g. includes fishing without a vaild lisence and to fish for sponges or use a trawler. Penalties include imprisonment up to three years and fines up to CYP 500.	Covered by Forest (management) law. Administrative fines, imprisonment, seizure of timber/timber products, suspension of authority to trade. Unspecified legal basis for infringements.	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. 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	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

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

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

Member State	IIU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	sanctions mostly used in practice. Fishing actions which can be considered criminal offences (Spanish Criminal Code, Articles 334, 335, 336, 338, 339) for example include fishing of protected species of wild fauna or fishing in areas subject to authorisation without the necessary lisence. Penalties include for e.g. fines and imprisonment of up to two years.	Administrative fines, seizure of timber/timber products, suspension of authority to trade. Ley 21/2015 de Montes, Article 67, 68, 69 and 74	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. 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	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,

Member State	IIU Fishing	Illegal logging and timber trade	Poaching / wildlife crimes
	are found in Article L954-4 of the Rural and Maritime Fisheries Code and provides for a fine EUR 22 500.		moral or public security, or when the illegal activities are part of organised crime.
HR	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, 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.

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

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

Information has been collected from the following sources:

- European Commission (2020). EVALUATION of the DIRECTIVE 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law. SWD(2020) 259 final.
- Hall, M.; Wyatt, T. (2017). LIFE-ENPE. Environmental prosecution report – tackling environmental crime in Europe.
- Milieu Consulting (2021), Study on the sanctioning systems of Member States for infringements to the rules of the Common Fisheries Policy.

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

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

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

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

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

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

Information has been collected from the following sources:

- 8th round of mutual evaluation country reports

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

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

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

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

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

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

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

statistical data on environmental crime as summarised below.

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

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

5.1 Baseline information on training

5.1.1 Training provided at national level along the enforcement chain

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

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

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

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

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

5.1.2 Training provided at EU level

Organisation	Practitioners targeted	Example of courses
CEPOL	LEAs and public prosecutors	•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[242]
FRONTEX	LEAs	• FRONTEX offers course on cross-border crime detection which includes environmental crime (dumps and waste trafficking and also wildlife/CITES trafficking)[243]
EJTN	Judges and prosecutors	• 20-21/05/2021: Two-day online course on Judicial Cooperation in Criminal Matters: Cross-border Environmental crimes - CR/2021/06 36 places • 15-18/06/2021: Three-day online seminar on cooperation in protected species trafficking cases (30 participants)

[242] See https://www.cepol.europa.eu/publications-training-catalogue.
[243] See https://frontex.europa.eu/assets/Publications/Training/TRU_Course_Catalogue_2018.pdf.

Organisation	Practitioners targeted	Example of courses
		• 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[244]
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.[245] • 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[246]. • 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[247] • 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[248]

[244] See https://frontex.europa.eu/we-build/building-capabilities/courses/ and https://www.ejtn.eu/Catalogue/EJTNs-searchable-database/.
[245] https://www.era.int/cgi-bin/cms?_SID=a1a4bb07794b7a2f9728f38b75d630cd13430f9500784449058078&_sprache=en&_bereich=artikel&_aktion=detail&idartikel=124138.
[246] See: https://www.environmentalprosecutors.eu/eu-life-project.
[247] https://www.impel-prevent.eu/.
[248] https://www.impel.eu/impel-programme-capacity-building-and-training-is-catching-up-speed/.

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

5.2 Baseline information on awareness-raising measures

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

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

[249] https://ec.europa.eu/environment/legal/pdf/COM_2018_10_F1_COMMUNICATION_FROM_COMMISSION_TO_INST_EN_V8_P1_959219.pdf.
[250] https://circabc.europa.eu/ui/group/cafdbfbb-a3b9-42d8-b3c9-05e8f2c6a6fe/library/fafe3895-04ae-4c42-b8b1-a233a5a780f3/details.
[251] https://ec.europa.eu/environment/legal/law/training_package.htm.

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

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

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

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

5.3 Baseline information on national enforcement strategies to combat environmental crime

Information has been collected from the following sources:

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

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

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

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

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

Information has been collected from the following sources:

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

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

Member State	**Structure of units specialised in environmental crime**				**Numbers of personnel working on environmental crime**			
	Police	**Public prosecutors**	**Judges**	**Administrative authorities**	**Police**	**Public prosecutors**	**Judges**	**Administrative authorities**
AT	Specialised personnel	*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 average of 5			

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	**Public prosecutors**	**Judges**	**Administrative authorities**	**Police**	**Public prosecutors**	**Judges**	**Administrative authorities**
					personnel per province (9 provinces)			
BE	Specialised personnel at federal level; also in some regions and some local police areas	*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 groups analyse environmental issues and cooperate.			Total number unknown. 2 officers at national level with expertise; 1 officer in each region with expertise			

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

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

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	**Public prosecutors**	**Judges**	**Administrative authorities**	**Police**	**Public prosecutors**	**Judges**	**Administrative authorities**
FI	No special unit; environmental crime unit pilot project in one region	*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 within gendarmerie	Designated courts	Designated courts (since 2020) Specialised tribunal in each court of appeal for environmental matters Each public prosecutor's office of a court can appoint a specialist judge for environmental matters.		435 70 officers for national environmental crime office; 365 investigators specially trained in environmental issues; unknown number of additional territorial units within gendarmerie		New law 2020	

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

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

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

Member State	Structure of units specialised in environmental crime				Numbers of personnel working on environmental crime			
	Police	**Public prosecutors**	**Judges**	**Administrative authorities**	**Police**	**Public prosecutors**	**Judges**	**Administrative authorities**
		officers for environmental crime Investigations can be carried out directly by prosecutors				level		
PT	Specialised unit within national guard, service for protection of nature and the environment; specialised police officers in environmental protection teams at regional level	*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	*de facto* specialised personnel	No specialised court or judges		322 142 posts for fighting illegal	Network involves approximately		621

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

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

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

ANNEX 5: ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACTS

1. INTRODUCTION

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

Unfortunately, there is a lack of reliable and comparable statistics pertaining to the degree to which specific types of environmental crime take place. However, their occurrence is significant – the evaluation of the ECD found that in 2017, there were 5 644 recorded instances of illegal wildlife trade (seizures of CITES rules) and 5 306 recorded instances of illegal waste shipment in the EU. In both cases, an upward trend was observed over time. The overall impact of environmental crime has never been quantified, but some studies have attempted to assess the magnitude of environmental crime - a UN study put the combined value of illegal revenue derived from environmental crime and losses for legal commerce and tax revenue at between **USD 91-259 billion** annually[252].

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

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

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

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

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

2. ECONOMIC IMPACTS ON BUSINESSES

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

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

Table 19 Business stakeholder interviews

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

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

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

2.1. EXPANDING THE SCOPE OF THE DIRECTIVE

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

In response to the online public consultation, the responding businesses see benefit in the two options of updating the list of legislation mentioned in the Annex of the Directive[253] and defining environmental crime independently of administrative law[254]. 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[255] 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.

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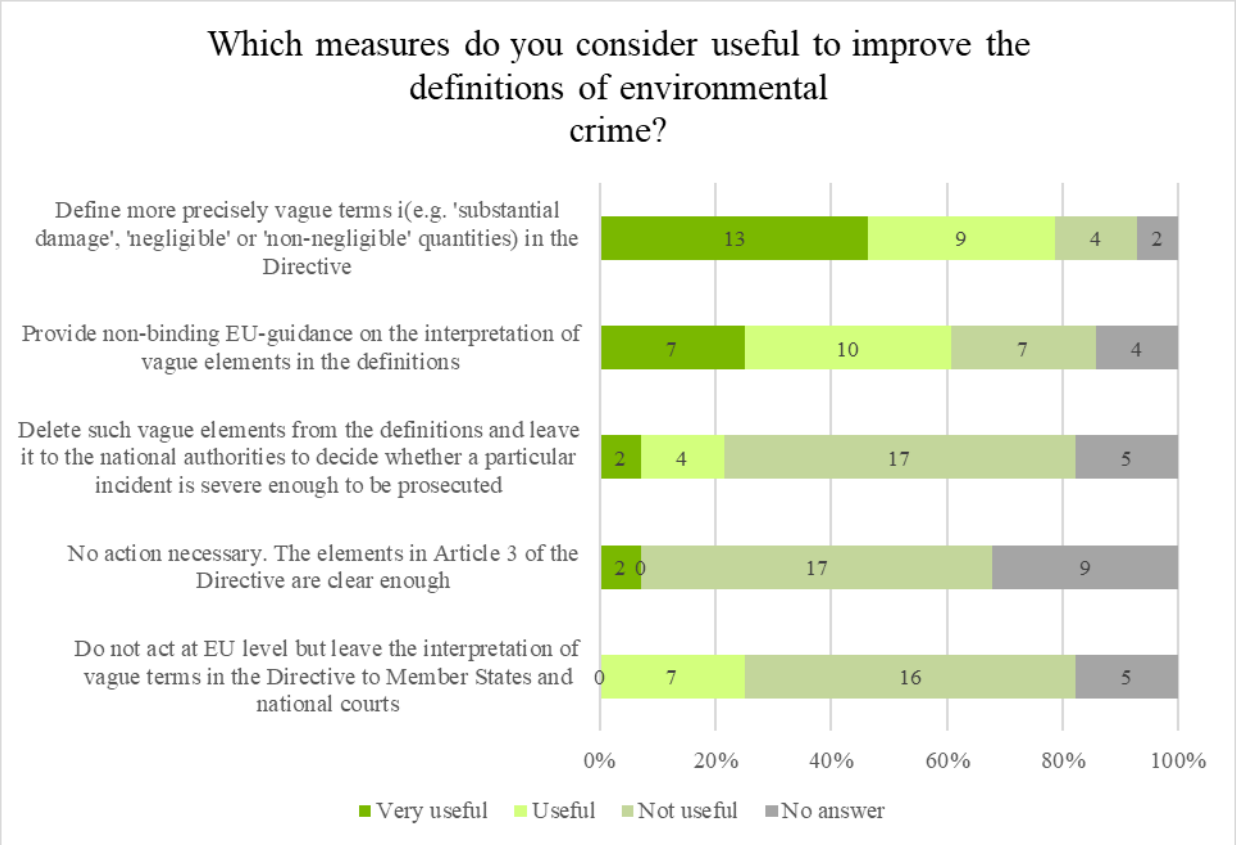
[253] 17 respondents consider this option useful or very useful.
[254] 15 respondents consider this option useful or very useful.
[255] As an example, waste brokers are mentioned by the stakeholder.

2.2. CLARIFYING DEFINITIONS OF VAGUE TERMS USED IN THE DIRECTIVE

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

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

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



2.3. CREATING AN EFFECTIVELY DETERRENT SANCTIONING SYSTEM

The evaluation of the Directive[256] as well as several interviewees commented on the high variations between sanctions (e.g. fines) across different EU Member States. The low sanctions in some Member States incentivise criminal activities by making them profitable even in case of prosecution. An effectively deterring sanctioning system throughout the EU helps solve this issue and contributes to an even playing field for legitimate businesses. However, it also needs to be coupled with enforcement (see next section) in order to provide sufficient risk of criminal actions being discovered. Stakeholders report that these objectives would be beneficial particularly in the fight against organised crime. As an example, illegal trade and disposal of waste is particularly attractive to organised crime groups as the financial volume is estimated to be similar to drug trafficking but with substantially lower sanctions[257].

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[258]. Large companies risk being fined high amounts for accidental damages or ones occurring for the first time. The responses to the online public consultation, however, indicate a diverse view among businesses. The same number of respondents consider sanctions linked to the generated profits and the financial situation very useful as the number that consider them not useful (7 respondents each). As an adaptive sanctioning system based on profits and the financial situation would apply to criminal offences only, a key determinant will also be the scope and threshold defined under the options for the other objectives.

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

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[256] European Commission (2020). EVALUATION of the DIRECTIVE 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law. SWD(2020) 259 final. https://ec.europa.eu/info/sites/default/files/evaluation_-_swd2020259_-_part_1_0.pdf.

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

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

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

Member State	Sanctions under national environmental criminal law and administrative fines in MS[259]	Sanctions under national administrative law in scope of Article 3[260]	Fisheries legislation in MS[261]
DK			Fixed penalty notice: fine for the master of the equivalent of 1/4 the value of the catch concerning the infringement. If the licence holder is also the master, he/she should be fined 1/3 of the value. These rates are binding on the administration.
EL		Natural persons acting for the benefit of legal persons are punished as natural persons. Additionally, legal persons can be punished as follows: An administrative fine up to three times the amount of the value of the benefit attained or pursued	

[259] European Commission (2020). EVALUATION of the DIRECTIVE 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law. SWD(2020) 259 final. https://ec.europa.eu/info/sites/default/files/evaluation_-_swd2020259_-_part_1_0.pdf.

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

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

Member State	Sanctions under national environmental criminal law and administrative fines in MS[259]	Sanctions under national administrative law in scope of Article 3[260]	Fisheries legislation in MS[261]
ES		Administrative sanctions include fines within a range set for each area of crime. The amount of the fine will be determined taking into account elements such as the extent of the damage, the degree of involvement and the benefit obtained, the economic capacity of the actor, the intent, and the repetition of the offense.	
FI			For legal persons from EUR 2,000 up to EUR 100,000 (EUR 50,000 for non- serious infringements). The maximum level of the sanctions shall be five times the value of such products, if it is greater than the set EUR 100,000 or EUR 50,000 .
HU	The maximum level of fines for crimes specified in the ECD is three times the financial benefit gained or aimed to be gained, but at least 500,000 HUF (EUR 1,500). If the benefit gained or intended to be gained through the criminal act is not financial advantage, the court imposes the fine considering the financial situation of the legal		

Member State	Sanctions under national environmental criminal law and administrative fines in MS[259]	Sanctions under national administrative law in scope of Article 3[260]	Fisheries legislation in MS[261]
	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[259]	Sanctions under national administrative law in scope of Article 3[260]	Fisheries legislation in MS[261]
NL	If an offence against one of the ECD's provision is punishable by a fine in the sixth category and that category does not permit an appropriate penalty, a fine may be imposed up to a maximum of 10 % of the annual turnover of the legal person in the business year preceding the judgment or decision.		
PL	Environmental crimes are fined between EUR 250 and 1,250,000, but not higher than 3% of the yearly income of the entity		In case of serious infringements: a fine of five times the value of fishery products
SE			- Fine of up to SEK 500,000 (EUR 48,600) - Special fee based on the market value or the selling price of the catch, depending on which is higher
SK		Confiscation of a sum of money in amount of €800 - 1 660 000 Euro. When determining the amount of money to be confiscated the court shall consider seriousness of the committed criminal offence, scope of the offence, gained benefit, damage arisen, circumstances of the commission of the	

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

2.4. IMPROVING THE IMPLEMENTATION AND ENFORCEMENT OF THE DIRECTIVE

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

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

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

2.5. IMPACTS ON SMES

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

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

In interviews[262], stakeholders express two main considerations for impacts on SMEs. On the one hand, two interviewees express concerns about the higher risks that SMEs face in their overall economic existence. Legal capacity is described as generally lower, and fines may threaten a business completely. This is in particular mentioned in relation to the approach in which criminal environmental law is decoupled from administrative law. Here, fines could be imposed without wrongdoing under sectoral law according to the interviewees, with higher impacts for SMEs with their limited legal and due diligence capacity. However, sanctions such as fines linked to the profit of a crime or the economic situation of a business would take into account the smaller size of SMEs and ensure that fines reflect this parameter.

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

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

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

3.1. ILLEGAL LOGGING AND TIMBER TRADE

Forestry crimes refer to the process consisting of illegal activities from pre-logging (getting permits), illegal logging, illegal transportation and illegal processing. According to INTERPOL's 2018 World Atlas of Illicit Financial Flows[263], forestry crimes have been reported as the most significant environmental crime with respect to volume of criminal gains. In 2018 alone, the total cost of forestry crime and illegal logging was estimated at **USD 51-152 billion**[264]. The issue seems to have worsened over time, as UNEPT estimated the cost of this crime at USD 30-100 billion per year before 2014[265]. Illegal logging accounts for as much

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

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

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

[265] UNEP and Interpol, 2016.

as **10-30% of the total logging** worldwide, with some estimates as high as 20-50%[266] when laundering of illegal wood is included. According to a WWF report[267], the EU is responsible for almost **EUR 3 billion of losses** due to illegal logging, with an import of around **20 million cubic meters of illegal timber** every year.

In 2013, the EU Timber Regulation (EUTR)[268] entered into force, having the aim of ensuring that timber and timber-related products on the European market are legal, by prohibiting imports of illegally harvested timber and products. A study by the WWF published in 2019[269] 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[270].

3.1.1. CURRENT STATUS IN THE EU

Although illegal logging and timber trade primarily impact regions most at risk of large-scale deforestation (e.g. the Amazon, Borneo, the Congo Basin, the Greater Mekong, New Guinea and Sumatra), it is also a threat within the EU itself, including some of Europe's last remaining old-growth forests[271]. 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[272]. 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

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

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

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

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

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

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

[272] Ibid.

amounts of illegally harvested timber[273]. The evaluation of the ECD also found that this type of crime is particularly common in **Hungary**, **Latvia** and **Lithuania**[274].

All of these countries have gaps in terms of the degree to which their national legislation provides for penalties in response to breaches of the regulation[275].

As reported by the Commission[276], throughout the EU, there are 9 countries where infringements can be both administrative and criminal, 11 where they can be only administrative, and 7 where they can be only criminal. In all Member States except for Italy, notices of remedial action or similar (all reporting countries except Italy) can be issued where shortcomings are detected. These allow operators to adjust their due diligence system prior to being re-checked. They can be combined with interim measures such as seizure of timber or prohibition to place it on the internal market. As for fines applicable to infringements of the EUTR, there was a large range from as little as EUR 50 to unlimited fines.

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

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

3.1.2. ENVIRONMENTAL IMPACTS

Illegal logging and illegal trade in timber contribute to deforestation, habitat destruction and biodiversity decline[277]. 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[278].

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

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

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

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

[277] World Bank Group, 2019.

[278] UNEP, 2018.

Moreover, forests are carbon sinks, and therefore their depletion can impact climate change[279]. 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[280]. EU forests absorb the equivalence of 8.9% of total EU greenhouse gas emissions yearly, consequently playing an important role in achieving Carbon neutrality[281].

3.1.3. SOCIAL IMPACTS

Illegal logging and trade in timber can have impacts on human health, such as the cause of spread of diseases from animals to humans[282]. According to UNEP[283], 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[284], the failure to protect a community's rights to forests threatens the rights and livelihoods of residents, which can result in conflict. Deforestation also damages the aesthetic and cultural value of forests. Corruption, which is often closely associated with illegal forestry, also leads to weakened governance and rule of law, as well as resulting in regional instability and migration.

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

3.1.4. ECONOMIC IMPACTS

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

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

[280] World Bank Group, 2019.

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

[282] UNEP, 2018.

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

[284] World Bank Group, 2019.

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

A substantial part of the economic losses associated with illegal logging relate to the loss of ecosystem services, which are not currently priced by the market[286].

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^3 of wood is illegally harvested every year[287].
Romania is home to two-thirds of Europe's last remaining virgin forests and large populations of bears, wolves and lynx. Based on an analysis of data by Greenpeace together with the university of Maryland, it was concluded that in the period 2000 – 2014, Romania had lost as much as 280 000 hectares of forest with almost half of this area represented by protected areas and national parks.[288] The Romanian national forest inventory reported that 49% of the timber cut down during the period 2008-2014 was done illegally[289].
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[290].
In addition, illegal logging in Romania has strong links to organised crime and corruption. Workers attempting to protect the trees have been killed, causing protestors in the capital to call for action from the government[291,292].

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

Illegal, unreported and unregulated (IUU) fishing is a broad term that captures a wide variety of fishing and fishing related activities, such as fishing without a valid license, fishing in a restricted area, or fishing in a way non-consistent with national laws or international obligations[293]. It concerns all aspects and stages of the capture and utilisation of fish. IUU fishing shall be distinguished from fishery crimes or offences, including those having a transnational nature, which are connected with fishing operations, such as the trade of catches fished illegally, or human rights violations on board fishing vessels, which may however also

[286] World Bank Group, 2019.

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

[288] GreenPeace, 2018.

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

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

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

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

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

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

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

According to information material of the European Commission[294], based on 2009 estimations, 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. UNEP and Interpol[295] reported in 2016 an economic loss of around USD **11- 30 billion** a year worldwide based on data from 2003-2009. Other estimates of IUU fishing includes an annual **10–26 million metric tonnes of fish**, with a value of up to USD 10 billion to USD 23 billion, and 12–28 million metric tonnes of fish at a value of USD 16–37 billion.[296]. While the mentioned limitations apply, this shows that environmental damage related to IUU fishing is an issue of global scale.

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

3.2.1. CURRENT STATUS IN THE EU

Unfortunately, there are no robust estimates of the degree of involvement of EU vessels in IUU fishing, primarily because of the secretive nature of IUU activities[297]. There is however evidence to suggest that this does take place[298]. In the past, the OECD[299] has reported on

[294] European Commission, 2021. Tackling illegal, unreported and unregulated (IUU) fishing. Available at: Illegal fishing (europa.eu).

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

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

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

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

examples of ships flying multiple flags with the motivation of avoiding rules and operating freely in different areas. The Regulation on the sustainable management of external fishing fleets[300] (SMEFF Regulation), as part of the CFP legislation, provides a legal framework for flagging and fishing authorisations.

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

The IUU Regulation sets sanctions for serious infringements of its provisions that can amount to five or eight (in case of repeated action) time the value of fishery products obtained through the infringement[302]. A recent review of sanctions under the EU Common Fisheries Policy by Milieu identified that almost all Member States (all except Ireland, Lithuania and Poland) provide for both administrative and criminal sanctions in their national laws. The others have only criminal sanctions (Ireland) or administrative sanctions (Lithuania, Poland, Slovenia). However, in practice, administrative sanctions are much more commonly used in almost all Member States (all except Belgium, Ireland, Malta and the Netherlands where criminal sanctions are more common)[303].

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

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

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

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

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

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

[304] Ibid., p. 208.

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

A report from the European Commission describes the progress made in combatting IUU fishing as a result of the IUU Regulation. However, the report concludes that the control system could be improved. A 2018 report[306] identified declines in imports across the EU, except for a few variations[307]. It should be noted, however, that only an identification of a country as non-cooperating ("red card") followed by a listing results in a ban of imports from that country. "Yellow cards" (pre-identification of a country as non-cooperating) does not have this same consequence.

3.2.2. ENVIRONMENTAL IMPACTS

Reducing or stopping illicit fishing activities in the EU, would contribute to fighting over-harvesting and pressuring fish stocks, which may already be under pressure from unsustainable rates of legal fishing activities. It can thereby contribute to preventing the depletion of fish stocks. Illegal fishing activities directly affect their target fish species. Moreover, reducing illegal fishing activities also benefit directly and indirectly non-target commercial species and nonmarketable fish, as well as protected and vulnerable species and their habitats. In general, IUU fishing threatens marine biodiversity and can have serious detrimental impacts on marine ecosystems and the services that these provide[308], which can be alleviated from further action to reduce crimes related to illicit fishing.

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

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

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

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

[308] EFFACE, 2015. Report on Illegal Fishing.

discarding[309]. 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[310]. These impacts could be reduced, with stronger prevention of crimes related to IUU fishing.

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

3.2.3. SOCIAL IMPACTS

Actions to further reduce environmental offences related to IUU fishing also have social benefits. Through the additional pressure it exerts on depleting fish stocks, IUU fishing reduces the resources available for legitimate fishing activities, thereby negatively effecting legal employment opportunities in the sector[311]. According to Eurostat[312], 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[313]. A significant proportion of imports to the EU originates from developing countries[314], 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[315] 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[316]. This practice particularly affects small-scale fishing communities in developing countries, with significant negative implications for their development and livelihoods[317]. Although not directly applicable to the EU context, it is an important impact nonetheless.

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

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[309] EFFACE, 2015. Report on Illegal Fishing.
[310] Watson, R. and Pauly, D., 2001. Systematic distortions in world fisheries catch trends. Nature, 414(6863), pp.534-536.
[311] EFFACE, 2015. Report on Illegal Fishing.
[312] Eurostat, 2020. Agriculture, forestry and fishery statistics, 2020 Edition. https://ec.europa.eu/eurostat/documents/3217494/12069644/KS-FK-20-001-EN-N.pdf/a7439b01-671b-80ce-85e4-4d803c44340a?t=1608139005821.
[313] European Commission, 2015. The EU fish market, 2015 edition. https://trade.ec.europa.eu/doclib/docs/2016/february/tradoc_154321.pdf.
[314] European Commission, 2018. The EU fish Market, 2018 Edition. https://www.eumofa.eu/documents/20178/132648/EN_The+EU+fish+market+2018.pdf.
[315] World Bank Group, 2019. Illegal logging, fishing, and wildlife trade: the costs and how to combat it.
[316] UNEP, 2018. The State of Knowledge of Crimes that have Serious Impacts on the Environment. Available at: https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment.
[317] EFFACE, 2015. Report on Illegal Fishing.

the trafficking in persons, drugs and arms, smuggling of migrants and terrorism. For instance, forced labour can take place on IUU fishing vessels[318].

3.2.4. ECONOMIC IMPACTS

Similarly to environmental and social ones, economic impacts from environmental offences related to IUU fishing can also be mitigated. As it is not compliant with regulations, IUU fishing reduces profits for the legal fishing sector and its ancillary industries and produces losses of fishing licence fees, taxes and levies for nation states. In addition, IUU fishing can disrupt the market by creating higher supplies, which may lower the price of legally captured, harvested or farmed fish, thus further affecting the incomes of legitimate fishers[319].

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[320]. 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[321]. No estimates are available for the economic loss suffered in the EU alone.

Focusing specifically on the costs of the destruction of ecosystems and the services they provide (e.g. carbon sinks, generation of food stocks, etc.), environmental damages linked to the fisheries sector have been estimated to cause an annual natural capital loss of USD 17 million (calculated as Net Present Value with 30 years and three percent discount rate)[322]. A significant part of this loss can be attributed to the destruction of coral reefs and the ecosystems services they provide in the form of coastal protection, tourism and recreation, biodiversity and fisheries[323].

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[324]. Bluefin Tuna was in the beginning of the 1990s at risk of extinction after significant overfishing in the 1980s.

[318] EFFACE, 2015. Report on Illegal Fishing.
[319] EFFACE, 2014. Understanding the damages of environmental crime - Review of the availability of data: Annexes. Available at: https://www.ecologic.eu/sites/default/files/news/2015/efface_3.1_annexes_final.pdf.
[320] Stimson, 2015. Environmental Crime. Defining the Challenge as a Global Security Issue and Setting the Stage for Integrated Collaborative Solutions. Available at: http://www.stimson.org/enviro-crime/.
[321] World Bank Group, 2019. Illegal logging, fishing, and wildlife trade: the costs and how to combat it. Available at: Illegal-Logging-Fishing-and-Wildlife-Trade-The-Costs-and-How-to-Combat-it (1).pdf.
[322] World Bank Group, 2019.
[323] World Bank Group, 2019.
[324] WWF, 2018. EUR 12.5 million illegal bluefin tuna trade exposes threat to sustainable fisheries in Europe. Available at: https://wwf.panda.org/?336830/125-million-illegal-bluefin-tuna-trade-exposes-threat-to-sustainable-fisheries-in-Europe.

Since then, recovery plans and other measures have been put in place to ensure the recovery and survival of the species. Illegal trade and fishing threaten the recovery of the stocks, in addition to creating competition for the legal market and financing further illegal activity[325].

3.3. POACHING / WILDLIFE CRIMES

As presented in a key guidance from the EU Commission, wildlife crimes concern a wide range of offences defined by EU legislation[326]. 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[327]. 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[328]. 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[329]. Additionally, the EU legislation on nature protection and conservation provides protection status of different level to species as well. Although the EU Wildlife Trade Regulations are directly applicable in all EU Member States, the necessary enforcement provisions must be transferred into national legislation and supplemented with national laws, and Member States must ensure that infractions are punished in an appropriate

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

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

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

[328] 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 .

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

manner. Wildlife trafficking was recognised in 2017 as a priority under the EU fight against transnational organised crime, which led to more resources devoted to it at the EU and Member State levels for the period 2018-2021[330]. Major cross-border investigations and seizures of illegally traded wildlife products have been carried out throughout the EU, with the active involvement of Europol, Eurojust and many law enforcement agencies from different Member States and other countries.

In addition to the aspect of trafficking, the EU Habitats Directive[331] and Birds Directive[332] (also known as the 'Nature Directives') ensure the conservation of a wide range of rare, threatened or endemic animal and plant species. Some 200 rare and characteristic habitat types are also targeted for conservation in their own right, along with the 500 wild bird species naturally occurring in the EU.

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

3.3.1. CURRENT STATUS IN THE EU

In the EU, CITES-related seizures show an upward trend since 2011. In 2016, the competent authorities of EU Member States reported to the European Commission a total of 2 268 significant seizures of wildlife commodities, 63% of them at external EU borders. More than two tonnes of ivory were seized in 2016, destined for the Asian market. In 2016-17, 48 persons were arrested, and 4 000 kg of live juvenile eels seized; the eels were intercepted as they were being exported to Asia and their total value was approximately EUR 4 million[333]. 5 644 seizure records were reported by Member States in 2017; 6 012 in 2018; and 6 441 in 2019.[334] Most of these seizures occurred in **France**, **Germany**, the United Kingdom, **Spain** and the **Netherlands**. The reported trade value of illegal wildlife trade was a minimum of **EUR 2.3 million** in 2018 in the EU, representing an increase from 2017 when this value was at EUR 1.8 million. 60% of the seizure records for which a destination was reported were *en route* to EU Member States. The main types of traded commodities were medicinals (both plant- and animal-derived), corals and reptile bodies, parts and derivatives[335].

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

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

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

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

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

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

A 2018 study by a group of NGOs found that 67% of the EU Member States had satisfactorily transposed the Nature Directives into national law but failed to implement them properly[336]. There are clear differences in the laws applied in each country. Some examples, taken from a 2016 ENEC study covering 18 Member States[337], include:

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

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

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

3.3.2. *ENVIRONMENTAL IMPACTS*

Illegal trade in wildlife is a threat to biodiversity and contributes to the endangerment and extinction of species in source countries. This practice can also lead to the introduction of invasive species and pathogen pollution in import countries[338].

3.3.3. *SOCIAL IMPACTS*

Wildlife crimes can increase poverty and negatively impact food security and public health[339].

In addition to this, illegal wildlife trade can have broader consequences for specific countries, as it can erode state authority, fuel civil conflict and threaten national stability and international security[340]. This is because organized crime and terrorist groups can use illegal wildlife trafficking to destabilize countries and und arm deals. In source countries, indigenous people and rangers protecting biodiversity might also suffer threats of violence[341].

3.3.4. *ECONOMIC IMPACTS*

Wildlife crimes undermine legal global wildlife trade, and employment opportunities thereof, as well as they deprive governments of revenues and taxes from legal activities[342]. 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[343].

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

Forest fire crime refers to the wilful and malicious burning of forests, and is distinguished from fires which are spontaneously or naturally caused. According to the WWF[344], **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.

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[338] https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment.
[339] EFFACE, 2015. Report on Illegal Wildlife Trafficking.
[340] EFFACE, 2015. Report on Illegal Wildlife Trafficking.
[341] Maher J., Sollund R, 2016. Wildlife Trafficking: Harms and Victimization. In: Sollund R., Stefes C., Germani A. (eds) Fighting Environmental Crime in Europe and Beyond. Palgrave Studies in Green Criminology. Palgrave Macmillan, London. https://doi-org.ezproxy.its.uu.se/10.1057/978-1-349-95085-0_5.
[342] European commission, 2016. What are the environmental, economic, social and criminal impacts of wildlife trafficking and illegal logging? Available at:https://ec.europa.eu/environment/legal/law/4/pdf/environmental_economic_social_criminal_impacts.pdf.
[343] UNEP, 2018. The State of Knowledge of Crimes that have Serious Impacts on the Environment. Available at: https://www.unep.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment.
[344] WWF, 2017.

3.4.1. *CURRENT STATUS IN THE EU*

According to a report by EFFACE, in the period 2003-2012, human-induced forest fires burned a total area of **1 535 572.41 hectares** in the EU Member State countries[345]. **Spain**, **Italy** and **Portugal**, **Greece** and **France** were the European countries most affected by forest fire crimes during the same period[346].

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[347].

3.4.2. *ENVIRONMENTAL IMPACTS*

According to a report by EFFACE[348], environmental impacts of man-made forest fires include effects on climate change due to GHG emissions. In addition to their release of carbon dioxide, forest fires account for 32% of global carbon monoxide, 10% of methane emissions and 86% of soot emissions.[349]

Impacts moreover include damages to vegetation, peat and soils, and the destruction of habitats for wildlife[350]. Depending on the scale and location of the fire, effects also include damage to endangered animal and plant species[351]. Moreover, fires directly impact benefits and resources derived from forests, including flood and drought regulation, nutrient recycling, and water and food provision.

3.4.3. *SOCIAL IMPACTS*

Social impacts include negative health impacts caused by the smoke released from the fires. According to the European Commission[352], 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[353].

In addition to fatalities, the indirect impacts are significant. According to the WHO[354], forest fires cause health impacts related to the resulting smoke, ashes, and mercury released during

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[345]EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.
[346]Ibid.
[347]Ibid.
[348]Ibid.
[349] WWF, 2017. FORESTS ABLAZE: Causes and effects of global forest fires. Available at: https://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/WWF-Study-Forests-Ablaze.pdf.
[350] EFFACE, 2015. The Quantitative and Monetary Impacts of Forest Fire Crimes.
[351] WWF, 2017.
[352] European Forest Fire Information System (EFFIS), EC PESETA II project report.
[353] WWF, 2017.
[354] WHO, 2021. Wildfires. Available at: https://www.who.int/health-topics/wildfires/#tab=tab_2.

the fire. This includes for example lung related diseases such as bronchitis, and cardiovascular diseases such as heart failure. The effects of smoke have been shown to be particularly damaging to elderly and small children, as well as people with respiratory and cardiovascular diseases, due to their containing of toxic substances like carbon monoxide, fine dust, formaldehyde and polycyclic aromatic hydrocarbons[355]. The health effects of mercury include impairment of speech, hearing and walking[356]. 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[357].

3.4.4. ECONOMIC IMPACTS

Economic impacts include costs for fire suppression, damages to infrastructure and private properties, loss of income from land, loss of jobs, and damages to industries such as tourism. No Europe-wide estimate 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[358] 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[359].

Box 4. Example – Forest fires in Italy

Example – Forest fires in Italy
A forest fire in Morfasso in the province of Piacenza, Italy in 2010 destroyed an area of 8.5 ha of woodland. The cause of the fire was determined to be negligence on the part of workers performing forest-cleaning operations in the area. Costs of fire extinction alone were estimated at EUR 100 504.54. With additional estimates of the environmental damages, the total monetary impact of the fire was determined at EUR 117 089.
Additional examples include the forest fire in Monte della Croce in 2011, where 1.49 ha of woodland was burnt, costing an estimated EUR 48 452; or the fire in Rocca Romana in 2003, affecting an area of 22 ha and costing an estimated EUR 202 353.

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

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3.5. WASTE-RELATED CRIMES

Waste related crimes include the improper collection, transport, recovery and disposal of waste. The criminal actions can be of very differing nature and impact depending on the waste stream. For example, criminal non-compliance around hazardous waste can cause severe and long-lasting damages, while illegal shipments may cause important impacts in other places, including outside of the EU[360]. Getting a clear and up-to-date view of the magnitude of waste related crimes is a challenging task, as only limited information is available.

3.5.1. CURRENT STATUS IN THE EU

According to IMPEL[361], illegal trafficking in waste accounts for **20% of all the waste shipments** in the EU. The evaluation of the ECD[362] 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[363].

Regarding e-waste in particular, a study on illegal e-waste trade[364] found that EU Member States exported **1.3 million tonnes** of e-waste and these transits were undocumented. In 2012, **4.65 million tonnes** of electronic waste alone were not properly managed or illegally traded within the EU.

3.5.2. ENVIRONMENTAL IMPACTS

Waste related crimes result in the contamination of air, land, water systems and can pose a threat to local ecosystems, affecting animals and plants. The inappropriate disposal and processing of e-waste in particular leads to the release of large amounts of contaminants into the local environment, including heavy metals[365].

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

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

[362] European Commission, 2020. COMMISSION STAFF WORKING DOCUMENT EVALUATION of the DIRECTIVE 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law (ENVIRONMENTAL CRIME DIRECTIVE) Available at: https://ec.europa.eu/info/sites/info/files/evaluation_-_swd2020259_-_part_1_0.pdf.

[363] European Commission, 2020.

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

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

In addition to this, the illegal and inappropriate disposal of waste also brings a loss of valuable materials that could have instead been recycled or recovered[366]. As pointed out by an interviewed stakeholder, this can take place both as dispersed small-scale contaminations originating from improper household waste management and from large-scale organised violations of waste management legislation.

3.5.3. SOCIAL IMPACTS

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

3.5.4. ECONOMIC IMPACTS

Illegal disposal of (e-)waste can generate revenue for operators that process this waste, but also constitutes an economic loss for countries that generate the (e-)waste, as they miss out on the gains related to recycling it[368]. 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

[366]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.

[367] UNEP, 2018.

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

tonnes of toxic waste has been reported to be buried in the area. The waste contains highly toxic substances such as arsenic, and dioxin, subjecting communities in the area to serious health risks[369]. One study indicated substantially increased levels of cancer in the area surrounding the waste dump[370]. 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 [371].

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

3.6. CRIMES RELATED TO CHEMICALS

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

One key area of environmental crime related to chemicals is the *trade in unauthorised and counterfeit pesticides*. Counterfeit pesticides are fake products often produced and packaged to look like the genuine article. The widespread availability of technology needed to produce counterfeit and unauthorised pesticides, coupled with the lack of enforcement of existing laws and legislative loopholes all contribute to facilitate the trade of counterfeit products. As found by a Europol study in 2011, the trade in illegal and counterfeit pesticides is worth **EUR 4.4 billion per year** globally[372]. The illegal trade in unauthorised or counterfeit pesticides represents over **10% of the worldwide market**, with an end-to-end value of **EUR 44 billion**.

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

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

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

[371] Aljazeera, 2016.

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

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

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

activities related to ODS is found to be of lower concern, as the ODS Regulation[375] proves to be effective[376]. Quantitative estimations of the impacts in Europe are not available, though.

3.6.1. CURRENT STATUS IN THE EU

The 2011 Europol study estimates that more than 25% of the pesticides in circulation in some EU Member States, notably those in North East Europe, originate from illegal pesticides trade[377]. The large north-western European seaports of Antwerp (**Belgium**), Hamburg (**Germany**) and Rotterdam (the **Netherlands**) are the main points of identified entry of illegal pesticides, though not the only ones.[378]

Several studies have found that especially in the area of chemical pollution, national authorities struggle with criminal investigations. There is a need for a particularly high level of specialist knowledge to successfully detect, investigate and prosecute crime involving chemical pollution, creating an obvious challenge for law enforcement and judicial authorities[379]. 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[380].

3.6.2. ENVIRONMENTAL IMPACTS

The trade in ODS leads to a progressive depletion of the earth's ozone layer. This can have negative impacts on ecosystems. UV-B can significantly impair reproductive capacity and early developmental stages of aquatic organisms, and increased exposure to UV light in terrestrial plants results in reductions in height, decreased shoot mass and reductions in foliage area[381]. It also contributes to global warming as ozone depleting substances such as chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) are generally potent greenhouse gases[382].

3.6.3. SOCIAL IMPACTS

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

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[375] Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.
[376] European Commission, 2020. SWD(2019) 406 final/2. Evaluation of Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.
[377] Europol, 2011. OC-SCAN Policy Brief 011-2011.
[378] European Commission, DG SANTE, 2015. Ad-hoc study on the trade of illegal and counterfeit pesticides in the EU, p. iii.
[379] EUROJUST, 2014. Strategic Project on Environmental Crime Report, page 21. Available at: https://www.eurojust.europa.eu/strategic-project-environment-crime.
[380] EnviCrimeNet, 2014. Intelligence Project on Environmental Crime: Preliminary Report on Environmental Crime in Europe, p. 21. Available at: http://www.envicrimenet.eu/images/docs/ipec_report_on_environmental_crime_in_europe.pdf.
[381] EIA (2014) New Trends in ODS Smuggling. EIA Briefing to the 26th Meeting of the Montreal Protocol, p. 1.
[382] EFFACE (2014), Understanding the damages of environmental crime: Review of the availability of data.

industry, resulting in a total of 2 600 lost jobs across the EU[383]. 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[384]. 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[385]. 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[386].

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[387].

3.6.4. ECONOMIC IMPACTS

The 2017 EUIPO study found that for the EU as a whole, the estimated total sales lost by legitimate manufacturers of pesticides in the EU due to counterfeiting amounted to 13.8% of sales or EUR 1.3 billion each year[388]. 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[389]. 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[390].

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

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

[383] European Union Intellectual Property Office (2017). The Economic Cost of IPR Infringement in the Pesticides Sector, p. 15.
[384] Ibid., p. 16.
[385] Europol (2011), OC-SCAN Policy Brief 011-2011.
[386] EIA (2014) New Trends in ODS Smuggling. EIA Briefing to the 26th Meeting of the Montreal Protocol, p. 1.
[387] EFFACE, 2014. Understanding the damages of environmental crime: Review of the availability of data.
[388] European Union Intellectual Property Office (2017). The Economic Cost of IPR Infringement in the Pesticides Sector, p. 13: https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/resources/research-and-studies/ip_infringement/study10/pesticides_sector_en.pdf.
[389] Ibid., p. 16.
[390] Ibid., p. 17.

gas generated a profit of between EUR 500 000 and EUR 1 million. The investigation by the Spanish Civil Guard revealed that, if not caught, the gas would have released as much as 17 000 tonnes of CO2 into the atmosphere[391].

3.7. POLLUTION CRIMES AFFECTING SOIL, WATER AND AIR

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

3.7.1. CURRENT STATUS IN THE EU

Pollution is a common threat for the environment affecting soil, water and air. In the EU, noise pollution is also included in this context[392]. 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[393] obliges Member States to introduce criminal sanction for such activities. The impacts of this criminalization, which was introduced in 2009, have not been systematically assessed to this point.

3.7.2. ENVIRONMENTAL IMPACTS

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

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

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

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

[393] DIRECTIVE 2005/35/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 September 2005 on ship-source pollution and on the introduction of penalties, including criminal penalties, for pollution offences, amended by Directive 2009/123/EC.

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

surface waters, can impact wildlife in a number of ways. For instance, air toxics are contributing to birth defects, reproductive failure, and disease in animals[395].

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[396].

3.7.3. SOCIAL IMPACTS

Pollution is a serious threat for human health. For instance, water and soil pollution can contaminate drinking water and food supplies, which can lead to a range of illnesses. Clean drinking water is an essential ingredient for a healthy human life, but 1.1 billion people lack access to water and 2.4 billion do not have adequate sanitation due to pollution from toxic substances dumped or washed into streams and waterways and the discharge of sewage and industrial waste[397].

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[398].

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[399].

3.7.4. ECONOMIC IMPACTS

Pollution has obvious consequences for social and economic systems through its impact on human health, but also causes unfair competition, declines in property prices and local businesses in areas massively polluted[400].

Box 7. Example – Burning of waste in Romania

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

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

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

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

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

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

Example – Burning of waste in Romania
Less than 16 km outside of Bucharest, waste is being illegally burnt for the extraction of metals to be sold. The burning of the waste causes significant air pollution due to the toxic chemical components released, effecting not only the communities in close proximity to the burning but also the air quality of the Romanian capital. The burning is largely carried out by the poverty-stricken Roma community who are reportedly caught in mafia structures in situations which can be likened to modern slavery[401].

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

4. OVERVIEW OF MAGNITUDE AND IMPACT PER CRIME TYPE

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
Forestry crimes	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)
Fishery crimes[402]	USD 11-30 billion per year (worldwide) IUU fishing practices represent approx. 19% of the reported value of	Over-harvesting and potential depletion of fish stocks that are already under pressure (directly and indirectly) Threat to marine biodiversity,	Reduced resources for legitimate fishing activities, thereby negatively effecting legal employment opportunities	Reduced profits for the legal fishing sector and its ancillary industries Losses of landing fees, taxes and levies for EU Member	Coastal countries, notably bordering the Atlantic Ocean and Mediterranean Sea(Netherlands, Spain, France, Ireland, Malta,

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

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

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
				through wildlife tourism	
Forest fire crimes	Up to 96% of all forest fires are man-made 1 535 572.41 hectares of forest burned in the EU between 200-2012 *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)*	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 derived from forests, e.g. flood and drought regulation, nutrient recycling, and water and food provision	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 homes and property, loss of livelihoods, and damages to cultural and historical sites	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
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	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	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,	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	All EU Member States

Environmental crime	Total magnitude of the environmental crime	Key environmental impacts	Key social impacts	Key economic impacts	Most affected Member States
	billion per year in the EU Annual revenues from illicit trafficking of hazardous waste between EUR 1.5 billion and EUR 1.8 billion	or recovered	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)	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	
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 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	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) Contributes to global warming through GHG emissions	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 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, photo-aging of the skin,	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 revenue from household income taxes, social security contributions and corporate income taxes (EUR 238 million per year in the EU)	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
	million (worldwide)		cataracts and skin cancer Dangerous work environments where employment and safety laws tend to be ignored		
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 throughout the oceans, snag and tear corals, and harm animals	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

ANNEX 6: COMPARATIVE TABLE PROVISIONS ON PRACTICAL IMPLEMENTATION

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

[403] Directive (EU) 2017/1371 of the European Parliament and of the Council of 5 July 2017 on the fight against fraud to the Union's financial interests by means of criminal law.
[404] Directive 2014/57/EU of the European Parliament and of the Council of 16 April 2014 on criminal sanctions for market abuse (market abuse directive).
[405] Directive 2011/93/EU of the European Parliament and of the Council of 13 December 2011 on combating the sexual abuse and sexual exploitation of children and child pornography.
[406] Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing.
[407] Directive (EU) 2017/541 of the European Parliament and of the Council of 15 March 2017 on combating terrorism and replacing Council Framework Decision 2002/475/JHA and amending Council Decision 2005/671/JHA.
[408] Directive (EU) 2019/713 of the European Parliament and of the Council of 17 April 2019 on combating fraud and counterfeiting of non-cash means of payment and replacing Council Framework Decision 2001/413/JHA.
[409] Directive 2014/62/EU of the European Parliament and of the Council of 15 May 2014 on the protection of the euro and other currencies against counterfeiting by criminal law, and replacing Council Framework Decision 2000/383/JHA.
[410] Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA.
[411] Directive 2013/40/EU of the European Parliament and of the Council of 12 August 2013 on attacks against information systems and replacing Council Framework Decision 2005/222/JHA.

	Member States shall, on an annual basis, submit the **following statistics** on the criminal offences referred to in Articles 3, 4 and 5 to the Commission, if they are available at a central level in the Member State concerned: (a) the number of criminal proceedings initiated, dismissed, resulting in an acquittal, resulting in a conviction and ongoing; (b) the amounts recovered following criminal proceedings and the estimated damage."					shall establish a detailed programme for monitoring the outputs, results and impacts of this Directive. The monitoring programme shall set out the means by which and the intervals at which the necessary data and other evidence will be collected. It shall specify the action to be taken by the Commission and by the Member States in collecting, sharing and analysing the data and other evidence. 2. Member States shall ensure that a	Commission on the number of offences laid down in Articles 3 and 4 and the number of persons prosecuted for and convicted of the offences laid down in Articles 3 and 4.	take the necessary measures to establish national rapporteurs or equivalent mechanisms. The tasks of such mechanisms shall include the carrying out of assessments of trends in trafficking in human beings, the measuring of results of anti-trafficking actions, including the gathering of statistics in close cooperation with relevant civil society organisations active in this field, and reporting.	relating to the offences referred to in Articles 3 to 8, Member States shall ensure that they have an operational national point of contact and that they make use of the existing network of operational points of contact available 24 hours a day and seven days a week. Member States shall also ensure that they have procedures in place so that for urgent requests for assistance, the competent authority can indicate, within eight hours of receipt, at least whether the request will be

						system is in place for the recording, production and provision of anonymised statistical data measuring the reporting, investigative and judicial phases involving the offences referred to in Articles 3 to 8. 3. The statistical data referred to in paragraph 2 shall, as a minimum, cover existing data on the number of offences referred to in Articles 3 to 8 registered by the Member States and on the number of persons prosecuted for and convicted			answered, and the form and estimated time of such an answer. 2. Member States shall inform the Commission of their appointed point of contact referred to in paragraph 1. The Commission shall forward that information to the other Member States and competent specialised Union agencies and bodies. 3. Member States shall take the necessary measures to ensure that appropriate reporting channels are made available in order to facilitate the

						of the offences referred to in Articles 3 to 7. 4. Member States shall transmit the data collected pursuant to paragraphs 1, 2 and 3 to the Commission on an annual basis. The Commission shall ensure that a consolidated review of the statistical reports is published each year and submitted to the competent specialised Union agencies and bodies.			reporting of the offences referred to in Article 3 to 6 to the competent national authorities without undue delay. Art. 14 - **Monitoring and statistics** 1. Member States shall ensure that a system is in place for the recording, production and provision of statistical data on the offences referred to in Articles 3 to 7. 2. The statistical data referred to in paragraph 1 shall, as a minimum, cover existing data on the number of offences

									referred to in Articles 3 to 7 registered by the Member States, and the number of persons prosecuted for and convicted of the offences referred to in Articles 3 to 7. 3. Member States shall transmit the data collected pursuant to this Article to the Commission. The Commission shall ensure that a consolidated review of the statistical reports is published and submitted to the competent specialised Union agencies and bodies.

Training	N/A	Art. 11 – Training: Without prejudice to judicial independence and differences in the organisation of the judiciary across the Union, Member States shall request those responsible for the training of judges, prosecutors, police, judicial and those competent authorities' staff involved in criminal proceedings and investigations to provide appropriate training with respect to the objectives of this Directive.	Art. 23(3): Member States shall **promote regular training for officials** likely to come into contact with child victims of sexual abuse or exploitation, including front-line police officers, aimed at enabling them to identify and deal with child victims and potential child victims of sexual abuse or exploitation.	N/A	N/A	N/A	N/A	Art. 9(3): Member States shall take the necessary measures to ensure that persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 2 and 3 **are trained accordingly**. Art. 18(3): Member States shall **promote regular training for officials** likely to come into contact with victims or potential victims of trafficking in human beings, including front-line police officers,	N/A

								aimed at enabling them to identify and deal with victims and potential victims of trafficking in human beings.	
Administrative sanctions	Art. 7(4) – Sanctions with regard to natural persons: "Where a criminal offence referred to in point (a), (b) or (c) of Article 3(2) or in Article 4 involves damage of less than EUR 10 000 or an advantage of less than EUR 10 000, Member States may provide for **sanctions other than criminal sanctions**" Art. 9 - Sanctions with regard to legal	Art. 9 – Sanctions for legal persons Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 8 is subject to effective, proportionate and dissuasive sanctions, which shall include criminal **or non-criminal fines and may include other sanctions**, such as:	Art. 13 – sanctions on legal persons Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 12(1) is punishable by effective, proportionate and dissuasive sanctions, which shall include criminal **or non-criminal fines and may include other sanctions**, such as:	Art. 8 – Sanctions for legal persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 7 is punishable by effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions, such as: (a) exclusion from entitlement to public	Art. 18 – Sanctions for legal persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 17 is punishable by effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions, such as:	Art. 11: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 10(1) or (2) is subject to effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and which may include other sanctions,	Art. 7 - Sanctions for legal persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 6 is subject to effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions such as	Art. 6 – Sanctions on legal persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 5(1) or (2) is subject to effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and may include other sanctions,	Art. 11 – Sanctions against legal persons: 1. Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 10(1) is punishable by effective, proportionate and dissuasive sanctions, which shall include criminal or non-criminal fines and which may include other sanctions,

	persons: Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 6 is subject to effective, proportionate and dissuasive sanctions, which shall include **criminal or non-criminal fines** and may include other sanctions, such as: (a) exclusion from entitlement to public benefits or aid; (b) temporary or permanent exclusion from public tender procedures; (c) temporary or permanent disqualification from the practice of commercial activities; (d)	(a) exclusion from entitlement to public benefits or aid; (b) temporary or permanent disqualification from the practice of commercial activities; (c) placing under judicial supervision; (d) judicial winding-up; (e) temporary or permanent closure of establishments which have been used for committing the offence.	(a) exclusion from entitlement to public benefits or aid; (b) temporary or permanent disqualification from the practice of commercial activities; (c) placing under judicial supervision; (d) judicial winding-up; or (e) temporary or permanent closure of establishments which have been used for committing the offence. 2. Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 12(2) is punishable by	benefits or aid; (b) temporary or permanent exclusion from access to public funding, including tender procedures, grants and concessions; (c) temporary or permanent disqualification from the practice of commercial activities; (d) placing under judicial supervision; (e) a judicial winding-up order; (f) temporary or permanent closure of establishments which have been used for committing the offence.	(a) exclusion from entitlement to public benefits or aid; (b) temporary or permanent disqualification from the practice of commercial activities; (c) placing under judicial supervision; (d) a judicial winding-up order; (e) temporary or permanent closure of establishments which have been used for committing the offence.	such as (…).		such as (…)	such as (…) 2. Member States shall take the necessary measures to ensure that a legal person held liable pursuant to Article 10(2) is punishable by effective, proportionate and dissuasive sanctions or other measures.

	placing under judicial supervision; (e) judicial winding-up; (f) temporary or permanent closure of establishments which have been used for committing the criminal offence.		sanctions or measures which are effective, proportionate and dissuasive.						
Prevention	N/A	N/A	Article 21 Measures against advertising abuse opportunities and child sex tourism: Member States shall take appropriate measures to prevent or prohibit: (a) the dissemination of material advertising the opportunity to commit any of the offences referred to in Articles 3 to 6;	N/A	Art. 21 - Measures against public provocation content online: 1. Member States shall take the necessary measures to ensure the prompt removal of online content constituting a public provocation to commit a terrorist offence, as referred to in Article 5, that is hosted in	Art. 17 – prevention: Member States shall take appropriate action, including through the internet, such as information and awareness-raising campaigns and research and education programmes, aimed to reduce overall fraud, raise awareness and reduce the risk	N/A	Art. 18 – Prevention: 1. Member States shall take appropriate measures, such as education and training, to discourage and reduce the demand that fosters all forms of exploitation related to trafficking in human beings. 2. Member States shall take appropriate	N/A

			and (b) the organisation for others, whether or not for commercial purposes, of travel arrangements with the purpose of committing any of the offences referred to in Articles 3 to 5. Art. 22 Preventive intervention programmes or measures: Member States shall take the necessary measures to ensure that persons who fear that they might commit any of the offences referred to in Articles 3 to 7 may have access, where		their territory. They shall also endeavour to obtain the removal of such content hosted outside their territory. 2. Member States may, when removal of the content referred to in paragraph 1 at its source is not feasible, take measures to block access to such content towards the internet users within their territory. 3. Measures of removal and blocking must be set following transparent procedures and provide adequate safeguards, in particular to ensure that	of becoming a victim of fraud. Where appropriate, Member States shall act in cooperation with stakeholders.		action, including through the Internet, such as information and awareness-raising campaigns, research and education programmes, where appropriate in cooperation with relevant civil society organisations and other stakeholders, aimed at raising awareness and reducing the risk of people, especially children, becoming victims of trafficking in human beings. 3. Member States shall promote regular	

			appropriate, to effective intervention programmes or measures designed to evaluate and prevent the risk of such offences being committed. Art. 23 Prevention: 1. Member States shall take appropriate measures, such as education and training, to discourage and reduce the demand that fosters all forms of sexual exploitation of children. 2. Member States shall take appropriate action, including through the Internet, such as information		those measures are limited to what is necessary and proportionate and that users are informed of the reason for those measures. Safeguards relating to removal or blocking shall also include the possibility of judicial redress.			training for officials likely to come into contact with victims or potential victims of trafficking in human beings, including front-line police officers, aimed at enabling them to identify and deal with victims and potential victims of trafficking in human beings. 4. In order to make the preventing and combating of trafficking in human beings more effective by discouraging demand, Member States shall consider taking	

			and awareness-raising campaigns, research and education programmes, where appropriate in cooperation with relevant civil society organisations and other stakeholders, aimed at raising awareness and reducing the risk of children, becoming victims of sexual abuse or exploitation. Article 25 Measures against websites containing or disseminating child pornography: 1. Member States shall take the necessary					measures to establish as a criminal offence the use of services which are the objects of exploitation as referred to in Article 2, with the knowledge that the person is a victim of an offence referred to in Article 2.	

			measures to ensure the prompt removal of web pages containing or disseminating child pornography hosted in their territory and to endeavour to obtain the removal of such pages hosted outside of their territory. 2. Member States may take measures to block access to web pages containing or disseminating child pornography towards the Internet users within their territory. These measures must be set by transparent procedures and provide adequate						

			safeguards, in particular to ensure that the restriction is limited to what is necessary and proportionate, and that users are informed of the reason for the restriction. Those safeguards shall also include the possibility of judicial redress.						
Victims	N/A	N/A	Art. 14: Non-prosecution or non-application of penalties to the victim Art. 18: General provisions on assistance, support and protection measures for child victims Art. 19: Assistance and support to victims	N/A	Art. 24: Assistance and support to victims of terrorism Art. 25: Protection of victims of terrorism Art. 26: Rights of victims of terrorism resident in another Member State	Article 16 - Assistance and support to victims: 1. Member States shall ensure that natural and legal persons who have suffered harm as a result of any of the offences referred to in Articles 3 to 8 being committed by misusing	N/A	Art. 11: Assistance and support for victims of trafficking in human beings Art. 12: Protection of victims of trafficking in human beings in criminal investigation and proceedings Art. 13: General provisions on	N/A

			Art. 20: Protection of child victims in criminal investigations and proceedings			personal data, are: (a) offered specific information and advice on how to protect themselves against the negative consequences of the offences, such as reputational damage; and (b) provided with a list of dedicated institutions that deal with different aspects of identity-related crime and victim support. 2. Member States are encouraged to set up single national online information tools to facilitate		assistance, support and protection measures for child victims of trafficking in human beings Art. 14: Assistance and support to child victims Art. 15: Protection of child victims of trafficking in human beings in criminal investigations and proceedings Art. 16: Assistance, support and protection for unaccompanied child victims of trafficking in human beings	

						access to assistance and support for natural or legal persons who have suffered harm as a result of the offences referred to in Articles 3 to 8 being committed by misusing personal data. 3. Member States shall ensure that legal persons that are victims of the offences referred to in Articles 3 to 8 of this Directive are offered the following information without undue delay after their first contact with a competent		Art. 17: Compensation to victims	

						authority: (a) the procedures for making complaints with regard to the offence and the victim's role in such procedures; (b) the right to receive information about the case in accordance with national law; (c) the available procedures for making complaints if the competent authority does not respect the victim's rights in the course of criminal proceedings; (d) the contact details for communications about their case.			

Investigative tools	N/A	N/A	Art. 11 - Seizure and confiscation: Member States shall take the necessary measures to ensure that their competent authorities are entitled to seize and confiscate instrumentalities and proceeds from the offences referred to in Articles 3, 4 and 5. Art. 15(3): "Member States shall take the necessary measures to ensure that **effective investigative tools**, such as those which are used in organised crime or other serious crime cases are available to	Art. 11: Member States shall take the necessary measures to ensure that effective investigative tools, such as those used in combating organised crime or other serious crimes are available to the persons, units or services responsible for investigating or prosecuting the offences referred to in Article 3(1) and (5) and Article 4.	Art. 20 - Investigative tools and confiscation: 1. Member States shall take the necessary measures to ensure that effective investigative tools, such as those which are used in organised crime or other serious crime cases, are available to persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 3 to 12. 2. Member States shall take the necessary measures to ensure that	Art. 13(1) - Effective investigations and cooperation: 1. Member States shall take the necessary measures to ensure that investigative tools, such as those which are used in countering organised crime or in other serious crime cases, are effective, proportionate to the crime committed and available to the persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 3 to 8.	Art. 9: Member States shall take the necessary measures to ensure that **effective investigative tools**, such as those which are used in organised crime or other serious crime cases, are available to persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 3 and 4.	Art. 9(4): Member States shall take the necessary measures to ensure that **effective investigative tools**, such as those which are used in organised crime or other serious crime cases are available to persons, units or services responsible for investigating or prosecuting the offences referred to in Articles 2 and 3.	N/A

			persons, units or services responsible for investigating or prosecuting offences referred to in Articles 3 to 7” (4) Member States shall take the necessary measures to enable investigative units or services **to attempt to identify the victims** of the offences referred to in Articles 3 to 7		their competent authorities freeze or confiscate, as appropriate, in accordance with Directive 2014/42/EU of the European Parliament and of the Council (1), the proceeds derived from and instrumentalities used or intended to be used in the commission or contribution to the commission of any of the offences referred to in this Directive				
Investigation, prosecution and courts	Art. 10: **Freezing and confiscation** Member States shall take the necessary measures to	N/A	Art. 15 – Investigation and prosecution: (1) Member States shall take the necessary	Art. 9 Confiscation: Member States shall take the necessary measures to ensure, as	N/A	Art. 13(2): Member States shall take the necessary measures to ensure that,	Art. 10 - Obligation to transmit counterfeit euro notes and coins for analysis and detection of	Art. 8 – Non-prosecution or non-application of penalties to the victim Member	N/A

	enable the freezing and confiscation of instrumentalities and proceeds from the criminal offences referred to in Articles 3, 4 and 5. Member States bound by Directive 2014/42/EU of the European Parliament and of the Council (1) shall do so in accordance with that Directive. Art. 12 - Limitation periods for criminal offences affecting the Union's financial interests Art. 13: Recovery		measures to ensure that investigations into or the prosecution of the offences referred to in Articles 3 to 7 are not dependent on a report or accusation being made by the victim or by his or her representative, and that criminal proceedings may continue even if that person has withdrawn his or her statements. 2. Member States shall take the necessary measures to enable the prosecution of any of the offences referred to in Article 3,	appropriate, that their competent authorities freeze or confiscate, in accordance with Directive 2014/42/EU, the proceeds derived from and instrumentalities used or intended to be used in the commission or contribution to the commission of the offences as referred to in this Directive.		where national law obliges natural and legal persons to submit information regarding offences referred to in Articles 3 to 8, such information reaches the authorities investigating or prosecuting those offences without undue delay. Art. 15 – reporting of crime: 1. Member States shall take the necessary measures to ensure that appropriate reporting channels are made available in order to	counterfeits: Member States shall ensure that during criminal proceedings the examination by the National Analysis Centre and Coin National Analysis Centre of suspected counterfeit euro notes and coins for analysis, identification and detection of further counterfeits is permitted without delay. The competent authorities shall transmit the necessary samples without any delay, and at the latest once a final decision concerning the criminal proceedings has been reached.	States shall, in accordance with the basic principles of their legal systems, take the necessary measures to ensure that competent national authorities are entitled not to prosecute or impose penalties on victims of trafficking in human beings for their involvement in criminal activities which they have been compelled to commit as a direct consequence of being subjected to any of the acts referred to in Article 2.	

			Article 4(2), (3), (5), (6) and (7) and of any serious offences referred to in Article 5(6) when child pornography as referred to in Article 2(c)(i) and (ii) has been used, for a sufficient period of time after the victim has reached the age of majority and which is commensurate with the gravity of the offence concerned. Art. 16 Reporting suspicion of sexual abuse or sexual exploitation: 1. Member States shall take the necessary measures to ensure that the confidentiality			facilitate reporting of the offences referred to in Articles 3 to 8 to law enforcement authorities and other competent national authorities without undue delay. 2. Member States shall take the necessary measures to encourage financial institutions and other legal persons operating in their territory to report suspected fraud to law enforcement authorities and other competent authorities without undue		Art. 9 – Investigation and prosecution: 1. Member States shall ensure that investigation into or prosecution of offences referred to in Articles 2 and 3 is not dependent on reporting or accusation by a victim and that criminal proceedings may continue even if the victim has withdrawn his or her statement. 2. Member States shall take the necessary measures to enable, where the nature of the act calls for it, the	

			rules imposed by national law on certain professionals whose main duty is to work with children do not constitute an obstacle to the possibility, for those professionals, of their reporting to the services responsible for child protection any situation where they have reasonable grounds for believing that a child is the victim of offences referred to in Articles 3 to 7. 2. Member States shall take the necessary measures to encourage any person who			delay, for the purpose of detecting, preventing, investigating or prosecuting offences referred to in Articles 3 to 8		prosecution of an offence referred to in Articles 2 and 3 for a sufficient period of time after the victim has reached the age of majority. Art. 10 - Jurisdiction	

			knows about or suspects, in good faith that any of the offences referred to in Articles 3 to 7 have been committed, to report this to the competent services. Article 17 Jurisdiction and coordination of prosecution Article 24: Intervention programmes or measures on a voluntary basis in the course of or after criminal proceedings						
Cooperation with coordination bodies	Art. 15 - Cooperation between the Member States and the Commission (OLAF) and other Union	N/A	N/A	Art. 10(3)- Jurisdiction: Where an offence referred to in Articles 3 and 4 falls within the jurisdiction of	Art. 19(3) – Jurisdiction and prosecution: When an offence falls within the jurisdiction of	Art. 14 Exchange of information 1. For the purpose of exchanging information relating to the	N/A	Art. 20 - Coordination of the Union strategy against trafficking in human beings: In order to	N/A

	institutions, bodies, offices or agencies: 1.Without prejudice to the rules on cross-border cooperation and mutual legal assistance in criminal matters, the Member States, Eurojust, the European Public Prosecutor's Office and the Commission shall, within their respective competences, cooperate with each other in the fight against the criminal offences referred to in Articles 3, 4 and 5. To that end the Commission, and where appropriate, Eurojust, shall provide such technical and			more than one Member State and where any of the Member States concerned can validly prosecute on the basis of the same facts, the Member States concerned shall cooperate in order to decide which of them will prosecute the offender, with the aim of centralising proceedings in a single Member State. Account shall be taken of the following factors: (a) the territory of the Member State on which the offence was committed; (b) the nationality or residency of the offender; (c) the country of origin of the victim or victims; and (d)	more than one Member State and when any of the Member States concerned can validly prosecute on the basis of the same facts, the Member States concerned shall cooperate in order to decide which of them will prosecute the offenders with the aim, if possible, of centralising proceedings in a single Member State. To this end, the Member States **may have recourse to Eurojust in order to facilitate cooperation** between their judicial authorities and	offences referred to in Articles 3 to 8, Member States shall ensure that they have an operational national point of contact available 24 hours a day, seven days a week. Member States shall also ensure that they have procedures in place so that urgent requests for assistance are promptly dealt with and the competent authority replies within eight hours of receipt, by at least indicating whether the request will be answered and		contribute to a coordinated and consolidated Union strategy against trafficking in human beings, Member States shall facilitate the tasks of an anti-trafficking coordinator (ATC). In particular, Member States shall transmit to the ATC the information referred to in Article 19, on the basis of which the ATC shall contribute to reporting carried out by the Commission every two years on the progress made	

	operational assistance as the competent national authorities need to facilitate coordination of their investigations. 2.The competent authorities in the Member States may, within their competences, exchange information with the Commission so as to make it easier to establish the facts and to ensure effective action against the criminal offences referred to in Articles 3, 4 and 5. The Commission and the competent national authorities shall take into account in each specific case the requirements of			the territory on which the offender was found. The matter shall, where appropriate and in accordance with Article 12 of Framework Decision 2009/948/JHA, **be referred to Eurojust.**	the coordination of their action. Account shall be taken of the following factors: (a) the Member State shall be that in the territory of which the offence was committed; (b) the Member State shall be that of which the offender is a national or resident; (c) the Member State shall be the country of origin of the victims; (d) the Member State shall be that in the territory of which the offender was found	the form of such an answer and the estimated time within which it will be sent. Member States may decide to make use of the existing networks of operational points of contact. 2. Member States **shall inform the Commission, Europol and Eurojust of their appointed point of contac**t referred to in paragraph 1. They shall update that information as necessary. The Commission shall forward that		in the fight against trafficking in human beings.	

	confidentiality and the rules on data protection. Without prejudice to national law on access to information, a Member State may, to that end, when supplying information to the Commission, set specific conditions covering the use of information, whether by the Commission or by another Member State to which the information is passed. 3.The Court of Auditors and auditors responsible for auditing the budgets of the Union institutions, bodies, offices and agencies established					information to the other Member States Art. 18(4): Member States shall transmit the data collected pursuant to paragraphs 1, 2 and 3 to the Commission on an annual basis. The Commission shall ensure that a consolidated review of the statistical reports is published each year **and submitted to the competent specialised Union agencies and bodies**.			

	pursuant to the Treaties, and the budgets managed and audited by the institutions, shall disclose to OLAF and to other competent authorities any fact of which they become aware when carrying out their duties, which could be qualified as a criminal offence referred to in Article 3, 4 or 5. Member States shall ensure that national audit bodies do the same.								

ANNEX 7: PUBLIC CONSULTATION REPORT

Improving environmental protection through criminal law

Online public consultation – Summary report

1. INTRODUCTION

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

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

2. OVERVIEW OF RESPONDENTS

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

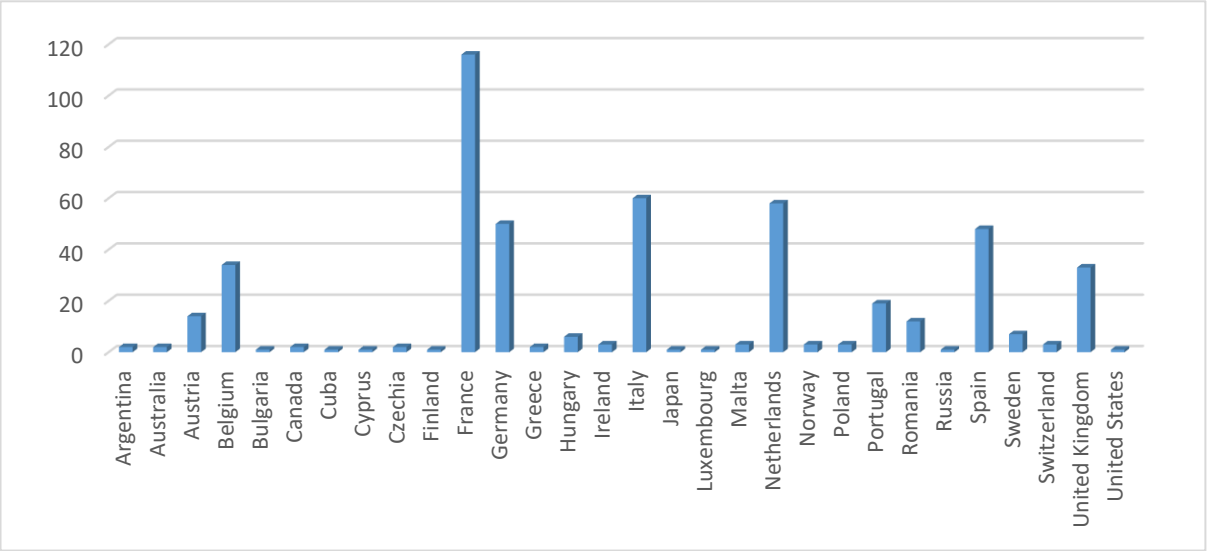
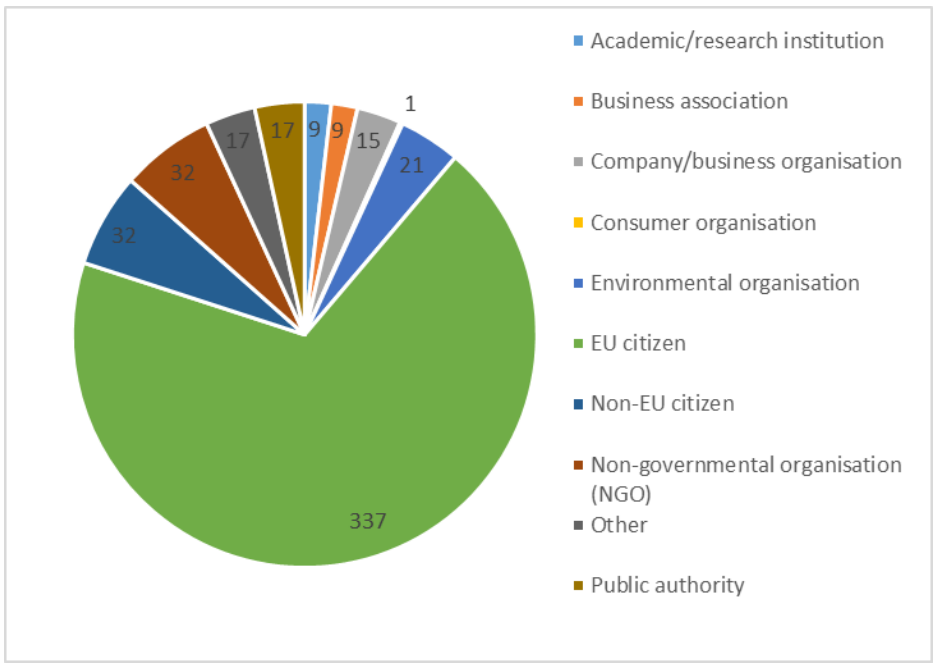


Figure 3: Country of origin of respondents

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

Figure 4: Stakeholder type per EU Survey template - 'I am giving my contribution as…'



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

Figure 5: Follow-up question on stakeholder role

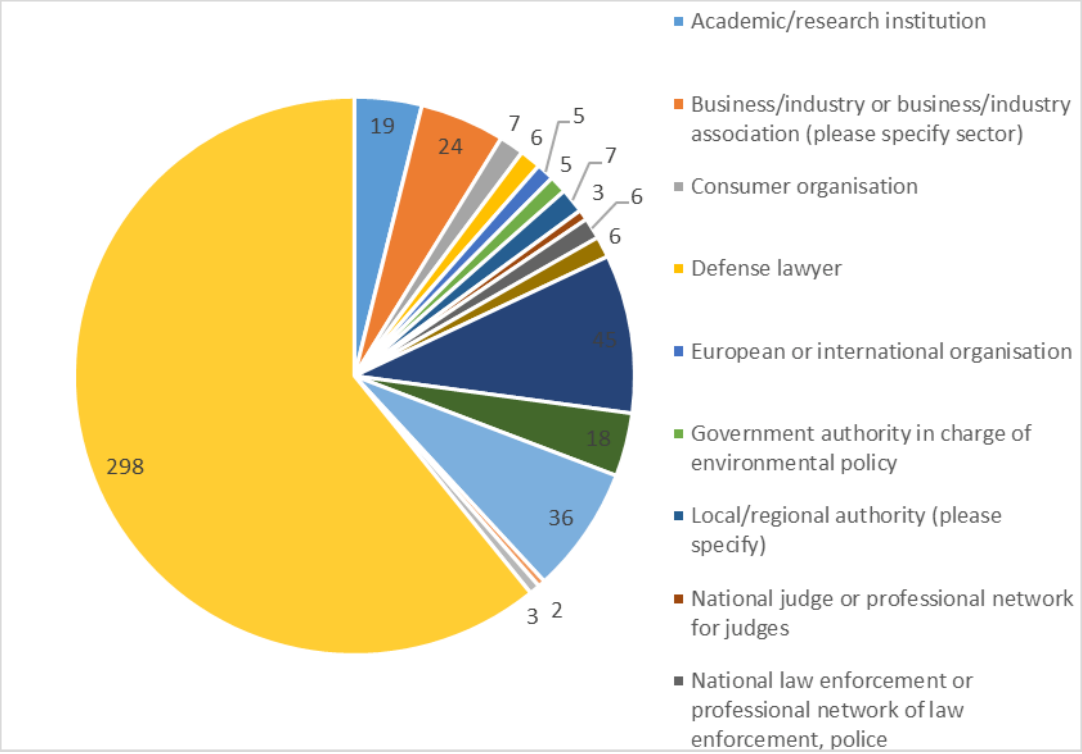


Table 21: Number and percentage of respondents according to their more precise role

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

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

3. GENERAL TRENDS AND APPROACH TO THE ANALYSIS

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

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

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

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

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

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

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

10.1 10.1 Evidence of coordinated responses

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

4. ANALYSIS OF RESPONSES TO GENERAL QUESTIONS

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

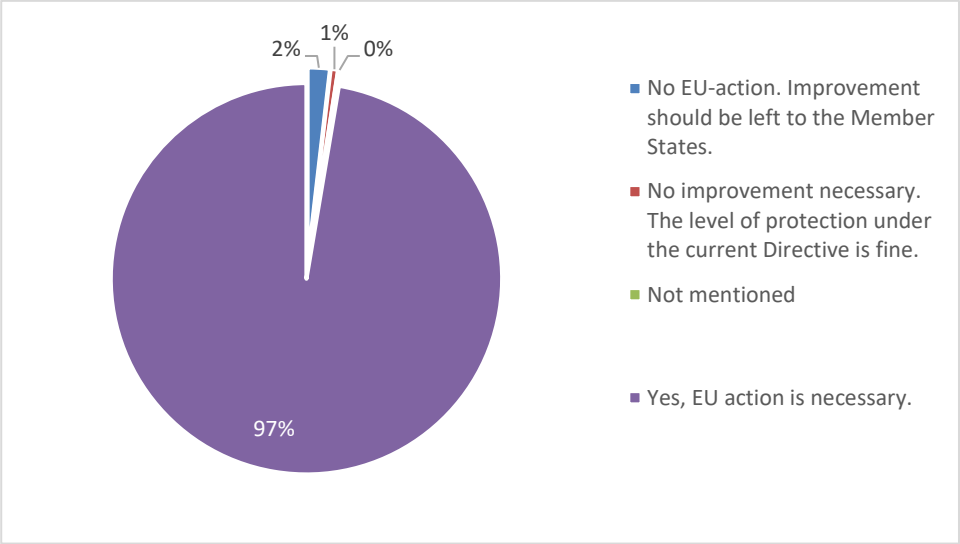
10.2 10.2 Question 1: Do you think the EU should act to improve environmental protection through criminal law in the Member States?

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

Table 22: Number and percentage of replies to question 1

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

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



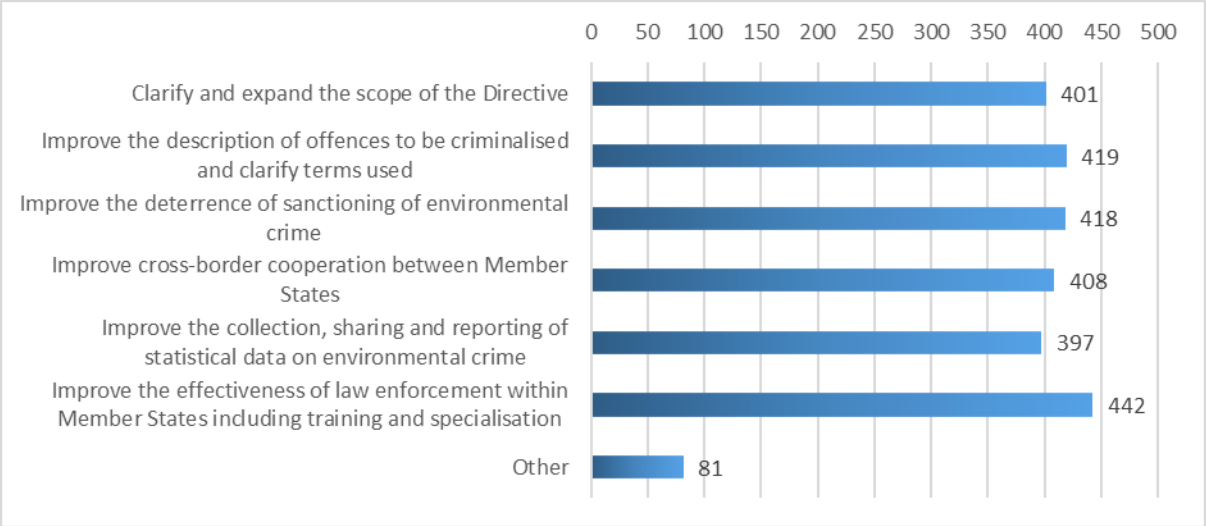
10.3 10.3 Question 2: If you consider that EU action is necessary, what should be addressed by a revised Environmental Crime Directive? (Several answers are possible)

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

Table 23: Number and percentage of replies to question 2

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

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



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

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

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

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

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

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

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

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

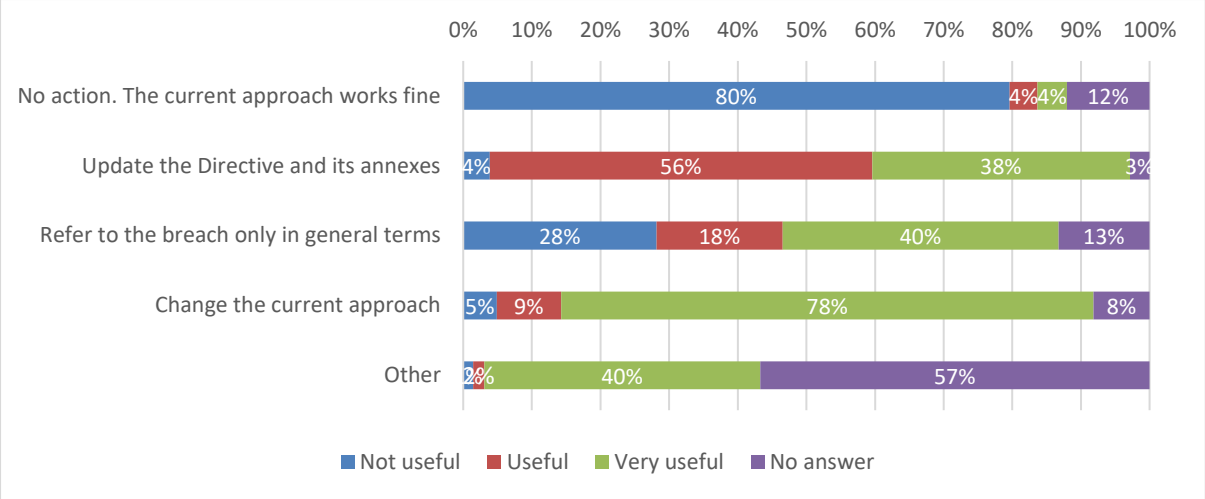
With regard to the active options, there appears to be a preference for changing the current approach and defining environmental crime independently from administrative law: a total of 380 or 78% of respondents would consider this approach 'very useful'. Of those who claim the approach would not be useful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

Table 25: Number and percentage of replies to question 3

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

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

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



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

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

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

Main themes identified	Total 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%

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

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

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

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

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

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

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

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

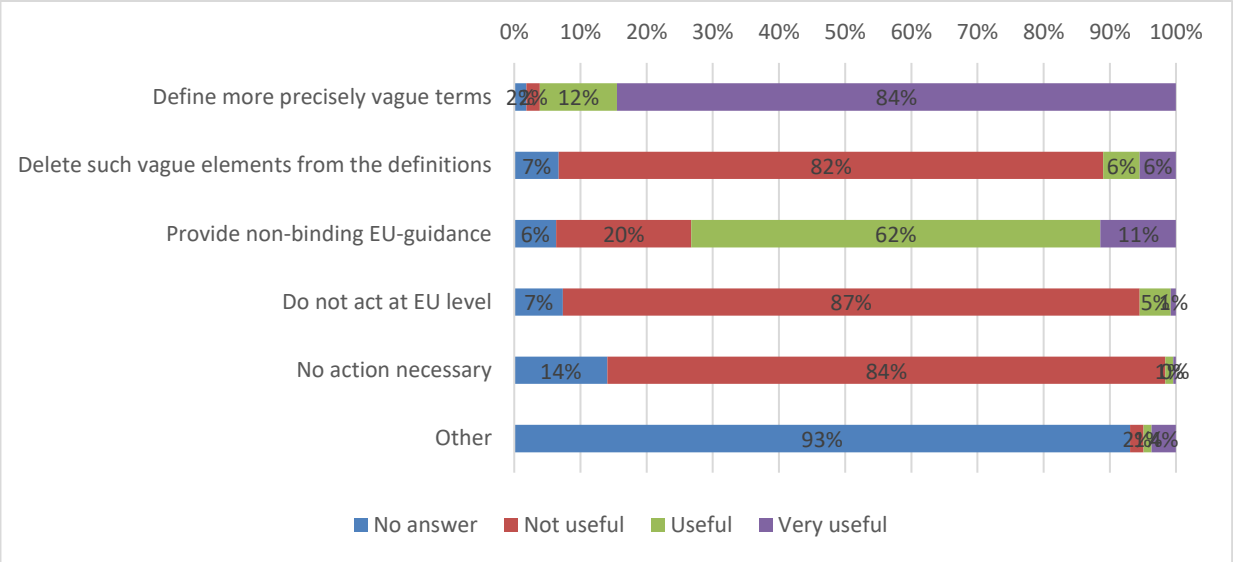
The option to retain terms in the Directive but define them more precisely is viewed as ‘very useful’ by most respondents (84%). Likewise, 82% of respondents stated that it would not be useful to delete such elements from the Directive; however a quarter (6 of 24) businesses agreed with the option to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

Table 28: Number and percentage of replies to question 5

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

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

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



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

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

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

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

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

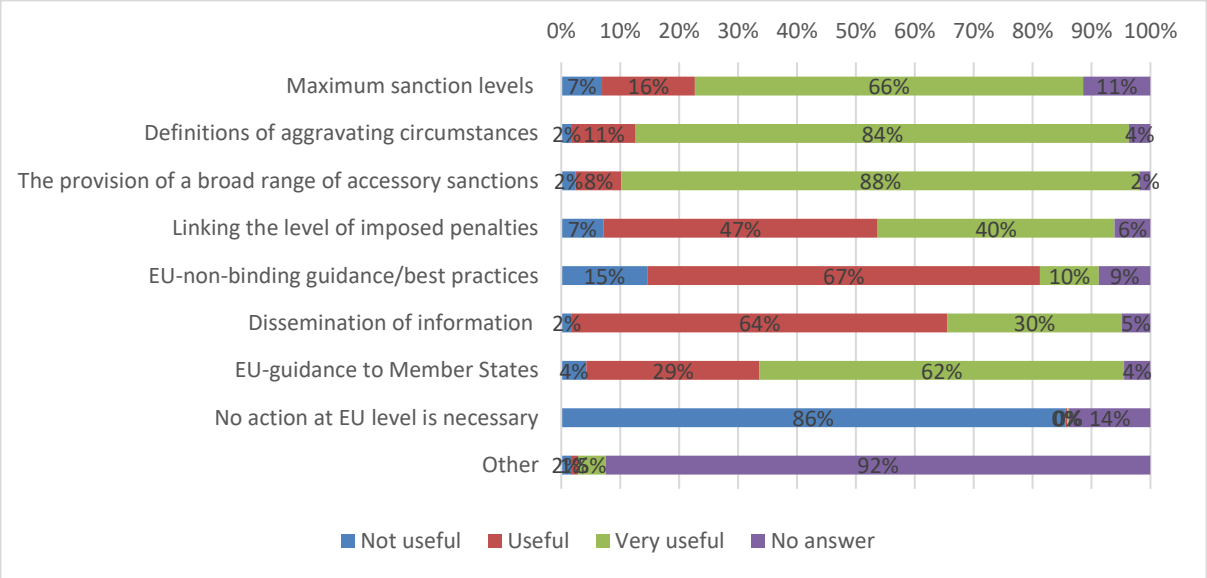
Most respondents (86%) support EU action; only three in total reacted positively to the concept of no EU action (however 68 or 14% did not answer the question). With regard to legislative approaches, most of those proposed were considered as 'very useful' by the majority of respondents. Support was slightly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

Table 30: Number and percentage of replies to question 6

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

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

Figure 10: measures to foster a more deterrent sanctioning system



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

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

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

Main themes identified	**Total 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%

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

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

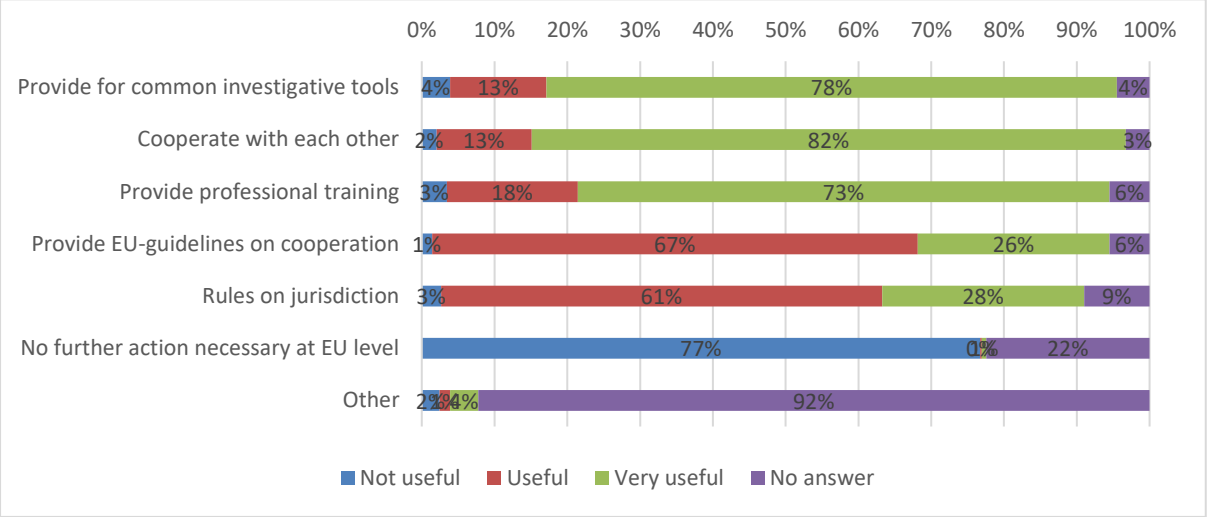
As with the previous questions, options for providing guidance on cooperation received a lower proportion of ‘very useful’ responses (23%), but were still generally considered useful (67%), indicating that this could be perceive as a less-preferred option if compared to a legislative approach. With regard 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 32: 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 4%	65 13 %	384 78 %	22 4%
Include a provision in the Directive to require Member State authorities to cooperate with each other and with EU-agencies mandated with facilitating cross-border cooperation such as Europol, OLAF and Eurojust.	10 2%	64 13 %	400 82 %	16 3%
Include a provision in the Directive to oblige Member States to provide professional training on cross-border cooperation.	17 3%	88 18 %	358 73 %	27 6%
Provide EU-guidelines on cooperation between Member States and how to make use of EU agencies such as Eurojust, Europol and OLAF.	7 1%	327 67 %	129 26 %	27 6%
Include a provision in the Directive on rules on jurisdiction with regard to cross-border environmental crimes in the Directive.	13 3%	297 61 %	136 28 %	44 9%
No further action necessary at EU level.	376 77 %	1 < 1 %	3 1%	110 22 %
Other	12 2%	71 %	19 4%	452 92 %

Figure 11: measures to improve cross-border cooperation



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

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

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

Main themes identified	**Total references (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%

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

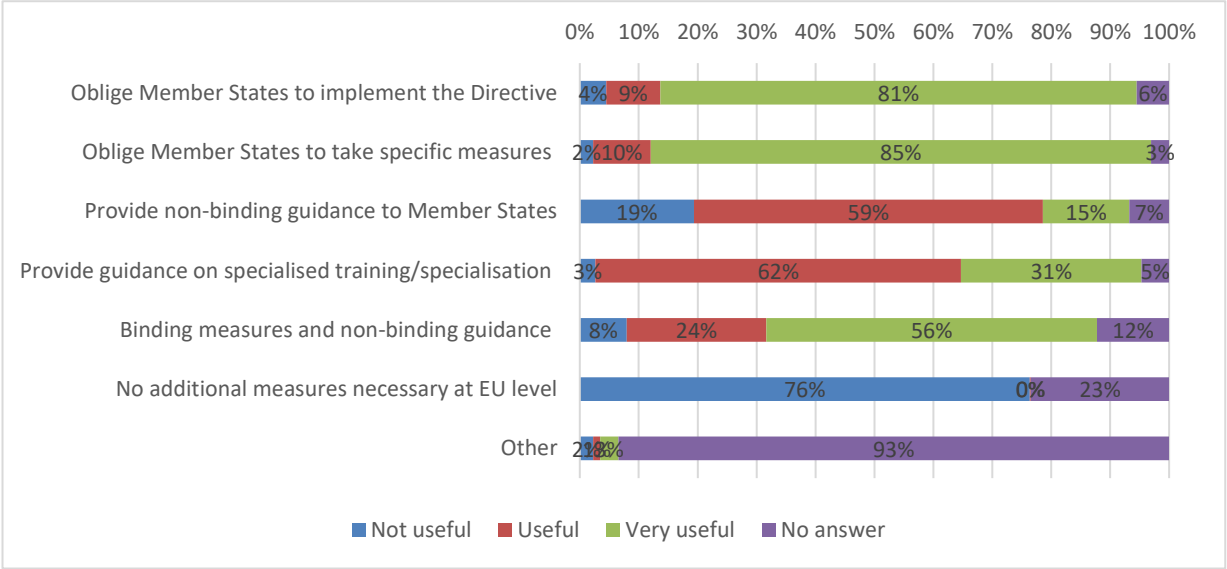
Most of the respondents consider EU action necessary to foster the practical implementation of the Directive – only one respondent opposed this – however 115 or 23% of respondents chose not to answer this question. Most respondents support legislative provisions on better implementation and a proportionately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

Table 34: Number and percentage of replies to question 8

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

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

Figure 12: options to foster the implementation of the Directive



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

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

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

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

Main themes identified	Total references [n=39]	
Promotion of cooperation on enforcement, inspection and implementation	4	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%

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

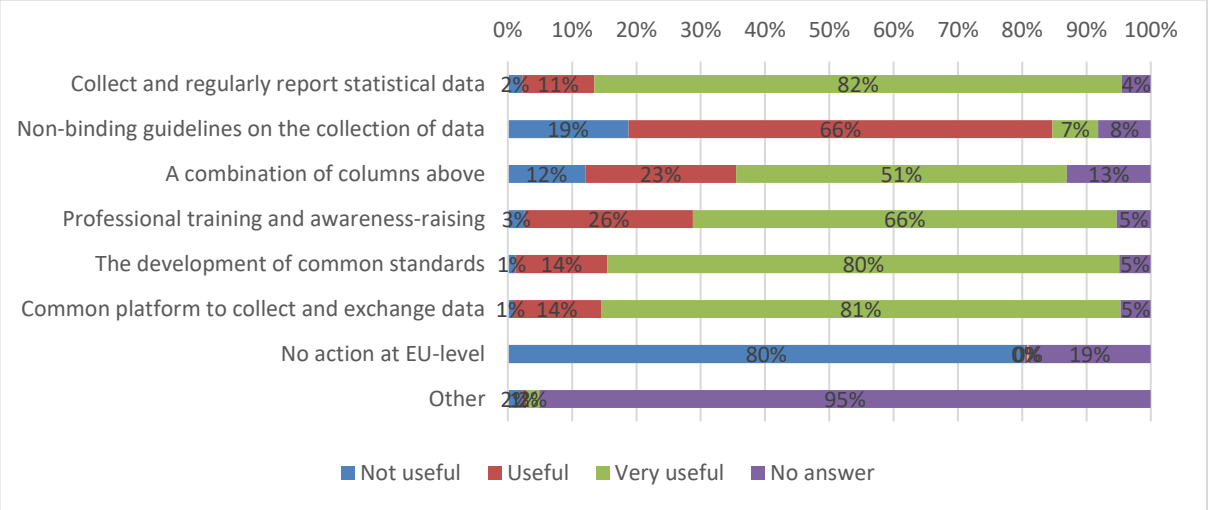
Most respondents would support a legal obligation to require Member States to collect and report statistical data on environmental crime – 82% regarded this option as very useful. Many also agree that this could be supported via the development of EU-level common standards for data collection (80% 'very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

Table 36: Number and percentage of replies to question 9

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

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

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



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

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

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

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

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

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

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

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

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

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

6. OVERVIEW OF THE DOCUMENTS SUBMITTED

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

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

Table 39: Overview of all documents submitted

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

ID	Reference	Role	Overview and comments
			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 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

ID	Reference	Role	Overview and comments
			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 may be promptly and easily added by guidance/amendment or similar mechanism by the Commission to reflect new and developing areas of criminal activity 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.

ID	Reference	Role	Overview and comments
			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 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

ID	Reference	Role	Overview and comments
			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 (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

ID	Reference	Role	Overview and comments
			(suggestions are provided). 17. PUBLIC PARTICIPATION IN THE PROCEDURES is defined. 18. ADDITIONAL ARTICLE: COOPERATION of Member States with Union bodies is created (suggestions are provided). 19. ADDITIONAL ARTICLE: Cooperation at the expense of the organs and agencies of the Union is created (suggestions are provided). 20. ADDITIONAL ARTICLE: CROSS-BORDER COOPERATION BETWEEN MEMBER STATES is created (suggestions are provided).
11	María Jesús Sanchis Carles	Local/regional authority	Same as document N7; Examples of Spanish legal cases and issues on power lines and 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-by-case basis considering: the nature, degree of culpability, frequency, harm caused, previous warnings and seriousness of non-compliance. It highlighted that any double sanctions arising from the ECD and existing administrative law should be avoided.
13	RJT article	National prosecution or professional network for prosecutors	Academic article about ecocide
14	PRE - Plastics Recyclers Europe	Business/industry or business/industry	Propositions by PRE focused on definitions, sanctions and data collection. The position calls for: -clarification of vague legal terms, e.g. through a guidance to the MS;

ID	Reference	Role	Overview and comments
		association	-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 introduction of penalties diversified per complementary activities. -Strengthening 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.

ID	Reference	Role	Overview and comments
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 measures that will increase the minimum requirements of the Directive and supports: criminalising risky behaviour, making

ID	Reference	Role	Overview and comments
			revisions to include also offences committed through negligence that is not considered serious, establishing an autonomous environmental criminal provision for some criminal acts but that such provision must exclude acts that have been permitted by the competent authorities (an example is provided).
23	Essens	Other (academic)	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:

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

Annex 8: Stakeholder consultation –synopsis report

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

Consultation strategy

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

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

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

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

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

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

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

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

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

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

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

	WHAT

Consultation activities

The consultation was structured as follows:

2.1. Inception Impact Assessment[412]

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

2.2. Public Consultation[413]

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

2.3. Stakeholder events

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

2.3.1. Targeted stakeholder consultation

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

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

19 February 2021: Criminal Law Experts Meeting

[412]The Inception Impact Assessment Consultation is available here. All contributions received are publically available.
[413] The Open Public Consultation is available here. All contributions received are publically available.

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

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

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

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

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

27 April 2021: Workshop with environmental NGOs

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

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

29 April 2021: Consultation of Member States

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

24 June 2021: Workshop with business/industry

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

2.3.2. Conferences

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

MEP Maria Toussaint:

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

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

included the European Network of Environmental Police (EnviCrimeNet), the European NGO "TRAFFIC" and the Italian NGO "Legambiante".

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

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

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

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

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

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

IMPEL: Conference WasteForce

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

European Chemical Industry Council's Legal Forum

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

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

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

Frontex Seminar on environmental Crime

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

2.3.3. Semi-structured interviews and/or written opinions

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

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

In terms of research and innovation, the structured interviews included:

- French (6 April 2021), German (23 April 2021) and Swedish (20 May 2021) authorities;
- the Judicial Cooperation Advisor of Eurojust on 15 February 2021;
- the lead of ECSA – European Community Shipowners' Associations on 30 March 2021;

- MEP Antonius Manders, rapporteur for the report on the liability of companies for environmental damage, on 27 May 2021;
- the chairman of the French society of judges and prosecutors for the environment on 3 June 2021;
- the European law Institute on 15 June 2021;
- Véronique Jaworski (University of Strasbourg) on 22 June 2021 on the occasion of her preparation of a discussion paper for the meeting of Working Group of the Council of Europe on the Environment and Criminal Law on 20 April and of her drafting of the joint study from may 2021 "Legal paradigm shifts for a new environmental law" with Marie-Pierre Camproux Duffrène;
- the chair of the Council of Europe's Working Group on the Environment and Criminal law on 1 July 2021.

Results

The following sections presents a summary of the main results of the consultation activities.

3.1. Reactions on the Inception Impact Assessment

This public consultation received 17 replies from a variety of stakeholders, ranging from public authorities of the Member States, to business associations and non-governmental organisations. All the responses have been published in full online[414]. Of these responses, 14 came from EU states and 3 from non-EU states.

By category of respondent:
Non-governmental organisation (NGO): 4 (23.53%)
Public authority: 4 (23.53%)
Business association: 2 (11.76%)
Other: 2 (11.76%)
EU citizen: 2 (11.76%)
Environmental organisation: 1 (5.88%)
Non-EU citizen: 1 (5.88%)
Company/business organisation: 1 (5.88%)

[414] The responses are available at: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12779-Environmental-crime-improving-EU-rules-on-environmental-protection-through-criminal-law_en.

The Inception Impact Assessment aimed to inform citizens and stakeholders about the Commission's plans in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities.

The feedback gathered in reaction to the Inception Impact Assessment showed, that in summary, the initiative enjoys support as the majority of the respondents welcomed the Commission's effort to tackle the environmental crimes. Providing legal clarity and certainty, the need of new specific legislation under the scope of the Directive as well as the inclusion of minimum maximum sanctions are seen as the main positives attributes of the proposal. Some concerns regarding standing-alone offences and bureaucratic burdens arise amongst Member States.

The majority of the respondents favoured the **update** of the Environmental Crime Directive and its annexes as well the **clarification of legal terms**. An NGO welcomes the **criminalization of risky behaviour**. This wording would ensure that those who negligently or intentionally engage in acts of environmental harm are not able to rely on the difficulty of proving beyond a reasonable doubt the likelihood that their actions will cause harm in order to escape criminal sanctions. This is particular important in an increasingly complex context in relation to certain activities, such as the production or use of harmful chemicals.

One Member State stressed that the environmental crime **autonomous** of administrative law should be imperatively excluded because such incriminations impose excessive criminal liability on private actors, including those who comply with existing regulations. On the other hand, this Member States believes that the technical feasibility of such an approach is limited. In contrast, an NGO preferred an environmental crime is a self-standing concept, to avoid a situation where the Directive becomes obsolete as legislation evolves.

Most of the contributions from the non-governmental organisations and the business associations identified environmental areas or specific legislation that the current Environmental Crime Directive is not covered by the current Directive, but **should be covered**. To ensure serious fisheries and seafood market infringements it is important for one NGO to include illegal, unregulated, and unreported (IUU) fishing in the Directive. One organisation recommended to include timber and timber products illegally sourced from a third country as a criminal offence under the Environmental Crime Directive, complementary to EUTR. One NGO demanded that it should be take into consideration the ongoing review of both the FLEGT Regulation and the EU Timber Regulation, combined with the upcoming Commission legislative proposal to address deforestation and forest degradation. One NGO called on the EU to adopt and implement a new legislation that prohibits trade in wildlife, fish and plants that have been illegally taken, possessed, transported or sold in violation of any foreign law. In the view of one business association, the EU Ship Recycling Regulation in the annexes to the Directive should not be

included in the scope of the Environmental Crime Directive because the Member States should remain competent to determine whether administrative or criminal sanctions are the best means to tackle infringements. Another business association considered the Environmental Crime Directive could further enhance the efforts through its horizontal approach across EU measures, including the F-Gas Regulation, to help develop a more coherent and effective framework that better achieves the EU's climate action objectives. Finally, the inclusion of obligations for specialist platforms that sell wildlife on their online platforms was requested.

The majority of the respondents supported the suggestions for **minimal levels for maximum sanctions** and for aggravating circumstances. The inclusion of a provision on confiscation and legislation against legal persons are considered useful in some cases.

Better **collection and transmission of information** by Member states advocated by several parties. Concerns were raised that this implies complex IT adjustments, which is a difficult and lengthy process and puts a heavy administrative burden on law enforcement authorities, the Public Prosecution Office and the judiciary.

3.2. Public Consultation

See Annex 7.

3.3. Targeted stakeholder consultation

3.3.1. Criminal Law Experts Meeting

Regarding **the link between environmental crime and administrative law**, the majority of the Experts group considers this link to be necessary and impossible to do away with. A few however supported decoupling and suggested interesting lines of reflection. The need to decriminalise some offences that are not serious enough was also mentioned.

Regarding the **sanctions**, most expert agreed that more should be done, especially concerning corporations (such as reparations, asset recovery, removing the added value for not complying with obligations). Some believe that the general system of criminal sanctions in EU legislation should be rethought to introduce new categories of sanctions.

Reflection on how to ensure the **enforcement chain** is effective in practice is needed. A choice needs to be made between regulating this in the directive itself or in a soft law instrument.

3.3.2. Workshop with the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum and *6th* meeting of the Environmental Compliance and Governance Forum

- **Workshop with the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum**

Regarding the initial question of whether **EU action is necessary** participants deemed harmonization necessary for an effective fight against environmental crime. Some participants illustrate this by pointing to the difficulties prosecution faces when an act is treated as a criminal offense in one Member State only as an administrative relevance in another Member State. Some participants indicated that harmonization should be limited to certain areas where a criminal enforcement is more suitable than administrative enforcement. A high number of the Member States that responded the questionnaire agreed to the requirement of approximation. Approximation and homogeneity were necessary and useful, but should balance with flexibility for the Member States. Some Member States supported approximation only to certain extent. All law enforcement practitioners or experts participating in the survey agreed that approximation is needed. The consensus view was that rules are needed to effectively implement EU policies. Member States should align their national laws.

With regard to measures for **update the Annexes and clarification of offences**, the participants believed that it would be difficult to find a clear and correct definition of certain legal terms like substantial damage at the level of the Directive that covers all conceivable cases in practice. Nevertheless, there is a need for concrete definitions as a prerequisite for an effective enforcement chain. A balance of regulatory density must be found, also in the sense of legal certainty.

A high number of Member States that responded to the questionnaire was in favour of a mix of the introduction of a mechanism for regular updates of the Environmental Crime Directive, the expansion of the scope and defining environmental crimes in the Directive independently of a breach of specified EU legislation. The Directive may evolve and adapt promptly to any new requirements. The majority of networks that responded in writing agreed with continuously updating regulations.

A significant number of Member States was in favour of clarifying the vague legal terms by means of guidance. Non-binding regulations were sufficient. Specific definitions of these legal terms in the Environmental Crime Directive may impose undue problems on national criminal systems and laws. Fixed terms were not useful considering the large number of topics covered. Some Member States supported a legal regulation in Environmental Crime Directive for clarification purposes to avoid ambiguity and to achieve legal certainty and coherence in the detection, prosecution and conviction.

According to the written comments of the practitioners or experts, they fully agreed that is a requirement for clarify legal terms and a common base of definitions, but it may be difficult to

find a clear and correct definition. The practitioners or experts preferred the clarification legal terms and approximation of crimes law, thereby overcoming the lack of definitions or the vague or interpretable definition of technical terms.

Regarding the possible options to **sanctions**, some participants raised questions in regards the competence of the EU to adopt minimum-maximum sanctions and the degree to which this is appropriate in the area of environmental crime. The EU competence and that minimum-maximum sanctions provisions have now been included in many criminal law instruments. Participants support the proposition that profits should be taken into account in determining the sanction level. This is to be distinguished from confiscation of the proceeds of crime in addition to the imposition of penalties.

A significant number of Member States that responded to the survey saw the need for improvements in the area of sanctions through a combination of measures. Partly the status quo was favoured. The networks was unanimously in favour of a combination of EU guidance and binding provision, including minimum levels for maximum sanctions.

In the workshop was a consensus among interveners on the need for more **specialisation through training and the establishment of specialized units**. A majority of Member States participating in the survey agreed an approximation and harmonization through the inclusion of provision about cooperation within and between Member States in the Directive. At the same time, a majority of Member States saw the need for training on use of tools for structured cooperation, investigative tools and cross-border cooperation with the involvement of EU agencies. The networks was in favour of providing training courses and of the strengthening of the cross-border cooperation with the involvement of EU agencies. They supported the inclusion of an obligation for Member States to do so on the basis of a legal provision in the Directive.

To **effective operation of the enforcement chain**, a high number of Member States agreed according to their written comments to a combination of providing EU guidance and the inclusion of obligations to Member States in the directive. The practitioners or experts preferred a corresponding legal obligation of Member States. At the same time, they supported a combination of EU guidance and the inclusion of a provision requires the Member States.

Statistical data should only be collected for strategic analysis and only a few easy to collect data sets should be included, like prosecutions. A common EU platform is the preferred method. A clear approach among Member States towards collecting and disseminating statistics should be found.

The majority of Member States welcomed the option to provide training and awareness raising, develop common EU standards on the collection of statistical data on environmental crime.

Partly were favour of a legal obligation for Member States. Partly strongly supported the establishment of a common platform to collect statistical data. All practitioners or experts demanded to provide training, raise awareness and develop common EU standards on the collection of statistical data on environmental crime. There was a unanimous call for Member States obligation to collect process and share data. This may allow synergies to be exploited.

- **6th meeting of the Environmental Compliance and Governance Forum**

The four professional networks of inspectors, prosecutors, police officers and judges in the environmental area (IMPEL, ENPE, EnviCrimeNet and EUFJE) presented to the Forum the joint statement summarising the main conference conclusions at the 4 networks day an 21 May.

Relating to measures to **strengthen cooperation** it is confirmed that environmental crime is serious, transboundary and often organised. To fight it better, efficient national, regional and international cooperation is necessary.

Regarding fostering effective operation of the **enforcement chain** the four networks stressed that environmental cases should be handled by specialised police officers, inspectors, prosecutors and judges. The specialisation of the actors of the enforcement chain should be anchored into the law. Training of police, inspectors and prosecutors and judges is crucial. Training is only effective when it comes with structural specialisation.

Effective implementation of the Environmental Crime Directive requires more coherence and more coordination between administrative and criminal sanctioning tracks, including punitive and remedial sanctioning possibilities, communication and information transmission rules.

Environmental crime is neither "victimless" nor of minor significance. Environmental crime constitutes a threat for human health and the prospects of future generations, as well as for international and EU internal security.

With regard to the need to improve the **exchange of information and data**, the networks note that there is still a lack of prioritisation for fighting environmental crime, a lack of reliable data and a lack of adequate human resources and equipment across the entire enforcement chain. Data exchange on cases and sanctions both at national and European level should be improved.

Finally, the joint statement of the four networks affirmed the usefulness of using the revision of the Environmental Crime Directive for strengthening **specialisation**, **coherence** between the administrative and criminal enforcement and international **cooperation**.

3.3.3. Workshop with environmental NGOs

Regarding the **scope** of the Environmental Crime Directive the NGOs confirmed in the workshop and in the written comments that the Annex mechanism in place is at the moment outdated. It should be organized in such a way to allow other crimes to be added to it more easily and on a more regular basis. One approach could be to define environmental crime independent of sectoral legislation.

In parallel, authorities should have sufficient legal certainty – which goes beyond the annex – to allow them to act effectively and promptly. There is a need to better link the revised Environmental Crime Directive to sectoral legislation and to administrative law.

From the point of view of NGOs, there is a need for regulation of online crimes in the Environmental Crime Directive. In addition, a link to trade agreements and regulations (e.g. trade in rare species) and to CITES should be established. The revised Environmental Crime Directive should e.g. better define issues of sale, import, purchase of wildlife and refer to clear lists of species concerned.

Regarding the **definitions of the offences** is unanimously demanded clear definitions for the key terms such as what constitutes substantial damage. Guidance would be useful too, however, they are not binding, so clear definitions of terms in the Directive itself is important. Without these, the Member States (practitioners in general) find it hard to prosecute effectively environmental crimes. Legal clarity is of the utmost importance.

There is a need to define "rules of the game" for EU-based companies operating in non-European territory as there are different legal standards outside of the EU.

One participant suggested the inclusion of Ecocide.

Many NGOs were in favour of introducing **minimum maximum sanction** levels and types. Some were in favour of putting in place a more binding system, avoiding the option of having ranges in the Member States. Sanctions should be proportionate to the environmental harm caused and profit generated by the criminal networks. Often, Member States that have high sanction levels in their national law fail to impose high sanctions in case of environmental damage. This should be considered in the revised Environmental Crime Directive. Better investigations of money laundering is necessary and looking into the profit side.

Better linkage of the revised Directive with civil liability issues, such as with the Environmental Liability Directive, and with civil and administrative law in general is called for. NGOs argue that legislators should also address environmental crimes outside the EU and sanction them appropriately. There is agreement that the establishment of a minimum level of sanctions should

be supported by training and awareness-raising activities (for practitioners and judges across Europe) in order to be effective.

Regarding improving the **cross-border cooperation** the large majority of NGOs supported the suggestion to set up a specific unit to deal with environmental crime at EU level to be supported by a network of focal points at MS level.

EU-based training is urgently needed on various themes, e.g. how to deal with online crime or illegal trade and how to conduct investigations into environmental crimes. Training will also encourage cooperation between agencies within Member States, across Member States and with non-European countries, which is however more tricky. One NGO mentioned an example of working with Thai and US authorities where Interpol played a crucial role in facilitation cooperation and sharing information.

The EU should support the proposed protocol of the CITES convention which should equate trade in wildlife to trade in drugs or arms. This will promote cooperation also beyond the EU borders.

Finally, the use of already existing mechanisms of cooperation, e.g. with Eurojust and Interpol, should be encouraged. Some participants reported good experiences in working with these European agencies and that the good cooperation has led to more effective law enforcement. Collaboration should clearly include sharing of intelligence and information, as this means lower costs for agencies. Participants identified some best practices of interagency cooperation at the Member State level for different objectives, such as priority setting, monitoring, and definition of strategies or action plans.

Regard fostering **practical implementation** the enforcement should be improved by the setting up of a centralised environmental crime unit. At the level of Member States, the differences between countries should be taken into account: there are different ministries or agencies that deal with the subject. Some participants emphasized that enforcement should be at the national, rather than local, level; local authorities often lack the capacity to enforce the directive.

The role of civil society and NGOs should be clearly formalized in the enforcement process, as this has proven to be very effective in various cases also in connection with access to justice issues and the Aarhus Convention. Enforcement should be improved through specialization courses for practitioners, to be supported by Member States. These trainings should cover all parts of the enforcement chain and could also involve civil society.

Regarding the considered option to improve the **information sharing**, the NGOs reported that the problem of lack of data is not unique to Environmental Crime Directive. Data sharing, when

available, should be done in such a way that the sharing authority gets something back in return. This "reward" mechanism, could be also a simple data analysis report. Information flow is not always sufficient, sometimes environmental authorities are not informed about environmental crime cases that reach the court. The NGOs suggested to set up a centralised system for data sharing purposes, to be used by practitioners and judges.

3.3.4. Consultation of Member States

In an online meeting, three key issues were discussed on the basis of a discussion paper sent out beforehand: scope of the Directive, definitions of environmental crime and sanctions. The Member States expressed their preliminary opinion on these and gave their first assessment in the workshop.

Regarding the **scope** of the Environmental Crime Directive a majority of the Member States supported the update the Annexes as it would best ensure legal clarity. However, some Member States also did not regard the comitology procedure as the right tool include new environmental crime areas. To define new environmental crime categories should be for the EU legislator. Two Member States expressed preference for an infringement of sectorial legislation in general terms without Annexes.

The majority of the Member States considered the **breach of an administrative environmental law** is necessary to criminalise on behaviour in the Environmental Crime Directive. There is no widespread acceptance of loosen or cut the link between administrative law and criminal law. Some Member States also expressed doubts whether the limits of the legal basis of Art. 83 (2) would not be overstepped if crime would be defined without linking it to EU sectoral legislation. One Member States said that the decoupling of the administrative law from criminal law could be contradiction to the permits and authorisations issued and thus undermine legal certainty that was crucial for investments. The EU should not propose legislation that could hinder investments.

A number of Member States were open for the **autonomous approach** for the most serious offences. However, they state that more information on details and on the role of administrative permits and authorisation would be needed. Legal certainty must be ensured. One Member State has this approach already today in their national law and say it works find in practice.

There are no clear majorities regarding the review of the definitions. The range of opinions is rather broad here (in some cases with multiple preferences).

While a majority of the Member States seemed to endorse **legal binding definition** in the Directive itself, a number of Member States also drew attention to the difficulty in striking a balance between sufficiently clear definitions of environmental crime categories and the necessary flexibility that must be maintained to not create loopholes in criminalisation and to allow for the inclusion of new developments in the future. One Member State said it may make

sense to continue working with the existing open terms but guidelines and exchange of best practices should foster a common understanding among the Member States. A majority welcomed soft law as non-binding guidelines to complement existing or reviewed definitions in the Directive.

Some Member States supported or were open for relying more on the **definition of endangerment crime** that do not require actual damage. Other Member States are sceptical: Endangerment could not spare the legislator the effort to define the damage as a constituting element, otherwise endangerment crime might end up in penalising basically the infringement of sectoral legislation. Some Member States also cautioned that endangerment crimes should not serve to alleviate the burden of proof, while other Member States welcomed this as the chief benefit of the concept of endangerment crimes.

Almost all Member States could endorse the introduction in the Directive **minimum levels for maximum sanctions** for environmental crimes.

Regarding the consideration to provide for **the same sanction levels as for organised crime or other serious crime** in Member States penal law systems only two Member States could endorse this approach, as it would respect national traditions and systems. In contrast, most Member States claimed that environmental crime comes in many different shapes and gravity forms. It cannot always be considered as serious crime or crime at the same gravity level as organised crime. Although one Member State would favour relying more on the existing systems and tradition in each Member State, rather than fixed numbers for sentencing levels, this Member State does not think that this option is feasible.

3.3.5. Workshop with business/industry

The Commission wanted to know whether it makes a difference for companies whether the Directive contains **Annexes or a general reference** that would have the advantage not to be exhaustive. Partly, maintaining and updating the Annexes was supported as they provide legal clarity. One industry stakeholder detailed that the Annexes would not play a role, as they are not necessarily transposed into national law. Industry and practitioners would look into the national law. Apart from F-gases also the Reach legislation and the Plant Protection Regulation are missing from the annexes. Generally, there is a risk that an exhaustive list creates loopholes. Theoretically, there should be an obligation to regularly update the Annexes, but it is not sure whether any mechanism could be found that works in practice.

Regarding the **autonomous approach** (less strict link between environmental crime and a breach of sectoral legislation) it would not be the right approach to try to foster due diligence measures through criminal law rather than through administrative law directly. The participants described that in Spain and Germany, permits are very precise and the businesses have to apply strict due diligence obligations to receive a permit. In Spain, all violations of environmental sectoral

legislation or conditions in a permit constitutes environmental crime. In addition, permit holders must pay guarantees to the national authorities that serve to ensure that financial sanctions or restoration of nature is covered. Compliance costs in Spain are thus high for businesses, independent of criminal liability. Companies from Member States which have less rules are thus in a competitive more advantageous situation. It should be a priority to harmonise Member States' administrative law and ensure that existing rules are applied in all Member States to ensure the same level of playfield and equal trading conditions. Currently, there are high gaps in the different Member States regarding the required standards for a permit. It would not be the right approach trying to harmonise due diligence requirements through criminal law rather than directly in administrative law. Moreover, this approach would shift the responsibilities to ensure effective due diligence systems that protect the environment from the state to companies.

In Germany, the autonomous approach would exist to the extent that environmental crime does not require the breach of sectoral law but only an environmental damage caused. The offender can justify himself if his action is covered by a permit. One stakeholder had concerns regarding legal certainty if the autonomous approach would mean that less detailed permits could not any longer exculpate an offender. It is not the responsibility of the offender how detailed a permit is in a given Member State. This legal uncertainty would add to the uncertainties created by vague terms in the definitions of environmental crime (substantial damage).

Regarding the **definition of crime**, it would not be possible to define vague terms more precisely in the Directive or in soft-law. There would always be room for different interpretations. There are examples of negative consequences of different interpretations for cross-border cooperation. For example in the area of second-hand market (cars or electronics) shipped mainly to Africa it is unclear whether this is waste with the waste shipment regulation to apply or just used goods that can be shipped without restrictions. German companies could have a financial interest to keep such 'waste' cars in the country and recycle them according to high standards. Also other elements of the waste shipment regulation do lead to different interpretations whether a shipment is illegal or not. This very often prevents effective cross-border cooperation and an investigation comes to a halt. There are also positive examples of successful cross-border cooperation in the waste sector, for example a few years ago between the German county Brandenburg and the neighbouring Poland. After all, cross-border cooperation does not depend so much on the text of legislation but on proper law-enforcement and people.

One participant draw the attention to poor implementation of sectoral rules in some Member States. Poor environmental implementation also hinder investments in these countries, because of the legal uncertainties. The Commission should assume more responsibilities to use its possibilities to make Member States not only to transpose EU sectoral legislation but also to implement it in practice. There are numerous experience where investigations against illegal

practices were not initiated at national level. In the few cases that made it to the courts, sanctions imposed where inadequate and too low to be effective. The reason for these failures are due to a large extent to a lack of specialised knowledge, especially with the judges.

Illegal services with dumping prices, e.g. non EU compliant waste management service, are offered on internet platforms. The platform cannot be held liable because they claim they are only is only the host where such services are promoted and do not offer the service themselves. NGOs which have been addressed by the industry to help with this problem did not go further. For unknown reasons the police (in France) had not been contacted by the fair playing industry. In addition, industry did not try to have the illegal businesses held criminal liable. This might be due to a lack of trust in the capacity of the police although units specialised in environmental crime do exist. The industry appeals for clear legislation so that platforms can be prosecuted.

Businesses would appreciate stronger **enforcement** of existing environmental rules. This would impact positively the bad reputation of e.g. the chemical and waste industry. Mafia like organisations that make a business of systematically breaking the rules are a big problem on which criminal legislation or law enforcement should focus, as they cause the greatest harm. One participant detailed that criminal legislation would not have any impact on costs of businesses. Compliance costs are triggered by sectoral legislation and the requirements that must be fulfilled to receive a permit. Effective criminal law enforcement has rather an impact to improve the reputation of the industries and to prevent unfair competition. For a participant, linking the amount of the fines to the annual turnover is not feasible in practice. The annual turnover does not reflect the financial situation of a company correctly.

Overall, there was broad agreement that the industry is driven by administrative law, not by criminal law. This goes for costs as well as for change of behaviour. Practical implementation also of sectoral law is deficient in many Member States. There are big problems with illegally playing businesses in many sectors which go in most cases unpunished.

3.3.6. Semi-structured interviews and/or written opinions

Eurojust

Eurojust filled in a targeted questionnaire with extensive comments. The report on Eurojust's Casework on Environmental Crime from January 2021 provides experiences, challenges, identified best practices and statistical analysis. A series of targeted interviews has taken place.

Eurojust's experience indicates the existence in **different jurisdictions of different legislative approaches** to environmental crime (even though the current EU legal framework requires a harmonised approach), which results in different perceptions about some key legal qualifications and can trigger dual criminality issues during cross-border cooperation.

Based on the Eurojust's experience, two areas can be identified as the **areas not mentioned** by the Directive that have been dealt with in the cross-border environmental crime cases referred to Eurojust in 2014–2018: illegal trade in hazardous substances and (hazardous) contamination in food. Bringing illegal fishing under the remit of the Environmental Crime Directive can contribute to a harmonisation of key legal concepts of environmental crime.

Eurojust suggests that **cross-border investigations and prosecutions** of environmental crime in the EU, including judicial cooperation on such cases, would benefit from the application of more uniform and dissuasive penalties for such crimes across the EU. This is because the possibility to use certain investigative tools and techniques, as well as the possibility to use instruments and tools for cross-border cooperation at the EU level depend on the seriousness of the investigated crime and the severity of the envisaged penalty.

The main factors that hinder cross-border cooperation on environmental crime cases can be attributed to such specifics of environmental crime investigations and prosecutions as their complexity and their multidisciplinary and resource-intensive nature. Environmental crime cases may require highly specialised legal, scientific or technical expertise, and thus the need to cooperate with relevant national or international authorities and organisations.

From the perspective of Eurojust, international coordination and cooperation are the key requirements in fighting organised cross-border environmental crime effectively. The involvement of Eurojust and the use of joint investigation teams can be recommended as effective tools to address involvement of organised crime in environmental crime cases. In addition, financial investigations and recovery of criminal proceeds can also be considered as an efficient way to address the involvement of organised crime.

Europol

The Europol filled in the questionnaire for the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum and participated in the targeted consultation with Euopol's vision from March 2021 on the revision of the Directive 2008/99/EC. In addition, Europol has provided further input with practical cases in the context of targeted interviews as well as in writing.

The current Environmental Crime Directive contains expressions and **legally ambiguous concepts** which in practical terms adds difficulties to initiate the criminal investigation and later on during the penal procedure. The language should be more precise in order to help creating more unified approach towards environmental crime across the Member States.

The concept of environmental crime is broad and therefore the Environmental Crime Directive **should involve areas** such as wildlife – trafficking of specimens, products or parts, including timber, poaching, illegal poisoning, IUU fisherie –, waste and pollution – trafficking, illegal management, disposal and dumping of waste, pollution of soil, air and water, illegal trafficking of Ozone Depleting Substances and F-gases – and habitats (deforestation, illegal mining, illegal watering, urban planning and construction crime, acoustic crimes).

In addition, document fraud is used to cover the criminal activity. This should be included in the revised Environmental Crime Directive.

Only few crimes are currently described as "**risk crimes**". This means a serious legal loophole. It would be desirable to review in which cases an action or inactivity is worth to be considered as a crime "*per se"* regardless the eventual result. The new offences should be considered as a crime itself due to the conduct itself, independently of the eventual result.

The broad scope involves a strong need of **specialization and dedication of the units involved**. In addition, these units must be equipped with technical resources in order to carry out their duties. Environmental crime is often hidden, which means that the investigators need to work proactively to uncover it. The need of specialized units in Law Enforcement Agencies (LEAs) related to combating environmental crimes should be pointed out in the reviewed Environmental Crime Directive. Law enforcement authorities in all member states should have the same investigative powers. For instance, the possibility of carrying out telephone, environmental and telematics wiretapping for environmental crimes would guarantee a capacity to be more effective in investigations.

Europol should be mentioned in the Environmental Crime Directive concerning the transmission and exchange or information and intelligence concerning concrete investigations in which international cooperation would be a need.

The European Network of Prosecutors of Environment (ENPE)

The European network of prosecutors of environment (ENPE) recommends that the opportunity should be taken to include a clear, decisive and purposive requirement in the Directive that Member States should ensure both **natural and legal persons** can be prosecuted for environmental offences directly, rather than through the act or omission of a third party. There should be an additional catch-all definition of environmental crime to ensure that the requirement to criminalise certain behaviours which have an adverse impact upon regimes designed to protect it, is sufficiently broad.

Systems for administrative sanctions relating to criminal offending should be subject to legislative provision or judicial oversight which ensures that administrative sanctions are applied with high levels of governance and transparency.

ENPE fully agrees that Member States should be strongly encouraged to promote and adopt measures to ensure **specialisation of all participants** within the environmental law enforcement chain. ENPE suggests that the new version of the Environmental Crime Directive imposes an obligation on each Member State to nominate a specialist or specialist at each stage of the environmental enforcement chain and to publish the contact details of those personnel clearly.

According to ENPE's assessment Member States should be obliged to participate in **a common data collecting regime or system** with clear parameters and requirements, for law enforcement agencies involved in environmental crime, which is accessible to them and others for analytical purposes. The Commission should establish a mechanism for external audit or scrutiny.

The European Union Forum of Judges for the Environment (EUFJE)

For the European Union forum of judges for the environment (EUFJE) the **update** the Directive and its annexes and **include new environmental areas** – timber trade – is very useful. General terms without the annexes is very useful in EUFJE's view. EUFJE prefers the provision of non-binding EU-guidance on the interpretation of vague elements in the definitions and supports the autonomous approach.

EUFJE supports the bundle of measures for stronger alignment of **sanctions**, effective operation of the **enforcement chain** and **information sharing**. EUFJE welcomes a combination between legal requirement and the provision of non-binding guidance to Member States on the establishment of overarching national enforcement strategies and favors both a legal obligation and the provision of EU-guidelines on cooperation between Member States and how to make use of EU agencies.

The European Network for Environmental Crime (EnviCrimeNet)

The European network for environmental crime (EnviCrimeNet) filled in the questionnaire for the Working Group on environmental sanctioning of the Environmental Compliance and Governance Forum and participated in the targeted consultation with a report from April 2021 about the evaluation of the Directive 2008/99/EC.

The casuistry is innumerable, so **periodic updates** would greatly help a better implementation in all Member States according to EnviCrimeNet. EnviCrimeNet welcomes the **clarification** in the Directive because the whole chain must make this specification. It is necessary to keep the link with other EU legislation on environment. Corruption is an essential component in the

facilitation and perpetration of all environmental crimes. It can be considered a catalyst for environmental crime. In particular, corruption plays an important role in facilitating fraudulent trade, forging import/export certificates, clearing customs wrongly, ignoring illegal waste disposal, issuing licenses, etc. EnviCrimeNet suggests to include this typology as a new offence.

For a coordinated application of the sanction, EnviCrimeNet understand that a generic and binding guide is necessary that sets out the guiding principles for action throughout the EU. The fact that a certain illegal activity is a crime in one Member State, but it is an administrative offence in other Member States, causes problems in the international cooperation at EU level. As a possible solution could be recommend establishing certain criteria, for example height of an illegal profit and the height of environmental damage (cost of restoration of condition before the crime was committed) which should be common in all Member States.

The creation and strengthening of **specialized units** in all MS is essential according EnviCrimeNet, it constitutes the key to success to tackle efficiently with this (sometimes silent) threat. In this sense, reinforcing training plays a very relevant role. Raising awareness about the need to align strategies throughout the compliance chain at national level is essential. According to the experience achieved, the environmental criminality cannot be tackled without common strategies and common procedures that involve the whole enforcement chain (inspectors, police, prosecutors, judges), especially in case of transnational investigations.

Having a **reliable statistic** is essential for EnviCrimeNet, too.

European Union agency for fundamental rights (FRA)

The European Union agency for fundamental rights (FRA) has submitted an extensive written contribution. FRA suggests that **sanctions** could include obligatory awareness raising courses or training for environmental crime offenders and emphasises that sanctions against legal entities must be sufficiently dissuasive, stipulated in national law and effectively implemented.

How the results have been taken into account

The results of the consultation activities have been incorporated throughout the impact assessment in each of the option in which feedback was received. The consultation activities were designed to follow the same logical sequence as the impact assessment, starting with the problem definition and then moving on to possible options and their impacts. Using the same logical sequence in the consultation activities as in the impact assessment itself, facilitated the incorporation of the stakeholders' feedback – where relevant – into the different sections of the impact assessment.

ANNEX 9: INTERVENTION LOGIC

Drivers	Problems	Specific objectives	Options	Direct Impacts
Scope of the ECD defined through sectoral legislation listed in exhaustive annexes and corresponding definitions of crimes in Article 3 is outdated. No functioning mechanism to update scope of the ECD	The scope of the ECD (defined in two Annexes to the ECD and a list of offenses in Article 3 of the ECD) is outdated and defined in a complex way, hindering effective investigations, prosecutions and cross-border cooperation.	1.Improve the effectiveness of investigations and prosecutions by updating the scope of the ECD and by inserting a feasible mechanism to keep the ECD up-to-date in the light of the European Green Deal	1a. Update the existing list of legislation in the annexes, add new relevant crime categories to Article 3 1b. Refer to relevant sectoral legislation in general terms and remove the annexes, add new crime categories to Article 3, more precision on crime constituting elements in Article 3. 1c. Define environmental crime in the Directive without the requirement of a breach of relevant EU sectoral legislation	More and more effective investigations and prosecutions of environmental crime through greater clarity on the scope of the ECD and through widening the scope of the ECD
Vague terms used in the definitions of environmental crime in Article 3 leave too much scope for diverging interpretation	Unclear definitions of what is environmental crime within Member States and between Member States hinder effective investigation, prosecutions and cross border cooperation	2.Improve the effectiveness of investigations and prosecutions by clarifying the definitions of environmental crime	2a. Define unclear terms in the definitions of environmental crime (such as substantial damage) more precisely 2b. Criminalise risky behaviour (endangerment crime) thus eliminating vague terms, 2c. A combination of 2a and 2b.	More and more effective investigations, prosecutions and convictions through greater clarity on the definitions of environmental crime
No precise sanction types and levels required in the ECD	Sanction levels vary widely across MS. Sanctions levels imposed in practice are too low to be effective, dissuasive and proportionate.	3. Ensure that environmental crimes are sanctioned by effective, dissuasive and proportionate sanctions	3a. Introduce minimum-maximum sanctions levels 3b. Option 3a plus aggravating circumstances and accessory sanctions 3c. Option 3b plus an obligation to link the level of fines to the financial situation of legal person and/or illegal profits	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 crime	4. Introduce a package of provisions directly fostering cross-border cooperation, such a harmonised investigative tools, obligation of be MS to cooperate through Eurojust, Europol and OLAF, harmonised rules on jurisdiction.	More and more effective cross-border cooperation increase the effectiveness of law enforcement and will bring more cases to court.
Lack of resources/efforts in the MS to collect statistical data on environmental crime investigation, prosecution and convictions	Lack of and prioritisation by policymakers; lack of monitoring of the functioning of the enforcement chain leads to environmental crime cases not being sufficiently investigated	5.Improve informed decision-making on environmental crime through improving statistical data collection and reporting	5a. Oblige MS to collect and regularly report to the Commission statistical data related to environmental crime 5b. Option 5a plus an obligation of the MS to collect and report statistical data according to harmonised common standards	Better statistical data helps raise awareness, will lead to allocation of adequate resources, enables monitoring and helps address problems in the enforcement chain. Result: more and more effective investigations, prosecutions and convictions
Lack of resources /efforts in the Member States to implement the Directive in practice/ to enforce environmental crime policies	Environmental crime not effectively investigated, prosecuted and sanctioned due to ineffective operation of the enforcement chain	6.Improve the operational effectiveness of national enforcement chains (investigations, prosecutions, sanctioning)	6. Insert in the Directive obligations that directly strengthen practical implementation such as improved training at all levels of the enforcement chain, national overarching strategies to combat environmental crime, awareness-raising measures.	Strong enforcement and enhanced expertise on environmental crime will lead to more and more effective investigations, prosecutions and convictions

Relevant policy option: Amending the Directive
Discarded options: 1. Repeal the Directive
2. Address the identified problems only through non-binding measures

ANNEX 10: OPTIONS TABLE

ECD Review – Options

	Relevant policy option: Amending the Directive where needed in combination with non-legislative measures Discarded options: a. repeal the Directive, b. address the identified problems only through non-binding measures	
General Objective	**Specific objectives**	**Options**
Better protect the environment through more effective detection, investigation, prosecution, and sanctioning of environmental crime	**1. Improve the effectiveness of investigations and prosecutions by updating the scope of the Directive and by inserting a feasible mechanism to keep the Directive up-to-date in the light of the European Green Deal**	1a. Update the existing list of legislation in the annexes, add new relevant crime categories to Article 3. 1b. Refer to relevant sectoral legislation in general terms and remove the annexes, be more precise on crime constituting elements in the Article 3. 1c. Define environmental crime in the Directive without the requirement of a breach of relevant EU sectoral legislation.
	2. Improve the effectiveness of investigations and prosecutions by clarifying the definitions of environmental crime	2a. Define unclear terms in the Directive more precisely 2b. Eliminate vague terms by criminalising risky behaviour (endangerment crime) 2c. A combination of 2a and 2b
	3. Ensure effective, dissuasive and proportionate sanctions types –levels for environmental crime	3a. Introduce minimum-maximum sanctions levels 3b. Option 3a plus aggravating circumstances and accessory sanctions 3c. Option 3b plus an obligation to link the level of fines to the financial situation of legal person and/or illegal profits

	4. Improve the effectiveness of cross-border cooperation on environmental crime	4.Introducing a package of provisions directly fostering cross-border cooperation - harmonised effective investigative tools - obligation to cooperate through Eurojust, Europol and OLAF - harmonised rules on jurisdiction
	5. Improve informed decision-making on environmental crime through improving statistical data collection and reporting	5a. Oblige MS to collect and regularly report to the Commission statistical data related to environmental crime 5b. Option 5a plus an obligation of the MS to collect and report statistical data according to harmonised common standards
	6. Improve the operational effectiveness of national enforcement chains (investigations, prosecutions, sanctioning)	6. Insert in the Directive a package of obligations that directly strengthen practical implementation, e.g. specialisation/training, awareness-raising measures, national environmental crime strategies