



LIFE-ENPE

Environmental prosecution report tackling environmental crime in Europe

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The Environment Agency is a UK executive non-departmental public body sponsored by the Department for Environment, Food and Rural Affairs. It is the main environmental regulator in England.



The Environmental Protection Agency is at the front line of environmental protection and policing in Ireland. It ensures that Ireland's environment is protected, and changes in environmental trends to detect early warning signs of neglect or deterioration are monitored.



The EU forum of Judges for the Environment is a transnational network of European Environmental Judges. Its objective is to promote the enforcement of national, European and international law in a perspective of sustainable development.



The National Environmental Crimes Unit at the Swedish Prosecution Authority deals solely in environmental crimes and crimes related to Health and safety.



The prosecutor's office for serious fraud and environmental crime is part of the Dutch national public prosecutor's office, Openbaar Ministerie and is responsible for all criminal enforcement of all environmental law in the Netherlands.

The European Network of Prosecutors for the Environment (ENPE) is an international network whose purpose is to promote the enforcement of environmental criminal law by supporting the operational work of environmental prosecutors. It seeks to provide a platform for environmental prosecutors across Europe to access relevant information, improve co-operation and share knowledge and best practices in prosecuting environmental crime.

Through the financial support of the European Union (EU) LIFE programme (project reference LIFE14 GIE/UK/000013) LIFE-ENPE is a five year project which aims to improve Compliance with EU Environmental Law by “addressing uneven and incomplete implementation across Member States through improvements to the efficiency and effectiveness of prosecutors and judges in combating environmental crime”.

Comprising partners from the UK, Sweden, the Netherlands, Republic of Ireland and Belgium, the project includes a key action to provide a report to analyse existing information on environmental crime and prosecution activity across Europe.

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Tackling environmental crime in Europe

A LIFE-ENPE Capitalisation and Gap-filling Report

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Executive summary

The European Network of Prosecutors for the Environment (ENPE) is a network that is open to membership from organisations involved in the criminal prosecution of environmental law, and to observers involved in prosecution activities more generally.

Its purpose is to promote the enforcement of environmental criminal law by supporting the operational work of environmental prosecutors. It seeks to provide a platform for environmental prosecutors across Europe to access relevant information, improve co-operation and share knowledge and best practices in prosecuting environmental crime.

The LIFE-ENPE project is a five-year European Union (EU) funded project, with support coming from the EU Life programme (project reference LIFE14 GIE/UK/000043), which aims to improve Compliance with EU Environmental Law by “*addressing uneven and incomplete implementation across Member States through improvements to the efficiency and effectiveness of prosecutors and judges in combating environmental crime*”.

The project includes a key action to provide a report to analyse existing information on environmental crime and prosecution activity across Europe (LIFE-ENPE Action A1).

This report draws on information gathered via prosecution and sentencing statistics, correspondence with prosecutors and legal/literature reviews of the 28 European Union Member States to present a baseline analysis of “what we know about environmental crime and, crucially, how it is *actually* being tackled by prosecutors and judges across Europe”. The report focuses on four core areas of interest, corresponding to the LIFE-ENPE Working Groups (LIFE-ENPE Action B2): wildlife crime (Section 2), chemical and water pollution (Section 3) waste (Section 4) and

sanctioning/judicial practice across the European Union member states in relation to environmental crime more generally (Section 5). For each section, we have generated a set of core recommendations based on our findings which we hope will assist prosecutors and judges across the EU in the fuller implementation of relevant EU legislation as well as the development of best practice in the environmental sphere.

Wildlife Crime

Indications are that less of this kind of crime is being recorded across the EU compared to other categories of environmental crime, and many of the available reports on environmental crime do not cover it or do not have a dedicated section on it (waste and water tend to get more attention). When this issue is dealt with directly, the links are usually emphasised with organised crime and other kinds of crime, including money laundering and terrorism. Trafficking is the main focus rather than other forms of wildlife crime. The available data are very fractured and very difficult to compare in any meaningful way. CITES reporting is haphazard in many jurisdictions. The EU-TWIX database offers an important step forward in collating this kind of data, as does the UNODC's World WISE report, but both need to be more uniformly engaged with.

In the light of these findings we offer the following recommendations:

- i) Wildlife crime should be escalated up the agenda as a genuine priority befitting of its wide implications, complexity and connection to organised crime
- ii) All Member States should work to engage fully with the EU-TWIX database and with CITES reporting requirements in order to fill in the significant gaps in our knowledge of this crime area along with the relevant sanctions imposed across the EU
- iii) Dedicated wildlife crime units with specially trained and knowledgeable enforcement officers should be established in all Member States
- iv) Criminal penalties should be considered more readily as the most meaningful and robust response to cases of wildlife trafficking
- v) Further analysis to investigate implementation of the EU Environmental Crime Directive should be undertaken.

Chemical Pollution

Given the overlap with other forms of environmental crime, chemical pollution is perhaps best understood in terms of the specialist scientific and practical knowledge required to identify and investigate such crimes. Thus, whilst general 'waste' crime may be obvious even to untrained investigators, it will not always be obvious what crimes and what hazards are involved with chemical pollution. Chemical pollution is challenging to identify, regulate and prosecute because of the need for (and often lack of) specialist knowledge within regulatory and prosecutory agencies which do not

always prioritise this type of crime. Whilst many examples revolve around relatively small-scale discharges of chemical pesticides into water sources, this area of crime can occur on a much larger scale and in these cases can be transnational in nature. As with other forms of environmental crime, there can be links to trafficking networks and with organised crime.

In the light of these findings we offer the following recommendations:

- vi) Member states must work towards consensus on definitions and collection of data on offences in this area of environmental harm
- vii) Having established such consensus, there is a pressing need for a shared data repository covering chemical incitements across the EU

Waste Crime

It is clear that the lack of joined up thinking and common standard of regulation and enforcement across EU jurisdictions is in fact facilitating the continuation and escalation of the problems raised by waste trafficking and illegal dumping. This is exacerbated by limited knowledge and expertise in agencies that must act together in a co-ordinated way to prove that a crime has taken place, rather than a genuine mistake due to a lack of awareness of waste regulation requirements by the culprit. This is principally because the perpetrators of these crimes are frequently linked to organised crime groups and are geographically mobile, able to 'shop around' for the most beneficial regulatory climate in much the same way as a legitimate international corporation. The broad scope of 'waste' as a concept is to some extent confusing matters and clearer guidance/understanding/expertise is required. Waste crime itself is linked to a large number of other kinds of trafficking as well as financial crime.

In the light of these findings we offer the following recommendations:

- viii) Waste crime often must be considered alongside other forms of transnational, organised crime (people, drug and weapon trafficking, etc.).
- ix) Like these crimes, and perhaps to an even greater extent, addressing waste crime both in terms of enforcement and prosecution requires specialist knowledge, training and equipment, all of which must be developed within EU Member states
- x) Member states should consider the development of specialist courts or judges and how these might work within their domestic systems
- xi) Consistency of approach between jurisdictions is vital as there is a strong tendency for these criminal groups to shift their basis of operations to whichever regime is least disruptive (either in terms of law and regulation, or more often in terms of practical implementation) to their business model
- xii) Some of the best data available in relation to WEEE and it is almost certainly worth exploring how knowledge in this area has developed more clearly and

consistently than for other aspects of waste so as to learn lessons for the broader waste regimes.

Sanctioning and Judicial Practice

The need for centrally compiled, consistently recorded data sources for environmental sanctions at an EU level has been put forward by almost all studies in this area. The lack of such a resource is at present compounding difficulties both in lack of consistent application of EU-level environmental law as well as continued cultural reticence in some countries to apply the laws and sanctioning regimes that are available. Furthermore, without consistently-recorded comparable data the ongoing discussion on the advantages and disadvantages of harmonisation of sanctions lacks an evidence base. The data indicates that fines are by far the most frequently used criminal sanction and that on average these are still of a relatively low level. Problems may trace back to the broad scope and lack of specific definitions in the primary EU legislation.

In the light of these findings we offer the following recommendations:

- xiii) Some combination of criminal and administrative sanctioning regimes appears to offer the greatest potential to make genuine inroads into the problems of environmental crime, although different countries strike the balance at different points.
- xiv) Training programs for judges, prosecutors and police need to emphasise the multi-level impact of such offending as well as the availability and *suitability* of more serious criminal sanctions, including much higher fines.
- xv) There is a need to develop specialist police, prosecutors and judges to adequately respond to these forms of offending.

Overall Recommendation

- xvi) The prevailing finding of this analysis was that systematic data on environmental crimes, their enforcement and their sanctioning is still piecemeal, incomplete and inconsistent across the European Union. As such, our core underlying recommendation is that all member states need to work towards a systematic repository of information concerning such crimes, how they were dealt with and the sanctions/sentences imposed. In many cases, the development of this database would need to start from establishing consensus on quite basic concepts ('waste', 'chemicals'). What is striking however is that this lack of joined up thinking, sharing of data or knowledge is in fact facilitating the further perpetration of these crimes, not only by organised crime groups, but also by corporate actors more generally.

1 – Introduction

1.1 – Background to the report, objectives & methodology

1. This project derives from a tender put out by the Environment Agency of England and Wales as President of the European Network of Prosecutors for the Environment (ENPE) and co-ordinating beneficiary of the EU Life programme's LIFE-ENPE project. Pursuant to that tender, and with the goal of furthering recent research into environmental crime and assist the work of environmental prosecutors and judges throughout the European Union, this project undertook an analysis and report into environmental crime and prosecution across Europe. In particular, we examined: (a) prosecution and sanctioning practice; and (b) how this affects compliance in the following areas of environmental crime: wildlife, chemical and water pollution (see Milieu (2010)) and waste. These areas mirror the distinct Working Groups set up by the LIFE-ENPE project.
2. As specified, the overall goal of this report was to conduct a baseline analysis of “what we know about environmental crime and, crucially, how it is *actually* being tackled by prosecutors and judges across Europe” (specification document, para.2.1). In order to deliver on this, we focused the project on three interrelated areas. First, as mentioned, we completed a detailed review of existing data and literature concerning environmental prosecutions in Europe in order to pool knowledge and identify gaps (as per para.2.3 of the specification). Second, we collected legal materials and statistical data on both the *availability* and the actual *use* made of environmental sanctions across the 28 EU Member States and other countries referred to in paragraph 2.5 of the specification document. Such data encompasses as far as is possible the transposition of the instruments listed in that paragraph. Importantly, it encompasses *non-criminal* (as well as criminal) sanctions employed as a response to environmental crimes, including administrative and civil sanctions. The final area of focus broadened the analysis to examine the nature of the legal systems and processes in place in each jurisdiction and examined whether these promote or impede responses to environmental crime. This involved a review and analysis of surrounding procedural, structural and cultural issues in each country's legal and regulatory systems which impact upon compliance, prosecution and sanctioning in respect of wildlife crimes, waste crime and chemical pollution (as per paras. 2.6 and 2.7 of the specification).

1.2 – Methodology

3. We produced this research firstly conducting a systematic literature review. This encompassed both legal and criminological literature. Thematic analysis of the literature was conducted to reveal gaps in knowledge and to help target further research activity. Guided by this review, data on prosecution rates and sanctions were collected through publicly available sources in each country under review. We also contacted relevant environmental agencies from each jurisdiction to

gather numbers and materials. In terms of analysis, because of the plurality of data sources and the different means of counting and responding to environmental crime of all kinds across such a wide cohort of jurisdictions, direct statistical comparison or high level quantitative analysis was not possible. We have collated the raw descriptive statistics where possible, which provides a firm basis for a basic indication of “what we know about environmental crime”.

4. In addition to drawing on existing sources of data regarding environmental prosecutions and sanctions, we also attempted to collect data directly from countries. At the first conference of all the EU environmental crime enforcement networks³, we presented the findings from the initial academic and grey literature review. As part of this presentation, we solicited help from attendees to share their data concerning environmental prosecutions and sanctions with us. This solicitation was followed up by an email to most of the attendees and other relevant stakeholders. Additionally, we requested access to the EU-TWIX data to gain a sense of the prosecutions and sanctions relating to wildlife crime.
5. With regards to waste and pollution, less primary data was forthcoming. Six countries sent in documents, which contained environmental prosecution and sanction information. An additional two countries sent links to websites where the data are available. One other country sent a summary of prosecution data and one other was still in the process of collecting the data. Three countries indicated that they do not collect information about environmental crimes though two of these countries indicated there are projects underway to do so in the future. Therefore 13 countries engaged with this study. Again, this raises concerns regarding the priority of environmental crime across EU Member States (see Milieu and ICF GHK (2014)).

1.3 – Structure of the report

6. As mentioned, our report is broken down into sections that match the LIFE-ENPE Working Groups that are being formed as linked to this initiative: wildlife crime (Section 2), chemical and water pollution (Section 3), and waste (Section 4). Each of these sections presents a general overview of the sources of knowledge and data in each area. The sections then proceed to present findings from three key stages of criminal enforcement: investigation, prosecution and sentencing. The sections then end with a summary of the findings for that topic and our associated recommendations. Following these, Section 5 of the report examines sanctioning and judicial practice across the European Union

³ The European Network of Prosecutors for the Environment (ENPE); the European Union Forum of Judges for the Environment (EUJFE); European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) and EnviCrimeNet (connecting police officers and other crime fighters in the field of environmental crime).

member states in relation to environmental crime more generally, again offering a summary and recommendations for steps forward.

2 - Wildlife Crime

2.1 – Sources of information on wildlife crime

7. There are three core sources of hard, statistical data on wildlife crime (broadly defined) across European jurisdictions:
- i) The European Union Trade in Wildlife Information Exchange (**EU-TWIX**) is a database developed in Belgium to assist national law enforcement agencies, including CITES Management Authorities and prosecutors, in their task of detecting, analysing and monitoring illegal activities related to trade in fauna and flora covered by the EU Wildlife Trade Regulations. Information is shared between designated enforcement officers from all 28 EU Member States, plus Montenegro, Norway, Serbia, Switzerland and Ukraine. The database currently holds data on over 31, 000 wildlife seizures as well as information on prices of wildlife specimens in trade. It currently connects around 800 CITES enforcement officials across the EU. Access to the data is normally restricted to enforcement officials. This was the case in the UK where law enforcement agents reported limitations in the database due to the failure of other EU agents to engage with EU-TWIX. In Norway, in many cases, law enforcement officers had not even heard of the EU-TWIX database⁴.
 - ii) Another key source of Pan-European data is the EU FP7-funded European Union Action to Fight Environmental Crime (**EFFACE**) project⁵. This was a 40-month EU funded research project involving eleven European research institutions and think tanks. EFFACE assessed the impacts of environmental crime as well as effective and feasible policy options for combating it from an interdisciplinary perspective, with a focus on the EU. It ended in March 2016. EFFACE produced a major report on wildlife crime in the EU setting out its findings in this area (Sina et al (2016))⁶. In a 2016 EFFACE Policy Briefing document on *The EU's Strengths and Weaknesses in Tackling Environmental Crime*, the authors note: "For some areas of environmental crime important data tools have been developed, such as the EU-TWIX database on seizures of illegally traded wildlife. However, such shared systems at EU/MS level are not easily shared externally" (EFFACE, 2016: p.2). EFFACE also produced a number of country-specific reports which vary in detail as to the amount of wildlife crime included⁷.
 - iii) In May 2016, Rosell and Banque (2016) completed a study on the implementation of Directive 2008/99/ec on the Protection of the Environment through Criminal Law. Funded by the Criminal Justice Support Programme of the European Union, the study was coordinated by SEO/Birdlife under a project to create a European Network on

⁴ The project website is here - <http://www.eutwix.org/>.

⁵ Its main website is here - <http://efface.eu/>

⁶ Its main study on wildlife crime in the EU can be found here - <http://efface.eu/EP-wildlife-crime-study>

⁷ See <http://efface.eu/publications>

Environmental Crime (**ENEC**). This study aimed to evaluate the transposition of Articles 3 and 5 of Directive 2008/99, which requires Member States to criminalise nine specific environmental offences and implement dissuasive penalties. The study focuses on three case studies of relevance to this section in particular: illegal killing and taking of birds, intentional poisoning of wildlife, and habitat destruction.

2.2 – Investigation of wildlife crime

8. The available data and literature reveal a number of recurring features and issues which impact directly on the manner in which wildlife crime is investigated. The Council of the European Union-funded EnviCrimeNet Intelligence Project on Environmental Crime Report (2015) notes that, annually, the international trade in endangered species of flora and fauna is estimated to be worth many billions of Euro. The trade is diverse, ranging from live animals and plants to products derived from them, such as timber, leather and cosmetic products, food, and so-called ‘traditional medicines’. Closely linked to the trade are illegal hunting and poaching of wildlife and illegal logging and associated deforestation. With a view to the protection of renewable natural resources, poaching and logging are not only seen as serious threats to endangered species but also to biodiversity, ecosystems, climate and social and economic development. Similarly, illegal, unreported and unregulated fishing has a negative impact on marine life, ecosystems and the fishing industry.
9. EFFACE’s 2016 core conclusion on the issue of wildlife crime, and one that recurs in most of the studies, is that wildlife crime is often related to other forms of offending and sometimes to organised crime, thus:

“Several EFFACE studies have identified that in some cases criminal organisations engage in environmental crime. In some cases (but not always) this organised crime has a cross-border character. As indicated above, the mere fact of being transboundary does not make environmental crime more serious. However, the fact that environmental crime takes place within the context of organised crime does give it a more serious character. Examples are notably wildlife crime and illegal trafficking of waste” (Faure et al, 2016: p.12)
10. Such findings point strongly towards the need for a coordinated approach to investigation drawing on expertise well beyond the scope of wildlife crime *per se*.
11. INTERPOL has also produced a number of pieces of work on the scale and response to wildlife crime in the EU and beyond. Thus, the EnviCrimeNet Intelligence Project on Environmental Crime (2015) notes in relation to endangered species and wildlife that risks within the EU primarily focus on mid-to-long-term issues such as deforestation, the extinction of rare domestic species or the fishing industry. Concerns regarding the links between wildlife and organised crime are further underlined by EUROPOL in their *Threat Assessment of Environmental*

Crime in the EU, Chapter 3 of which is devoted to trafficking in endangered species) (EUROPOL, 2013). This report highlights that wildlife trafficking is clearly a transnational issue and, indeed, the most troubling developments derive from outside Europe, specifically in Africa, Latin America and South East Asia. Illegal logging in the latter two regions is starting to have an effect on the globally available surface of forest area with a potential impact on climate change, in addition to pollution problems, and on biodiversity, important for pharmaceutical industries. In Africa the situation is worse. There are some indications that organised crime groups, as well as insurgents and terrorist groups, use poaching, trafficking of wildlife products and illegal timber trade to gain influence and to finance the purchase of firearms and other criminal activities. This is not only a problem for local governments, but also for the economic and political interests of the EU. The trafficking of elephant ivory is often linked to fraud, tax evasion and money laundering, which act as key enablers (EnviCrimeNet, 2015).

12. The International Fund for Animal Welfare (IFAW) cooperates with INTERPOL on investigations related to the trafficking of endangered animals; funding operations and providing training for officers. In 2005 the UK Office of IFAW published a report on online-trading of protected species in that country which indicate that:

“The Government, the intelligence service and other enforcement agencies in the UK have recognised the problem and have already devoted resources to tackling it, although these are insufficient to deal with the apparent scale of the trade” (IFAW, 2005: p.ii).

13. The report in particular highlights the lack of available information on this form of illegal trading both in the UK and in most of European jurisdictions, indicating that online auction websites need to be more closely involved in investigating the issue.

2.3 – Prosecution of wildlife crime and other modes of enforcement

14. Notwithstanding the existence of several good sources, discussed above it remains the case that our picture of prosecution rates for wildlife crime is woefully incomplete. As the EFFACE case study on wildlife crime points out (Sina et al., 2016) and as becomes clear from the primary data collected from EU-TWIX as part of this project, not all enforcement agencies dealing with illegal wildlife trade engage with that database. Nor have all countries complied with CITES requirements to publish Biennial Country Reports⁸. The latest of such reports to be made available are for 2013-2014. There is an online CITES trade database managed by the World Conservation Monitoring Centre which essentially summarises the data given in the biennial reports into searchable excel spreadsheets⁹.

⁸ See <https://cites.org/eng/resources/reports/biennial.php>

⁹ Available here - <http://trade.cites.org/>

15. In 2005, TRAFFIC (2005) on behalf of the UK Department for Environment, Food and Rural Affairs (DEFRA) produced a report breaking down enforcement mechanisms of wildlife trade controls under CITES in all EU countries. The key information from this report is reproduced in TABLE 1

Table 1: Sanctions and Enforcement Agencies for CITES in EU Member States (2005)

Country	Sanctions Available	Designated focal departments for enforcement of CITES
Austria	Austrian law (ArHG) provides for control, enforcement, and sanction mechanisms relating to the violations described in CITES and Regulation 338/97. Penalties for violation of ArHG 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.	Federal Ministry of Finance (Customs Authority) Criminal Intelligence Service Austria
Belgium	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.	Not given
Cyprus	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.	The designated focal points for the enforcement of CITES is the Environment Service and customs Authority.
Czech Republic	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. CITES is also included in the Czech Criminal Code. In 2002, an amendment was made to the Criminal Code (No. 134/2002 Coll) that allowed for infringements against protected species to be treated as criminal offences with penalties including imprisonment. The maximum penalty under the Criminal code is imprisonment for up to eight years for committing a crime listed in Article 1 or 2 in order to get extensive benefit or a crime in connection with an organised group operating in more countries.	Czech Environmental Inspectorate General Directory of Customs
Denmark	Fines for violation of this Statutory Order do not have any set minimum or maximum amount unless higher penalties are imposed under other legislation. However, violations that are intentional, for commercial purposes, or committed with gross negligence may carry a fine of imprisonment up to one year. Under the "Nature Protection Act", Chapter 13, additional powers may include: • Confiscation (Nature Protection Act 89.5 and Criminal Code 75f) which may be carried out by the Court of justice/police. • Search (Nature Protection Act 89.10 as to Chapter 73 of the Administration of Justice Act) which may be carried out by Court of justice/ police. • Seizure (Chapter 74 of the Administration of Justice Act) which may be carried out by the Customs administration or the Danish Forest and Nature Agency (when accepted) and the police 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. Most cases involving confiscation and	Danish Forest and Nature Agency Danish Police Copenhagen Police Central Customs and Tax Administration

	caution or small fines are settled out-of-court; most large cases are brought to court. 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. In general, fines settled in court are often less than those proposed by the public prosecutor. According to the Danish Criminal Code any economical gain of a perpetrator may also be (partly) confiscated. According to the "Nature Protection Act" 91, the Management Authorities are entitled to claim refund of costs from the perpetrator. Costs of storage etc., of illegal specimens – or the costs of returning the specimens to the country of export – can thus be claimed from the person (including a company) in charge of the transport, or the receiver of the specimens.	
Estonia	On 8 April 2005, Regulation No. 69 entered into force which 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 of rules established under EC Reg. No. 338/97 for transactions and operations with specimens of species listed in Annexes A–D of this regulation, compensation for environmental damages will be between 200–1.000.000 EEK (12–65 000 EUR), depending on the conservation status and the market value of the specimen concerned. The highest fine for violation of the Nature Conservation Law (2004) is 18 000 EEK (1150 EUR) or arrest, unless the same violation is committed by a corporation in which case the fine is up to 50,000 EEK (3,200 EUR). 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 at the border crossing with the maximum sentence being given to an official taking advantage of his or her official position, or if carried out by a group.	Estonian Tax and Customs Board Environmental Inspectorate The Police Board
Finland	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. Section 59 prescribes forfeiture of the specimen for violations involving listed species; any financial gain/corresponding monetary value of the specimen also is forfeited to the State. The Ministry of the Environment is responsible for recommending monetary values: values are specified in Decision 1209/1995 and range from FIM 100 (around EUR 16.00) for common birds and mammals to FIM 58,000 (around EUR 9,500) for the endemic ringed seal (<i>Phoca hispida</i>) of Lake Saimaa.	The Swedish Customs Service
France	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 EUR9,000 and/or six months imprisonment. Specimens seized by the criminal investigations detectives may be confiscated as well as instruments and vehicles having been used to commit the offence (planes, cars or all other vehicles having been used for their transport); • Article 414 of the Code of Customs by a maximum prison sentence of three years, the confiscation of the object involved in the fraud and a fine ranging from one to two times the object's value. The sanction may be increased to a maximum of 10 years and the fine increased to a maximum of five times the value of the specimen if the act of smuggling endangers human health, moral or public security, or when the illegal activities are part of organised crime.	French national agency for fighting against environmental and public health crime (OCLAESP) DNP – Ministère de l'écologie et du développement durable
Germany	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	Germany has a nominated CITES liaison officer/focal point, designated at

	related to Regulation (EC) No. 338/97 can be sanctioned by imprisonment of up to five years or a fine. In addition to charges filed by public prosecutors and courts, the Federal Agency for Nature Conservation (BfN) also initiates administrative offence procedures.	personal-level, within each relevant enforcement authority.
Greece	Penalties for violation of CITES under Greek Law range from a prison sentence of one 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 upon the nature of the offence. In addition, according to the Greek Customs Code, the penalty for illegal import or transportation is: a) 3,000 Euro for wild animal specimens b) three times the amount of evaded duties and taxes (at least 1,500 Euro) for specimens or samples of wild fauna and flora. Specimens seized by the forest or customs authorities shall be given to the nearest Forest Service for further procedures. The specimens may be returned, re-exported to their country of origin, disposed of or kept, taken care of and looked after.	None given
Hungary	According to the Criminal Code, the illegal purchase, possession, sale, import, (re-)export and transport through the territory of Hungary, trade in or killing of specimens of species listed in Annexes A and B of Council Regulation No. 338/97 is a criminal offence, punishable by up to 3 years imprisonment. Violations of the national CITES regulation and EC Wildlife Trade Regulations are liable to a fine specified in the provisions of a separate law, and the Management Authority may charge for costs incurred with the seizure and confiscation, including the cost of storage and transportation respectively. Confiscated live specimens are usually placed at rescue centres. The central rescue centre is a separate quarantine station at the Budapest Zoo and Botanical Garden. Other municipal zoos also function as rescue centres if necessary. In case the origin of the specimens is known, the animals are reintroduced to their native habitat. There have been three cases when the CITES MA has repatriated tortoise specimens for re-introduction in Turkey, Greece and Romania.	Department of International Treaties on Nature Conservation
Ireland	Penalties for offences in relation to CITES species are provided for under Section 68 of the Wildlife (Amendment) Act, 2000. Only maximum fines and maximum prison terms are specified in the Act. These are: a) on summary conviction – a fine not exceeding £1,500 (€1905.00) or imprisonment for a term not exceeding 12 months or to both or b) on conviction on indictment – a fine not exceeding £50,000 (€63,487.00) or to imprisonment for a term not exceeding 2 years or to both.	None given
Italy	Sanctions for illegal possession and trade and transit of specimens listed in Annex A, B and C of EU Regulation No. 338/97 are provided under national law, including also sanctions for trade of personal effects and household goods in accordance with Article 16. Law 150/92 determines specific penalties to prosecute infringements to CITES and EC Regulations, giving judiciary power to the State's Forest Corps, which has police status being also a competent Management Authority. Penalties specified under this law range from the lowest scale at EUR 2,000–10,000 to the highest scale of EUR 7,000–75,000 and 3 months to 1 year imprisonment.	Ministero delle Politiche Agricole e Forestali
Latvia	Sanctions are provided for CITES violations under various laws with penalties ranging from EUR 15.00 to EUR 750 (for private persons) or EUR 9,000 (for corporations) depending upon the nature of the violation and whether the offence is committed by a private person or a corporation. For example, under the Customs Regulations presenting customs with false or illegally obtained documents, etc., may result in a fine of up to EUR 9,000 (EUR 375 for a private person) and possible confiscation of the goods. Under the Criminal Law (1998), evasion of customs and/or presentation of false or illegal documentation	None given

	may also result in imprisonment for up to five years or a fine up to 120 times the minimum monthly salary (min salary in January 2004: EUR 120; total maximum fine EUR 14,400) and possible confiscation of the goods.	
Lithuania	There are no special legal provisions in the Republic of Lithuania where penalties only for illegal import, export or trade in species covered by CITES and Council Regulation (EC) No. 338/97 are provided. In all cases concerning violation of the provisions of CITES and the EU Regulations, state officials should observe the articles of the following instruments: The Administrative Law Violations Code (No. X-4449, 13.12.1984) provides detailed guidance on sanctions for a wide range of violations. Penalties range up to EUR 6,392 for violations of the provisions of laws (including CITES), depending on the nature of the offence and whether the person is a repeat offender or a government official, in accordance with the Administrative Law Violations Code (1984). Although prison sentences are not possible under this Administrative Code, confiscation of goods is allowable. The Penal Code (No. VIII-1968, 26.09.2000) also provides for sanctions for smuggling (in general) or other illegal business activity, including illegal activity related to wildlife. Fines can be as high as EUR 9,250 (for smuggling) and/or imprisonment of up to 8 years (for smuggling), and up to four years for illegal activities related to wildlife.	Ministry of Environment of the Republic of Lithuania State Environmental Protection Inspection Customs Department Lithuanian Criminal Police Bureau
Luxembourg	Penalties for violations of Regulation (EC) No. 338/97 are set out in Article 12 of the Law of 21 April 1989 and range from eight days to six months imprisonment and/or a fine of EUR62.5 to 25,000 as well as the confiscation of the specimens. In addition, the Law on the Protection of Nature and Natural Resources of 11 August 1982 and the Law Aiming to Protect the Life and Welfare of Animals of 15 March 1983 fixes penalties for violations of laws related to the protection of wild flora and fauna.	Direction de l'Administration des Douanes et Accises Direction Générale de la Police Grand-Ducale
Malta	Under the Trade in Species of Fauna and Flora Regulations (2004), penalties for illegal possession and/or trade of species listed in the CITES Appendices range from a fine of EUR 497 to EUR 4,967 and/or a prison sentence ranging from one month to two years.	Designated international CITES enforcement focal points are appointed from within the Environment Protection Directorate of the Malta Environment and Planning Authority
The Netherlands	The Act on Economic Offences (amended on 31 October 2002) (Wet op de economische delicten (Stb.1950, K258, laatstelijk gewijzigd bij de wet van 31 oktober 2002, Stb. 542) provides for sanctions under criminal law in the event of offences under the Flora and Fauna Act and its Council Regulation. Offences under section 13 of the Flora and Fauna Act are regarded as economic offences. A maximum of 6 years' imprisonment and a maximum fine of EUR 45,000 (private individuals) or EUR 450,000 (businesses) apply for such offences. The Flora and Fauna Act (amended 24 April 2002) (Flora-en faunawet (Stb.1998, 402 ; gewijzigd bij wet van 24 april 2002, Stb. 2002,236) authorises the Minister of Agriculture, Nature and Food Quality to order plants, animals or their derivatives found in the Netherlands in contravention of the Flora and Fauna Act to be returned to the country of export or origin.	None given
Poland	Articles 127–131 of the Nature Conservation Act concern penalties with respect to penal provisions for violation of CITES and EU regulations regarding the protection of species of wild fauna and flora. Persons who transport plants or animals covered by the above-mentioned provisions and cross the border without necessary permits or with a false declaration or without a phytosanitary certificate are subject to imprisonment from 3 months to 5 years; persons carrying out economic activities in animal trade or who do not have or do not present proper documentation stating the legal origin of the animal are subject to punishment of imprisonment or fine.	Ministerstwo Finansów

Portugal	Portuguese law does not classify the infringements to CITES as crimes and therefore they are subject to administrative sanctions but cannot lead to imprisonment or the imposition of any probationary status. Article 32/1 of the Law Decree 114/90 lists activities which are subject to a penalty which ranges from EUR 75 to EUR 2,494 depending upon which EC Regulation Annex the species are listed on.	None given
Slovakia	Penalties for violation of the Act on the protection of species of wild fauna and flora by regulating trade therein (2005) and its implementing regulations (2005) range up to EUR 7,150 for private persons, and to EUR 24,300 for violation of the Act committed by corporations. Violations of the Act may also result in a prison sentence of up to eight years.	None given
Slovenia	The Nature Conservation Act lays down fines for offences ranging to a maximum of EUR 41,600 for a legal person. A nature protection inspector, warden, police officer or customs officer may impose an on-the-site fine and seize any objects used for, intended for or originating from an offence. Violations of provisions of the NCA related to trade in protected species of wild fauna and flora, commercial use, breeding, acquisition of specimens, keeping in captivity etc. are treated as offences. The NCA prescribes the amounts of fines for such violations. The fines for offences according to Article 161 of the Nature Conservation Act are: - 4,160–41,600 Euro fine imposed on legal persons - 1,000–20,800 Euro fine imposed on individuals - 200–2,000 Euro fine imposed on responsible person of a legal entity The Decree on the course of conduct and protection measures in the trade in animal and plant species in its Art. 40 fully transposes the provisions of Art. 16 of Council Regulation (EC) No. 338/97. The fines for offences according to Article 40 of the said Decree are: 25,000–33,000 Euro fine imposed on legal persons 625–16,660 Euro fine imposed on individuals 166–1,660 Euro fine imposed on responsible person of a legal entity The Penal Code of the Republic of Slovenia (Official Gazette of RS, No. 40/2004) stipulates imprisonment for up to three years for import or export of an endangered plant or animal species contrary to international law. In exceptional cases, such as a criminal organisation avoiding customs controls while moving goods across the customs line, the perpetrator also may be sentenced to imprisonment of up to five years as well as a fine. In the case of any of these violations the specimens should be seized and confiscated.	Ministry of the Environment and Spatial Planning Customs Administration of Slovenia Inspectorate of the Republic of Slovenia for Environment and Spatial Planning
Spain	Under Spanish Law there are two possibilities for considering an offence an act against CITES: one is included in Articles 332 and 334 of the Criminal Code which provide for offences against protected flora and fauna and the other is included in the "Organic Law 12/1995 of 12 December 1995, to Deter Smuggling22". 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 EUR300, 5, the maximum fine would be EUR 41,265). Article 3 of the Organic Law 12/1995 provides for a fine which may amount to four times the value of the goods or objects involved. In addition, Article 5 of Royal Decree 1649/1998 states that administrative infringements will	Service for the Protection of Nature General Subdirectorate for Customs Management

	be sanctioned with a fine of up to three times the value of the smuggled goods.	
Sweden	Regulations concerning seizure and confiscation are stipulated in chapter 29 in the Environmental Code, in §8 point 11 and in §9 point 11. The sanctions range from fines (unspecified) to a maximum sentence of two years imprisonment.	Not given
UK	COTES enables forfeiture of the specimen (or any other thing in respect of which the offence was committed), and may order the forfeiture of any vehicle or other thing used to commit the offence. The decision on what penalty to impose for criminal offences relating to wildlife trade is at the discretion of the Courts. The Criminal Justice Act 1991 requires magistrates to take into account all the circumstances of an offence. The maximum penalties are specified by Parliament. Under CEMA the maximum penalty is seven years imprisonment and an unlimited fine. Under COTES the maximum penalty at crown court is five years imprisonment and an unlimited fine, and at magistrates court six months imprisonment and a fine not exceeding £5000.	Department for Environment, Food and Rural Affairs (Defra) National Criminal Intelligence Service HM Revenue & Customs

16. In 2016 the World WISE Wildlife report by the United Nations Office on Drugs and Crime (UNODC) was released (UNODC, 2016). The compilers have spent two years collating wildlife data concerning crime into a database, which is only available to law enforcement agencies (which is true of EU-TWIX as well), from which they have drafted their first report similar to their annual report concerning drugs. The data is a combination of CITES data and seizures from the World Customs Organisation's Customs Enforcement Network. Although the report gives a great deal of detail on quantity of CITES material seized, there is very little in the report on specific criminal justice responses save the data on maximum penalties available reproduced below in FIG 1 on p.34 of this report (UNODC, 2016).

17. Also of interest is the report arising in the context of a joint initiative between EUROJUST and ENPE in 2013 EUROJUST (2014) Strategic Project on Environmental Crime. Chapter 3 of this report provides an overview of EU legal efforts to tackle trafficking in endangered species (heavily underpinned by CITES). The compilers of the report noted in relation to investigation and sanctioning in such cases:

“Generally speaking, despite binding EU legislation both from a protection and criminal law point of view, cases of trafficking in endangered species only lead to very lenient sanctioning. This situation is aggravated by the fact that trafficking in endangered species could easily be considered a crime without apparent victims, as endangered species do not have a voice. Many practitioners participating in the Strategic Meeting felt that the absence of seriousness with which trafficking in endangered species is often considered should be changed, as should the image of those particular types of crime. The lack of awareness of the impact and scope of this crime should be corrected at national level, and be followed by clear, practical enforcement changes” (p.12)

18. The European Commission has also published a useful response document to its 2014 Consultation on the EU Approach to combat Wildlife Trafficking which emphasises the need to address both lack of awareness and the sanctions available for such crimes:

“Overall, to ensure a more even level of enforcement, an Enforcement Strategy or guidelines for uniform enforcement of EU legislation were considered important by several Member States, organizations and the European Network of Prosecutors for the Environment Practitioners [ENPE]. This could include developing enforcement indicators and/or binding requirements for inspections. Several contributors also suggested for the EU to prepare guidance documents on a variety of relevant issues. The need for close monitoring of the relevant EU directives in the Member States (Habitats Directive, Birds Directive, Environmental Crime Directive) was also highlighted. A majority of contributions considered it essential to ensure stricter and deterrent penalties for wildlife offences in all Member States” (European Commission, 2014: p.10)

19. We succeeded in obtaining permission to review the EU-TWIX data collected, but for confidentiality reasons cannot provide more than a summary. 5605 instances of trafficking of CITES-listed species from 25 EU countries make up the EU-TWIX data shared with us. The data are from between 2005 and 2015 and include information on the prosecution status of the instances of trafficking. Only 219 are fully completed with only a further 253 ongoing and 2 listed as ongoing/completed. Therefore 474 cases (8%) are reported as being prosecuted with the remaining 92% of cases having an unknown status. Certainly, these cases may have prosecution outcomes, but the data has not been collected and shared.
20. Trafficking is of course only one aspect of wildlife crime. Within the Environmental Crime Directive 2008/99 (ECD) there are three conducts in Article 3, which are relevant to wildlife crime – Article 3f, the killing, destruction, possession or taking of specimens of protected wild fauna or flora species, Article 3g, the trading in specimens of protected wild fauna or flora species or parts or derivatives thereof, and Article 3h, any conduct which causes the significant deterioration of a habitat within a protected site. The ECD obliges Member States to provide for criminal sanctions in their national legislation. As evidenced by the in-depth Country Reports produced by **Milieu** Law and Policy Consultants for the Evaluation Study on the Implementation of the Directive¹⁰, the transposition of criminal sanctions has not taken place correctly or completely in all Member States. Table 2 created from the 24 country reports available shows the transposition of Articles 3f, g, and h in order to demonstrate the instruments for prosecution available to Member States. Further

¹⁰ The latest report is available at

http://ec.europa.eu/justice/criminal/criminal-law-policy/environmental-protection/index_en.htm

information about the sanctions available can be found in Section 4 of this report.

21. The European Commission (2016b) has also published the findings from its Environmental Implementation Review (EIR). In regards to wildlife, the EIR addresses the efforts to protect biodiversity and habitats. There are also 28 detailed country reports outlining plans to deal with environmental legislation implementation gaps.

Table 2: Transposition of Environmental Crime Directive conducts related to wildlife crime

COUNTRY	3f	3g	3h
Austria	Y	Ambiguous - Derivatives not included in wildlife legislation.	Y
Belgium	No inclusion of possession of wildlife at Federal Level	N	No criminal provisions at Federal Level
Bulgaria	Y	Y	Y
Cyprus	Y	Y	Y
Czech	Y	Y	Y
Denmark	Broader	Broader	Y
Estonia	Incorrect - endangerment missing	Incorrect - endangerment missing	Y
Finland	Y	Y	Y
Greece	Y	Y	Y
Croatia	Y	Y	Y
Ireland	Incomplete	Incomplete	Incomplete
Italy	Y	Incomplete	Y
Latvia	Incomplete - missing possession of wildlife	Y	Y
Lithuania	Y	Y	Y
Luxembourg	Y	Y	Y
Malta	Y	Y	Y
Netherlands	Y	Y	Y
Poland	Y	Incomplete - parts of wildlife not included	Y
Portugal	Broader	Broader	Broader
Slovakia	Incomplete - no gross negligence; no possession of protected species	Incomplete - no gross negligence	Incomplete - no gross negligence
Slovenia	Y	Y	Y
Spain	Incomplete - missing possession of wildlife. Ambiguous around offences covered.	Incomplete - missing possession of wildlife. Ambiguous around if wildlife parts are covered.	Incomplete - no gross negligence.
Sweden	Y	Y	Y
UK	Y	Y	Y

'Y' indicates yes that this portion of the Article has been transposed. 'N' indicates no and where the information was available in the Milieu Country Report more information is provided.

2.4 – Sentencing in wildlife crime cases

22. As mentioned, we obtained permission to review the EU-TWIX data that has been collected, but for confidentiality reasons cannot provide more than a summary. Summary briefings for the EU Wildlife Enforcement Group are produced by TRAFFIC covering six-month time periods that

detail illegal wildlife trade, seizures and penalties in the EU¹¹. The information identifies which countries have reported. On average, this seems to be less than half of EU countries from between 2009 to 2015. As referred to above, EU-TWIX also consists of an extensive database detailing each violation that CITES member countries have reported. Whereas this appears to be largely engaged with by member countries, there are still countries who do not appear in the database or countries whose data are minimal. There is the capacity within the database to record prosecution status, fines given and court decisions, for example, but very few countries report in a full capacity. Therefore, it is difficult to discuss general trends or approaches to wildlife crime. EU-TWIX is clearly a valuable initiative, but limited in usefulness if all members do not participate and equally. There also seems to be limited applicability of the data with the restrictions around access and wider publication.

23. It is noted in the overall conclusions and recommendations of the EFFACE project (Faure et al, 2016) that the use of *minimum sentences* in the case of wildlife crimes specifically are often proposed across the EU. In terms of the proportionality of such sentencing exercises, the report argues that trafficking of waste or wildlife crime impacts on wider society and the security of citizens indirectly by allowing crime and black economies to grow. Huge profits from ivory, rhino horn and other wildlife products enable militant groups, terrorists and organised criminal groups particularly in Africa to finance their other activities, often overlapping with drugs smuggling, arms trafficking and money laundering; organised crime influence within and outside of the EU (UNODC, 2016).
24. It is useful in this context to note a 2014 Belgium court case reported by Lavrysen et al (2015) at the EU Forum of Judges of the Environment conference in 2015. The case involved the illegal trade in protected and endangered birds. In this case, the court underlined that international trade in endangered plant and animal species has approached a scale and lucrativity comparable to international drugs and arms trafficking. The defendants took advantage of the lack of political priority and thus enforcement of the CITES regulations. In the decision, the courts stressed that the defendants committed a direct and irreversible assault on biodiversity. For profit, the defendants seriously undermined national and international efforts to preserve and protect these already vulnerable bird species.
25. Rosell and Banque's (2016) ENEC study on the Implementation of Directive 2008/99/ec on the Protection of the Environment through Criminal Law' documents the overall use of the six typologies of criminal penalties used in two case studies relevant to this section: one on illegal killing and taking of birds and another intentional poisoning of wildlife. Most countries have only recently implemented legislation to become compliant though, so for a majority of countries it is too early to evaluate the effectiveness of criminalising these environmental offences.

¹¹ Available at http://ec.europa.eu/environment/cites/reports_en.htm

26. A summary of the penalties available to 24 EU countries for 3f, 3g and 3h is provided in the three tables below respectively. The tables include the penalties for both natural and legal persons as required by the ECD.

Table 3: Penalties for Article 3f for Natural and Legal Persons

Country	Natural Persons	Legal Persons
Austria	Damaging the stock of plants or animals: - With intent: up to 2 years of imprisonment or fine up to 360 daily units. - With serious negligence: up to 1 year of imprisonment or fine up to 360 daily units.	Intentional • fine up to 70 daily units With serious negligence • fine up to 55 daily units
Belgium	Federal - none, €500 – 100,000. Flanders - 1 month – 5 years, €100 – 500,000; Brussels - 1 month – 2 years, €25 – 25,000; Wallonia - 8 days – 6 months, €100 – 100,000.	Federal - €500 – 100,000; Flanders - €500 – 1,000,000; Brussels - €500 – 50,000; Wallonia - €500 – 200,000.
Bulgaria	Imprisonment of up to three years or probation and a fine of €1 000 to 5 000 (BGN 2 000 to BGN 10 000). If the act has been committed by negligence, probation and a fine of €500 - 2 500 (BGN 1 000 to BGN 5 000) shall be imposed. For killing, destruction, possession or taking of specimen of European or globally threatened wild vertebrate or a specimen of a species under Annex 3 imprisonment of up to five years and a fine of €2 500 -10 000 (BGN 5 000 to BGN 20 000) shall be imposed.	Administrative sanctions - the type of these sanctions shall be prescribed in a reasoned order issued by a competent authority. For non-compliance with the prescribed coercive administrative measures a pecuniary penalty of €100 to 2,500 (200 to 5,000 leva) can be imposed. A pecuniary penalty of €2,500 to 5,000 (500 to 10,000 leva) can be imposed for violations of the provisions related to killing, destruction, possession or taking of species of protected wild flora and fauna species; and a compensation for damages on certain wild flora and fauna species paid by the offender (the size of the compensation is determined in a tariff adopted by the Council of Ministers) can be ordered. In case of repeated offence, the respective pecuniary penalty is doubled.
Cyprus	With gross negligence, the person found guilty of such offence, is subject to imprisonment not exceeding three years or to a fine not exceeding € 100 000 or to both sentences; with intent the person found guilty is subject to imprisonment for a period not exceeding seven years or to a fine not exceeding €200 000 or to both of these sentences; irrespective of whether they were committed with gross negligence or with intent that have the result of substantial damage to the quality of air, soil water or to animals or plants the person found guilty is subject to imprisonment for a period not exceeding ten years or to a fine not exceeding €500 000 or to both of these sentences;	Same as Natural
Czech	Breach of Plant and Animal Species Protection Regulations • with intent: imprisonment up to three years or disqualification or forfeiture of a thing or another asset • with intent: imprisonment from six months to five years or disqualification or forfeiture of a thing or another asset, in case the offender commits an offence: a) as a member of an organised group, b) with the intention of gaining a substantial benefit for themselves or someone else, c) caused long-term or irreversible damage of the population of wild fauna or flora or a	Breach of Plant and Animal Species Protection Regulations • disqualification or forfeiture of a thing or another asset

	local population or biotope of a specially protected animal or plant species, • with intent: imprisonment from two to eight years in case offender commits an offence: a) in connection with an organised group operating in several States, b) with the intention of gaining a large-scale benefit for themselves or someone else, c) caused long-term or irreversible damage of a local population or biotope of a critically endangered animal or plant species. • by negligence: imprisonment up to one year or disqualification or forfeiture of a thing or another asset	
Denmark	Intentional • Endangerment: fines; • Actual damage: Fine or term of imprisonment up to two years under the Hunting Act and up to one year under the Nature Protection Act. With negligence: • Endangerment: fines; • Endangerment: fines or imprisonment for a term of maximum two years under the Hunting Act and up to one year under the Nature Protection Act where the offence is committed through gross negligence; • Actual damage: fines or imprisonment for a term of maximum two years Hunting Act and up to one year under the Nature Protection Act where the offence is committed through gross negligence. Under particular aggravating circumstances the term of imprisonment is up six years under the Criminal Code.	Fine; other sanctions - Seizure/confiscation of any profits earned
Estonia	Fine or up to 3 years imprisonment (see overview for fine levels).	Fine of €3,200 to 16,000,000
Finland	• Offence against nature conservation: fine • Crime against nature conservation: fine or imprisonment of up to two years	Same as Natural. Forfeiture.
Greece	Imprisonment of at least one year (up to five years) and/or monetary penalty from €3000 up to 60000, in case of intent. • If the act is performed by negligence, imprisonment up to maximum one year or and a monetary penalty from €150 up to 15 000. • In case of a danger of serious or wide spread pollution or degradation, imprisonment of at least two years or and a monetary penalty of €20 000 up to 150 000. • In case of a danger of death of an embryo or a person, or to the emergence of a serious bodily or mental illness to a neonate, or to a heavy bodily or mental illness of a person, imprisonment up to ten years or and monetary penalty from €150 000 up to 500 000. • In case of a serious or wide pollution or degradation, or the death of an embryo or person or the emergence of a heavy bodily or mental illness to a neonate or the heavy bodily or mental illness of a person, imprisonment from five up to twenty years is imposed, or and a monetary penalty from €150 000 up to 500 000. • In cases of acts resulting to danger of widespread pollution, danger of death, widespread pollution, danger of death of a person or embryo, or heavy bodily or mental	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; or • A temporary, or in case of relapse a final cessation of the business activity; or • A temporary or final disqualification from any public funding or aid; or • The publication, at its own expenses, of the irreversible condemnatory court decision in two daily newspapers of wide circulation or combination of all the above sanctions.

	illness, committed by negligence, imprisonment of at least one year (up to five years) or and a monetary penalty from €60 000 up to 150 000. Other sanctions - Additionally to the criminal and administrative sanctions provided for all conducts, all the species of wild flora and fauna which are captured, killed, wounded or collected by violation of the protective measures, prohibitions, terms or restrictions in force, shall be confiscated, either they are in possession of the perpetrator or in the possession of any other third party. Also, any instruments or means which have been used for the illegal capture, killing, wounding or collection of protected species shall also be confiscated. The confiscated items shall be confiscated and shall be handed to natural history museums or other foundations or public legal persons for educational or other aims. Also the fishing or hunting license of the perpetrator is abstracted for a period from three months up to three years. In case of relapse, the license is abstracted for life.	
Croatia	• Killing, destruction, possession, taking, trading in specimens or parts or derivatives of strictly protected wild species: imprisonment from six months to five years/ negligence: imprisonment not exceeding two years • Destroying or causing significant deterioration of habitats in protected areas of nature or on area of ecological importance: imprisonment from six months to five years/ negligence: imprisonment not exceeding two years • Causing significant damage: imprisonment from one to eight years/negligence: imprisonment not exceeding three years. Fine is imposed according to daily income. It amounts to at least thirty and not more than three hundred sixty daily incomes, except for criminal offences committed for personal gain when the maximum fine may amount to five hundred daily incomes.	finest and termination of the legal entity - If the criminal offence is punishable by a fine or imprisonment for a term of up to one year, the legal person may be punished by a fine of 5,000.00 (app. €655.00)1 to 8,000,000.00 kuna (app. €1,049,000.00) - If the criminal offence is punishable by imprisonment for a term of up to five years, the legal person may be punished by a fine of 15,000.00 (app. €1,966.00) to 10,000,000.00 kuna (app. €1,310,374.00) - If the criminal offence is punishable by imprisonment for a term of up to ten years, the legal person may be punished by a fine of 30,000.00 (app. €3,930.00) to 12,000,000.00 kuna (app. €1,572,880.00) - If the criminal offence is punishable by imprisonment for a term of up to fifteen years, the legal person may be punished by a fine of 50,000.00 (app. €6,553.00) to 15,000,000.00 kuna (app. €1,966,100.00) The penalty of termination of a legal person may be imposed if the legal person has been established for the purpose of committing criminal offences or if it has used its activities primarily to commit criminal offences.
Ireland	Depending on the offence, on summary conviction the maximum penalty is €5,000 and/or 6 months imprisonment or on conviction on indictment the maximum penalty is €500,000 and/or 3 years imprisonment.	Same as Natural
Italy	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Latvia	imprisonment for a term not exceeding five years or custodial arrest, or community service, or a fine not exceeding two hundred times the minimum monthly wage (€ 56 914).	fine from €284 570 t- 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequences

Lithuania	Community service of one month to one year (the sanction can be imposed only with the consent of the convict, or a fine of up to €37 650, or restriction of liberty of 3 to 24 months, or arrest of 15 to 90 days, or imprisonment for a term of up to four years.	Fine of up to €1,882,530; or restriction of operation of the legal entity or liquidation of the legal entity.
Luxembourg	• Imprisonment 8 days to six months and/or a fine between €241 - 750 000. • Other criminal sanctions: the reintroduction of animals plants removed from their natural location on the offender's expense and under the supervision of the administration of water and forests. The confiscation of equipment instruments and vehicles that were used by offender to commit the offence.	Fine up to € 1 500 000; Administrative sanctions - the confiscation of any type of property and/or the exclusion from public procurement and/or the dissolution of the legal persons.
Malta	See summary in section 4 for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Netherlands	Under the Economic Offences Act: Felony: Imprisonment not exceeding six years, and fine of fifth category [€78,000] Misdemeanour: Imprisonment not exceeding one year and fine of the fourth category [€19,500].	Fine can be increased up to €780 000 maximum or € 78 000 for the Economic Offences Act Also accessory sanctions: The total or partial cessation of the enterprise for maximum of one year. Confiscation of certain objects; Placing enterprise under judicial supervision; Provision of compensatory services.
Poland	1. For killing or destruction of specimens committed intentionally – a fine or a sanction of restriction of freedom or a sanction of deprivation of liberty for a term up to two years. 2. For killing or destruction of specimens committed unintentionally – a fine or a sanction of restriction of freedom. 3. For possession or taking of specimens committed intentionally – a sanction of deprivation of liberty for a term between three months and five years. 4. For possession or taking of specimens committed unintentionally – a fine or a sanction of restriction of freedom or a sanction of deprivation of liberty for a term up to two years. Administrative sanctions also possible.	Same as Natural
Portugal	• Harm with intent - term of imprisonment up to three years and fine up to 600 days; • Possess with intent - term of imprisonment of six months and fine up to 120 days; • Harm with negligence - term of imprisonment up to one year and fine up to 360 days; • Possess with negligence - fine up to 120 days. Administrative sanctions: When term of imprisonment applicable is not over two years, it may be replaced by work in benefit of the community. If the term of fine applicable to the agent is not over 240 days, the court may only deliver a reprimand.	Fine up to 600 days (harm with intent). Fine up to 120 days (possess with intent). Fine up to 360 days (harm with negligence). Fine up to 120 days (possess with negligence). Administrative sanctions: In alternative to the term of fine, if the applicable fine is not over 240 days, legal persons may be subjected to a reprimand delivered by the court; if the term of fine applicable to the legal person is less than 600 days, legal persons may be only subjected to court supervision or the fine may be replaced by a deposit of good conduct.
Slovakia	Breach of Plant and Animal Species Protection Regulations • imprisonment up to two years. • imprisonment from one to five years in case the offender commits an offence: a) acting in a more serious manner, b) by reason of specific motivation, c) on a considerable scale, d) with the intention to obtain substantial benefit for himself or another, or e) in spite of having been convicted for the same offence during the past twenty-four	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.

	months, or sanctioned for a similar offence during the past twenty-four months. • imprisonment from three to eight years in case offender commits an offence: a) as a member of a dangerous group, b) on an extensive scale, or c) with the intention to obtain large-scale benefit for himself or another. Admin: not classified as criminal offence, then administrative sanction in the form of fine up to 99,- € may be imposed.	
Slovenia	Imprisonment from 30 days to three years; If perpetrator committed the offence out of greed, a monetary fine may also be imposed in the amount of between 30 and 360 times the daily wage of the perpetrator.	Fine up to €500,000.
Spain	Imprisonment from 4 months to 2 years, or a fine of 8 to 24 months. In addition, a prohibition to exercise the professional activity that led to the crime and a prohibition to fish or hunt for a period from 2 to 4 years will always be imposed. If the action deals with endangered species or subspecies, the sanction shall be imposed in its upper half. Finally, when the action affects a protected natural area, the sanction will be one degree higher. However, if the person responsible for the criminal act voluntarily proceeds to repair the damage done, the judges and tribunals will impose a sanction lower in one degree.	The person responsible for the infringement must repair the environmental damage. Fines can range from €500 - 2,000,000, depending on a number of elements, including the gravity of the infringement, its impact on the security of people and the environment, the circumstances of the person responsible, the degree of malice, the degree of participation and the benefit obtained, and the degree of irreversibility of the damage caused. The amounts will be periodically adjusted to inflation.
Sweden	fine (max €17,250) or term of imprisonment not exceeding two years. If the offence is serious, the penalty should be not less than six months nor more than four years imprisonment. If the penalty can be imposed under Section 1, Chapter 29 of the EC, the sanctions are as follows: fine or term of imprisonment not exceeding two years. If the offence is serious, term of imprisonment between six months and six years.	Corporate fine not less than 5000 SEK nor more than 10,000,000 SEK (app. €500 - 1 000 000).
UK	Depending on the offence, and the specific jurisdiction, the maximum sanction that can be imposed is (a) on summary conviction to imprisonment for a term not exceeding 6 months or to a fine not exceeding level 5 on the standard scale (up to £5,000) on the standard scale, or to both, and (b) on conviction on indictment, to a fine. Admin - none.	Same as Natural

Table 4: Penalties for Article 3g for Natural and Legal Persons

Country	Natural Persons	Legal Persons
Austria	Illegal trade with species committed with intent: up to 2 years of imprisonment or fine up to 360 daily units - Illegal trade with species in aggravating circumstances: up to 5 years of imprisonment - Serious negligent trade with species: up to 1 year imprisonment or a fine up to 360 daily units	Intentional • fine up to 70 daily units with serious negligence • fine up to 55 daily units
Belgium	Federal - 15 days – 5 years, €25 – 50,000; Flanders - 1 month – 5 years, €100 – 500,000; Brussels - 1 month – 2 years, €25 – 25,000; Wallonia - <gap>	Federal - €500 – 120,000; Flanders - €500 – 1,000,000; Brussels - €500 – 50,000; Wallonia - <gap>
Bulgaria	imprisonment of up to five years and a fine of €1 000 - EUR 10 000 (BGN 2 000 to BGN	For non-compliance with the prescribed coercive administrative measures a pecuniary

	20 000). If the act has been committed by negligence, probation and a fine of €500 - 2 500 (BGN 1 000 to BGN 5 000) shall be imposed.	penalty of €100 to 2,500 (200 to 5,000 leva) can be imposed. A pecuniary penalty of €750 to 15,000 (1,500 to 30,000 leva) can be imposed. For violation of requirements for shipment of live wild animals and plants a pecuniary penalty of €500 to 10,000 (1,000 to 20,000 leva) can be imposed under Article 128a and for any other violation a pecuniary penalty of €50 to 2,500 (100 to 5,000 leva).
Cyprus	With gross negligence the person found guilty is subject to imprisonment for a period not exceeding three years or to a fine not exceeding €70 000 or to both of these sentences; with intent the person found guilty is subject to imprisonment for a period not exceeding three years or to a fine not exceeding €100 000 or to both of these sentences; irrespective of whether they were committed with gross negligence or with intent which have created substantial damage in the quality of air, soil, and and/or water or to animals and/or plants the person found guilty is subject to imprisonment for a period not exceeding ten years or to a fine not exceeding €500 000 or to both of these sentences	Same as Natural
Czech	Breach of Plant and Animal Species Protection Regulations • with intent: imprisonment up to three years or disqualification or forfeiture of a thing or another asset • with intent: imprisonment from six months to five years or disqualification or forfeiture of a thing or another asset, in case the offender commits an offence: a) as a member of an organised group, b) with the intention of gaining a substantial benefit for themselves or someone else, c) caused long-term or irreversible damage of the population of wild fauna or flora or a local population or biotope of a specially protected animal or plant species, • with intent: imprisonment from two to eight years in case offender commits an offence: a) in connection with an organised group operating in several States, b) with the intention of gaining a large-scale benefit for themselves or someone else, c) caused long-term or irreversible damage of a local population or biotope of a critically endangered animal or plant species. • by negligence: imprisonment up to one year or disqualification or forfeiture of a thing or another asset	Breach of Plant and Animal Species Protection Regulations • disqualification or forfeiture of a thing or another asset
Denmark	Intentional • Endangerment: fines; • Actual damage: Fine or term of imprisonment up to two years under the Hunting Act and up to one year under the Nature Protection Act. With negligence: • Endangerment: fines; • Endangerment: fines or imprisonment for a term of maximum two years under the Hunting Act and up to one year under the Nature Protection Act where the offence is committed through gross negligence; • Actual damage: fines or imprisonment for a term of maximum two years Hunting Act	Fine; other sanctions - Seizure/confiscation of any profits earned

	and up to one year under the Nature Protection Act where the offence is committed through gross negligence. Under particular aggravating circumstances the term of imprisonment is up to six years under the Criminal Code.	
Estonia	Fine or up to 3 years imprisonment (see overview for fine levels).	Fine of €3,200 to 16,000,000
Finland	• Offence against nature conservation: fine • Crime against nature conservation: fine or imprisonment of up to two years	Same as Natural. Forfeiture.
Greece	Imprisonment of at least one year (up to five years) and/or monetary penalty from €3000 up to 60000, in case of intent. • If the act is performed by negligence, imprisonment up to a maximum of one year or and a monetary penalty from €150 to 15 000. • In case of a danger of serious or wide spread pollution or degradation, imprisonment of at least two years or and a monetary penalty of €20 000 up to 150 000. • In case of a danger of death of an embryo or a person, or to the emergence of a serious bodily or mental illness to a neonate, or to a heavy bodily or mental illness of a person, imprisonment up to ten years or and monetary penalty from €150 000 up to 500 000. • In case of a serious or wide pollution or degradation, or the death of an embryo or person or the emergence of a heavy bodily or mental illness to a neonate or the heavy bodily or mental illness of a person, imprisonment from five up to twenty years is imposed, or and a monetary penalty from €150 000 up to 500 000. • In cases of acts resulting to danger of widespread pollution, danger of death, widespread pollution, danger of death of a person or embryo, or heavy bodily or mental illness, committed by negligence, imprisonment of at least one year (up to five years) or and a monetary penalty from €60 000 up to 150 000. Other sanctions - Additionally to the criminal and administrative sanctions provided for all conducts, all the species of wild flora and fauna which are captured, killed, wounded or collected by violation of the protective measures, prohibitions, terms or restrictions in force, shall be confiscated, either they are in possession of the perpetrator or in the possession of any other third party. Also, any instruments or means which have been used for the illegal capture, killing, wounding or collection of protected species shall also be confiscated. The confiscated items shall be confiscated and shall be handed to natural history museums or other foundations or public legal persons for educational or other aims. Also the fishing or hunting license of the perpetrator is abstracted for a period from three months up to three years. In case of relapse, the license is abstracted for life.	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; or • A temporary, or in case of relapse a final cessation of the business activity; or • A temporary or final disqualification from any public funding or aid; or • The publication, at its own expenses, of the irreversible condemnatory court decision in two daily newspapers of wide circulation or combination of all the above sanctions.
Croatia	• Killing, destruction, possession, taking, trading in specimens or parts or derivatives of strictly protected wild species: imprisonment from six months to	Fines and termination of the legal entity - If the criminal offence is punishable by a fine or imprisonment for a term of up to one year, the legal person may be punished by a

	five years/ negligence: imprisonment not exceeding two years • Destroying or causing significant deterioration of habitats in protected areas of nature or on area of ecological importance: imprisonment from six months to five years/ negligence: imprisonment not exceeding two years • Causing significant damage: imprisonment from one to eight years/negligence: imprisonment not exceeding three years. Fine is imposed according to daily income. It amounts to at least thirty and not more than three hundred and sixty daily incomes, except for criminal offences committed for personal gain when the maximum fine may amount to five hundred daily incomes.	fine of 5,000.00 (app. €655.00)1 to 8,000,000.00 kuna (app. €1,049,000.00) - If the criminal offence is punishable by imprisonment for a term of up to five years, the legal person may be punished by a fine of 15,000.00 (app. €1,966.00) to 10,000,000.00 kuna (app. €1,310,374.00) - If the criminal offence is punishable by imprisonment for a term of up to ten years, the legal person may be punished by a fine of 30,000.00 (app. €3,930.00) to 12,000,000.00 kuna (app. €1,572,880.00) - If the criminal offence is punishable by imprisonment for a term of up to fifteen years, the legal person may be punished by a fine of 50,000.00 (app. €6,553.00) to 15,000,000.00 kuna (app. €1,966,100.00) The penalty of termination of a legal person may be imposed if the legal person has been established for the purpose of committing criminal offences or if it has used its activities primarily to commit criminal offences.
Ireland	Depending on the offence, the maximum penalty is €1,500 and/or 12 months if prosecuted summarily or €50,000 and/or 2 years imprisonment if prosecuted on indictment.	Same as Natural
Italy	See overview for general sanctions – country report provides nothing specific.	See overview for general sanctions – country report provides nothing specific.
Latvia	Imprisonment for a term not exceeding two years or custodial arrest, or community service, or a fine not exceeding one hundred times the minimum monthly wage (€ 28 457).	Fine from €284 570 – 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequences
Lithuania	Community service of one month to one year (the sanction can be imposed only with the consent of the convict, or a fine of up to €37 650, or restriction of liberty of 3 to 24 months, or arrest of 15 to 90 days, or imprisonment for a term of up to four years).	Fine of up to €1,882,530; or restriction of operation of the legal entity or liquidation of the legal entity.
Luxembourg	• Imprisonment 8 days to six months and/or a fine between €241 – 750 000. • Other criminal sanctions: the reintroduction of animals and plants removed from their natural location on the offender's expense and under the supervision of the administration of water and forests. The confiscation of equipment instruments and vehicles that were used by offender to commit the offence.	Fine up to €1 500 000; Administrative sanctions – the confiscation of any type of property and/or the exclusion from public procurement and/or the dissolution of the legal persons.
Malta	See overview for general sanctions – country report provides nothing specific.	See overview for general sanctions – country report provides nothing specific.
Netherlands	Under the Economic Offences Act: Felony: Imprisonment not exceeding six years, and fine of fifth category [€78,000] Misdemeanour: Imprisonment not exceeding one year and fine of the fourth category [€19,500]	Fine can be increased up to €780 000 maximum or €78 000 for the Economic Offences Act. Also accessory sanctions: The total or partial cessation of the enterprise for maximum of one year. Confiscation of certain objects; Placing enterprise under judicial supervision; Provision of compensatory services
Poland	1. For the offence committed intentionally – a sanction of deprivation of liberty for a term between three months and five years.	Same as Natural

	2. For the offence committed unintentionally – a fine or a sanction of restriction of freedom or a sanction of deprivation of liberty for a term up to two years. Administrative sanctions possible.	
Portugal	• Trading with intent – term of imprisonment up to one year or fine up to 240 days; • Trading with negligence – term of fine up to 120 days. Administrative sanctions: When term of imprisonment applicable is not over two years, it may be replaced by work in benefit of the community. If the term of fine applicable to the agent is not over 240 days, the court may only deliver a reprimand.	Fine up to 240 days (trading with intent). Fine up to 120 days (trading with negligence). Administrative sanctions: In alternative to the term of fine, if the applicable fine is not over 240 days, legal persons may be subjected to a reprimand delivered by the court; if the term of fine applicable to the legal person is less than 600 days, legal persons may be only subjected to court supervision or the fine may be replaced by a deposit of good conduct.
Slovakia	Breach of Plant and Animal Species Protection Regulations • imprisonment from six months to three years • imprisonment from one to five years in case the offender commits an offence: a) acting in a more serious manner, b) by reason of specific motivation, c) on a considerable scale, d) with the intention to obtain substantial benefit for himself or another, or e) in spite of having been convicted for the same offence during the past twenty-four months, or sanctioned for a similar offence during the past twenty-four months. • imprisonment from three to eight years in case offender commits an offence: a) as a member of a dangerous grouping, b) on an extensive scale, or c) with the intention to obtain large-scale benefit for himself or another. Admin: not classified as criminal offence, then administrative sanction in the form of fine up to 99,- € may be imposed.	Confiscation of a sum of money in amount of €800 -1 660 000. 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.
Slovenia	1. Imprisonment of 30 days to three years; 2. if the object from 1 is of a large or exceptional conservation significance or if the offence has been committed in a criminal organisation to carry out such acts: imprisonment of six months to five years. If perpetrator committed above offence out of greed, a monetary fine may also be imposed in the amount of between 30 and 360 times the daily wage of the perpetrator.	Fine from €50,000 – 1,000,000 or a fine of maximum two hundred times of the resulting damage or of the proceeds from the offence.
Spain	Imprisonment from 4 months to 2 years, or alternatively a fine of 8 to 24 months. In any case, that sanction will be accompanied by a prohibition to exercise a profession or occupation and the prohibition to hunt or fish for a period of 2 to 4 years.	The person responsible for the infringement must repair the environmental damage. Fines can range from EUR 500 to 2,000,000, depending on a number of elements, including the gravity of the infringement, its impact on the security of people and the environment, the circumstances of the person responsible, the degree of malice, the degree of participation and the benefit obtained, and the degree of irreversibility of the damage caused. The amounts will be periodically adjusted to inflation.
Sweden	Fine (max €17,250) or term of imprisonment not exceeding two years. If the offence is serious, the penalty should be between six months and four years.	Corporate fine not less than 5000 SEK nor more than 10,000,000 SEK (app. €500 – 1 000 000).
UK	Depending on the offence, the maximum sanction that can be imposed is (a) on summary conviction, to a fine not exceeding level 5 on the standard scale (up to £5,000)	Same as Natural

	or to a term of imprisonment not exceeding 6 months, or to both; and (b) on conviction on indictment, to a term of imprisonment not exceeding 5 years or to a fine, or to both. For certain offences, the maximum term of imprisonment on summary conviction is 3 months, and on indictment is 2 years. Admin – none	
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Table 5: Penalties for Article 3h for Natural and Legal Persons

Country	Natural Persons	Legal Persons
Austria	Damaging protected habitats committed with intent: Imprisonment up to 2 years or fine up to 360 daily units. - Damaging protected sites with serious negligence: up to 1 year of imprisonment or fine up to 360 daily units.	Intentional • fine up to 70 daily units with serious negligence • fine up to 55 daily units
Belgium	Federal - /, €500 – 100,000; Flanders - 1 month – 5 years, €100 – 500,000; Brussels - 3 months – 3 years, €250 – 75,000; Wallonia -8 days – 6 months, €100 – 100,000	Federal - €500 – 100, 000; Flanders - €500 – 1,000,000; Brussels - €1,500 – 150,000; Wallonia - €500 – 200,000.
Bulgaria	Imprisonment of up to three years or probation, and a fine of €1 000 - 5 000 (BGN 2 000 to BGN 10 000). If the act has been committed by negligence, probation and a fine of €500 - 2 500 (BGN 1 000 to BGN 5 000) shall be imposed.	Coercive administrative sanctions can be imposed, as well as penalty for non-compliance with these sanctions. In addition, a pecuniary penalty of €50 to 2,500 (100 to 5,000 leva) can be imposed.
Cyprus	With gross negligence, the person found guilty of such offence, is subject to imprisonment not exceeding three years or to a fine not exceeding €100 000 or to both sentences; with intent the person found guilty is subject to imprisonment for a period not exceeding seven years or to a fine not exceeding €200 000 or to both of these sentences; irrespective of whether they were committed with gross negligence or with intent that have the result of substantial damage to the quality of air, soil water or to animals or plants the person found guilty is subject to imprisonment for a period not exceeding ten years or to a fine not exceeding €500 000 or to both of these sentences;	Same as Natural
Czech	Breach of Plant and Animal Species Protection Regulations, with intent or by negligence • imprisonment up to three years or disqualification or forfeiture of a thing or another asset	Breach of Plant and Animal Species Protection Regulations, with intent or by negligence • disqualification or forfeiture of a thing or another asset
Denmark	Intentional • Endangerment: fines; • Actual damage: Fine or term of imprisonment up to two years under the Hunting Act and up to one year under the Nature Protection Act. With negligence: • Endangerment: fines; • Endangerment: fines or imprisonment for a term of maximum two years under the Hunting Act and up to one year under the Nature Protection Act where the offence is committed through gross negligence; • Actual damage: fines or imprisonment for a term of maximum two years Hunting Act and up to one year under the Nature Protection Act where the offence is committed through gross negligence.	?

	Under particular aggravating circumstances the term of imprisonment is up to six years under the Criminal Code.	
Estonia	Fine or up to 3 years imprisonment (see overview for fine levels).	Fine of EUR 3,200 to 16,000,000
Finland	Crime against nature conservation: fine or imprisonment of up to two years	Same as Natural. Forfeiture.
Greece	Imprisonment of at least one year (up to five years) and/or monetary penalty from €3000 -60000, in case of intent. • If the act is performed by negligence, imprisonment up to maximum one year or and a monetary penalty from €150 - 15 000. • In case of a danger of serious or wide spread pollution or degradation, imprisonment of at least two years or and a monetary penalty of €20 000 - 150 000. • In case of a danger of death of an embryo or a person, or to the emergence of a serious bodily or mental illness to a neonate, or to a heavy bodily or mental illness of a person, imprisonment up to ten years or and monetary penalty from €150 000 - 500 000. • In case of a serious or wide pollution or degradation, or the death of an embryo or person or the emergence of a heavy bodily or mental illness to a neonate or the heavy bodily or mental illness of a person, imprisonment from five up to twenty years is imposed, or and a monetary penalty from €150 000 - 500 000. • In cases of acts resulting to danger of widespread pollution, danger of death, widespread pollution, danger of death of a person or embryo, or heavy bodily or mental illness, committed by negligence, imprisonment of at least one year (up to five years) or and a monetary penalty from €60 000 - 150 000.	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; or • A temporary, or in case of relapse a final cessation of the business activity; or • A temporary or final disqualification from any public funding or aid; or • The publication, at its own expenses, of the irreversible condemnatory court decision in two daily newspapers of wide circulation or combination of all the above sanctions.
Croatia	• Killing, destruction, possession, taking, trading in specimens or parts or derivatives of strictly protected wild species: imprisonment from six months to five years/ negligence: imprisonment not exceeding two years • Destroying or causing significant deterioration of habitats in protected areas of nature or on area of ecological importance: imprisonment from six months to five years/ negligence: imprisonment not exceeding two years • Causing significant damage: imprisonment from one to eight years/negligence: imprisonment not exceeding three years. Fine is imposed according to daily income. It amounts to at least thirty and not more than three hundred and sixty daily incomes, except for criminal offences committed for personal gain when the maximum fine may amount to five hundred daily incomes.	finest and termination of the legal entity - If the criminal offence is punishable by a fine or imprisonment for a term of up to one year, the legal person may be punished by a fine of 5,000.00 (app. €655.00)1 to 8,000,000.00 kuna (app. €1,049,000.00) - If the criminal offence is punishable by imprisonment for a term of up to five years, the legal person may be punished by a fine of 15,000.00 (app. €1,966.00) to 10,000,000.00 kuna (app. €1,310,374.00) - If the criminal offence is punishable by imprisonment for a term of up to ten years, the legal person may be punished by a fine of 30,000.00 (app. €3,930.00) to 12,000,000.00 kuna (app. €1,572,880.00) - If the criminal offence is punishable by imprisonment for a term of up to fifteen years, the legal person may be punished by a fine of 50,000.00 (app. €6,553.00) to 15,000,000.00 kuna (app. €1,966,100.00) The penalty of termination of a legal person may be imposed if the legal person has been established for the purpose of committing criminal offences or if it has used its activities primarily to commit criminal offences.
Ireland	Depending on the offence, on summary conviction the maximum penalty is €5,000 and/or 6 months imprisonment or on conviction on indictment the maximum penalty is €500,000 and/or 3 years imprisonment.	Same as Natural

Italy	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Latvia	Destruction or damaging of specially protected nature territories, natural persons may be punished by imprisonment for a term not exceeding five years or custodial arrest, or community service, or a fine not exceeding two hundred times the minimum monthly wage (€56 914). For the illegal hunting in a specially protected nature territory the sanctions applicable are: imprisonment for a term not exceeding two years, or custodial arrest, or community service, or a fine not exceeding one hundred times the minimum monthly wage (€28 457). For the catching of fish or aquatic animals in a specially protected nature territory, natural persons are punished by imprisonment for a term not exceeding two years or custodial arrest, or community service, or a fine not exceeding one hundred times the minimum monthly wage (€28 457). For the arbitrary cutting, destroying or damaging trees in a specially protected nature territory, the sanctions applicable to natural persons are: imprisonment for a term not exceeding three years or custodial arrest, or community service, or a fine not exceeding one hundred and fifty times the minimum monthly wage (€42 686).	Fine from €284 570 - 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequences.
Lithuania	Fine of up to €37 650, or restriction of liberty of 3 to 24 months, or arrest of 15 to 90 days, or imprisonment for a term of up to five years.	Fine of up to €1,882,530; or restriction of operation of the legal entity or liquidation of the legal entity.
Luxembourg	• Imprisonment 8 days to sixth months and/or a fine between €241 - 750 000. • Other criminal sanctions: the reintroduction of animals plants removed from their natural location on the offender's expense and under the supervision of the administration of water and forests. The confiscation of equipment instruments and vehicles that were used by offender to commit the offence.	Fine up to €1 500 000; Administrative sanctions - the confiscation of any type of property and/or the exclusion from public procurement and/or the dissolution of the legal persons.
Malta	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Netherlands	Under the Economic Offences Act: Felony: Imprisonment not exceeding six years, and fine of fifth category [€78,000] Misdemeanour: Imprisonment not exceeding one year and fine of the fourth category [€19,500].	Fine can be increased up to €780 000 maximum or €78 000 for the Economic Offences Act. Also accessory sanctions: The total or partial cessation of the enterprise for maximum of one year. Confiscation of certain objects; Placing enterprise under judicial supervision; Provision of compensatory services
Poland	1. For the offence committed intentionally – a fine or a sanction of restriction of freedom or a sanction of deprivation of liberty for a term up to two years. 2. For the offence committed unintentionally – a fine, or a sanction of restriction of freedom. Administrative sanctions possible.	Same as Natural
Portugal	• Harm with intent - term of imprisonment up to three years and fine up to 600 days; • Possess with intent - term of imprisonment of six months and fine up to 120 days; • Harm with negligence - term of imprisonment up to one year and fine up to 360 days; • Possess with negligence - fine up to 120 days.	Fine up to 600 days (harm with intent). Fine up to 120 days (possess with intent). Fine up to 360 days (harm with negligence). Fine up to 120 days (possess with negligence). Administrative sanctions: In alternative to the term of fine, if the applicable fine is not over 240 days, legal persons may be subjected to a reprimand delivered by the

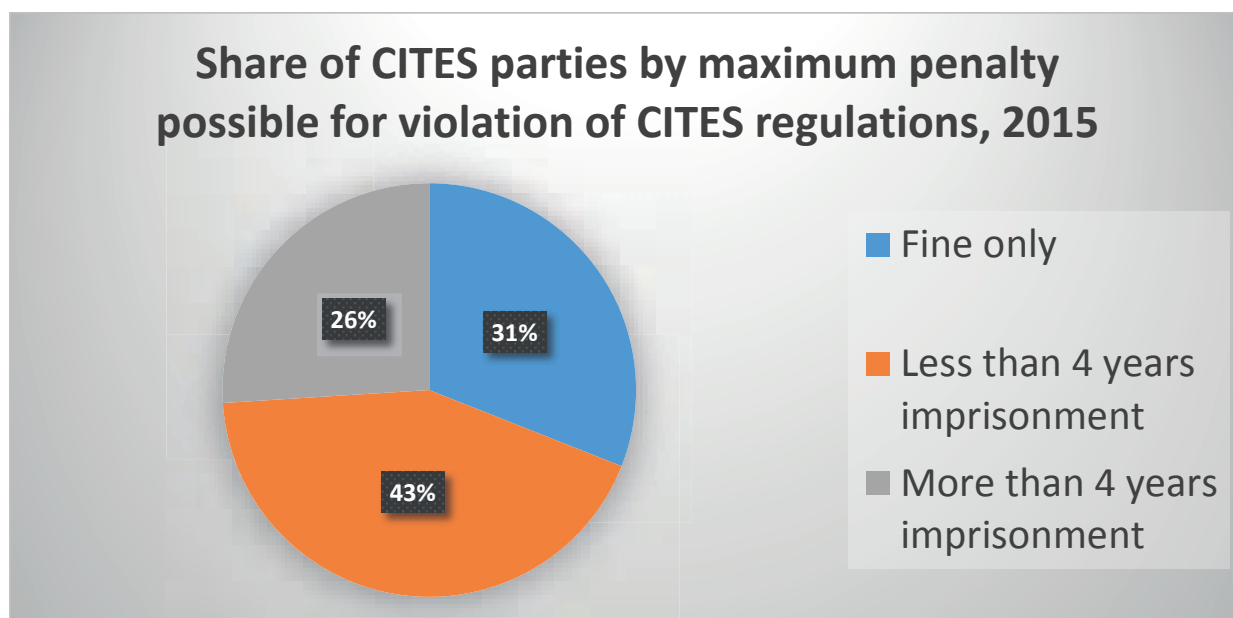
	Administrative sanctions: When term of imprisonment applicable is not over two years, it may be replaced by work in benefit of the community. If the term of fine applicable to the agent is not over 240 days, the court may only deliver a reprimand.	court; if the term of fine applicable to the legal person is less than 600 days, legal persons may be only subjected to court supervision or the fine may be replaced by a deposit of good conduct.
Slovakia	Breach of Plant and Animal Species Protection Regulations - imprisonment up to two years. - imprisonment from one to five years in case the offender commits an offence: - acting in a more serious manner, - by reason of specific motivation, - on a considerable scale, - with the intention to obtain substantial benefit for himself or another, or - in spite of having been convicted for the same offence during the past twenty-four months, or sanctioned for a similar offence during the past twenty-four months. - imprisonment from three to eight years in case offender commits an offence: - as a member of a dangerous group, - on an extensive scale, or - with the intention to obtain large-scale benefit for himself or another. Admin: not classified as criminal offence, then administrative sanction in the form of fine up to 99,- € may be imposed.	Confiscation of a sum of money in amount of €800 Euro - 1 660 000. 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.
Slovenia	1. imprisonment from 30 days to five years; 2. if the offence from 1 results in serious bodily injury or substantial damage to the quality of air, soil or water or animals or plants: imprisonment from 30 days to eight years. If perpetrator committed above offence out of greed, a monetary fine may also be imposed in the amount of between 30 and 360 times the daily wage of the perpetrator.	A fine from €50,000 - 1,000,000 or a fine of maximum two hundred times of the resulting damage or of the proceeds from the offence.
Spain	imprisonment from 4 months to 2 years, or a fine between 8 and 24 months. The sanction is in any case coupled with the prohibition to carry out a profession or occupation and the prohibition to hunt or fish for a period of two to four years. Moreover, if the action involves endangered species or subspecies, the sanction shall be imposed in its upper half. Likewise, when the acts affect a protected natural area, the sanction will be one degree higher. if the person responsible for the criminal conduct, voluntarily repairs the damage done, judges and tribunals will impose the sanction inferior in one degree to the one established in the SCC.	The person responsible for the infringement must repair the environmental damage. Fines can range from €500 to 2,000,000, depending on a number of elements, including the gravity of the infringement, its impact on the security of people and the environment, the circumstances of the person responsible, the degree of malice, the degree of participation and the benefit obtained, and the degree of irreversibility of the damage caused. The amounts will be periodically adjusted to inflation.
Sweden	fine (max €17,250). However, if the liability of the offence can be imposed under Sections 1 or 2b, chapter 29 of the EC, those sanctions apply	Corporate fine not less than 5000 SEK nor more than 10,000,000 SEK (app. €500 - 1 000 000).
UK	Depending on the offence, the maximum sanction that can be imposed is (a) on summary conviction to a fine not exceeding £20,000 or (b) on conviction on indictment to a fine. Under the transposing legislation for the Environmental Liability Regulations, the maximum sanction that can be imposed is (a) on summary conviction to a fine not exceeding the statutory maximum or to imprisonment for a term not exceeding 12 months or both, or (b) on conviction on indictment to a fine or to imprisonment for a	Same as Natural

	term not exceeding 2 years or both. Admin - remediation notices.	
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27. As will be evident from a comparison of the above penalties available for violations of Article 3f, g and h, there is a wide range of approaches to penalisation. We will discuss in more detail in the Sanctions section of this report if these penalties are fit for purpose. What is important to note, is that these are what is available and does not provide data on what the actual sentences for wildlife crimes is in the different Member States.

28. In addition, the World WISE Wildlife report by the United Nations Office on Drugs and Crime (UNODC) offers the following (limited) data on maximum penalties available:

FIG. 1 (Adapted from UNODC, 2016).



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2.5 – General conclusions on wildlife crime

29. Indications are that less of this kind of crime is being recorded across the EU compared to other categories of environmental crime, and many of the available reports on environmental crime do not cover it or do not have a dedicated section on it (waste and water tend to get more attention).

¹² The full list of Contracting Parties to CITES is available here at: <https://cites.org/eng/disc/parties/chronolo.php>

30. When this issue is dealt with directly, the links are usually emphasised with organised crime and other kinds of crime, including money laundering and terrorism. Trafficking is the main focus rather than other forms of wildlife crime.
31. The available data are very fractured and very difficult to compare in any meaningful way. CITES reporting is haphazard in many jurisdictions.
32. EU-TWIX offers an important step forward in collating this kind of data, as does the UNODC's World WISE report, but needs to be more uniformly engaged with.

2.6 – Summary and recommendations

33. From the literature and data collected it can be seen that wildlife crime is becoming more of a priority in the EU. This is also evident by the EU Action Plan to Combat Wildlife Trafficking (European Commission, 2016a). Whereas it may appear from the data collected that wildlife crime is increasing, this may be due to the increased focus. Yet, not all countries are engaging with data sharing through EU-TWIX indicating wildlife crime has not increased in priority everywhere. Good practice is evident in countries such as the UK, which have dedicated Wildlife Crime Units and officers, and have made significant efforts to professionalise wildlife law enforcement. Increased engagement with CITES, EU-TWIX and creation of specialised forces should be considered by member states. Of the 5605 records shared with us about wildlife crime from EU-TWIX, only 33 appear to be criminal charges and eight of these are after 2010. Further analysis to investigate implementation of the EU Environmental Crime Directive should be undertaken.

3 - Chemical Pollution

3.1 – Sources of information on chemical pollution

34. Chemical pollution is probably the least readily distinguishable area amongst the identified working groups in terms of crime figures and surrounding reports and documentation. No single repository of crime data has developed which amasses such data from different jurisdictions and the terminology one sees in the reports that are available tends to be somewhat inconsistent. So, as well as 'chemical pollution' one also sees 'dangerous substances', 'hazardous waste', 'industrial waste' etc. (which in other contexts mean different things). There is considerable overlap with various concepts of 'waste'. This issue is highlighted by the 2014 EnviCrimeNet preliminary report on environmental crime in Europe:

"Environmental crime covers a wide range of offences. The EnviCrimeNet experts distinguish them by topics such as chemicals, endangered species, energy, pollution, waste and others (e.g. fires, biodiversity, coastal and protected areas, or food safety). Whilst there are other possibilities to categorise those crimes, it is important to realise potential overlaps: illegal dumping of waste will usually put soils and ground water at risk; the use of fuel oil mixed with waste oil will cause air pollution etc" (p.6)

35. Information on this kind of crime tends to come from individual accounts of particular case studies described either in official reports or through media sources; many of these incidents being trans-frontier in nature. Particular attention in the reports is paid to oil spills and shipping-incidents, as well as to incidents which impact upon water supplies (see Dupont and Goldenman (2010)). Thus, a report from IMPEL from July 2000 on Criminal Enforcement of Environmental Law in the European Union notes:

"On second thought the Portuguese respondent, however, reports problems of marine oil pollution on the Atlantic coast of Portugal, caused by illegal washing of tanks by oil tankers. Most of the countries which report of trans frontier pollution incidents mention that it concerns cases of transboundary water pollution, usually involving transboundary rivers. This apparently is the case for Austria and Finland. Some countries in addition report of problems with water pollution incidents which take place just outside of the territorial waters. This was also the case for Finland, where 100 cases of marine oil pollution were reported in 1997 and with Italy, where report is made of a spectacular case of the sinking of 80 ships with radioactive waste" (Faure and Heine, 2000: p.73)

36. EnviCrimeNet (2014) has also emphasised the predominance of pesticide-related cases in this area:

“The chemicals of most concern are currently pesticides. They can be divided into two major groups, plant protection products and biocides. In an international context (e.g. Food and Agriculture Organisation – FAO) the definition also includes certain medicinal and veterinary medicinal products, which appear under the term "pesticides". The illegal trade and use of pesticides has been detected across Europe, with many criminal networks involved in this activity” (p.7)

37. INTERPOL’s 2015 report on Environmental Crime and its Convergence with other Serious Crimes (INTERPOL, 2015) notes how, in Germany, authorities have identified particular criminal activities being undertaken in relation to specific environmental crimes, including: counterfeiting associated with the illegal trade in pesticides. Another less typical example of this kind of crime is discussed in the EUROPOL 2013 Threat Assessment of Environmental Crime, which describes:

“criminal activities includ[ing] petrol pollution as a result of the intermixing of low quality petrol with toxic residues produced during the illicit production process, the sale of maritime vessels contaminated with asbestos, the environmentally hazardous sale of an appropriate biogas fuel and illegal sand mining” (EUROPOL. 2013: p.6)

38. One source of potential information in this area is the Secretariat of the Rotterdam Convention, which promotes shared responsibilities in relation to importation of hazardous chemicals¹³. Nevertheless, unlike an instrument like CITES, there is no regular reporting requirements imposed for each country.

3.2 – Investigation of chemical pollution

39. A theme which comes through very strongly in the available reports is the particularly high level of specialist knowledge required to successfully detect, investigate and prosecute crime involving chemical pollution. Thus, EUROJUST notes in its 2014 strategic report:

“In addition to the challenges posed by differences in legislative implementation, environmental legislation in general is often highly technical and thus requires a certain degree of technical expertise (see the above chapters). This creates an obvious challenge for law enforcement and judicial authorities. The situation is no different for surface water pollution: some specific knowledge is for instance required of the chemicals used and the damage these can cause to the environment as well as to public health” (EUROJUST, 2014: p.21)

40. Furthermore:

¹³ The website for the Convention is here - <http://www.pic.int/Home/tabid/855/language/en-US/Default.aspx#5>

“A criminal investigation can be negatively affected when police or customs officers detect the possibility of an environmental offence but the required expertise to determine the technical requirements is not available on a 24 hours per day, seven days per week basis. Generally, there are only a few specialists at national level. Additionally, any assessment of the material and chemical composition of waste has to be performed by an expert, which significantly increases the cost of evidence proceedings. The same applies to DNA testing (see chapter above on trafficking in endangered species). Legal and technical assistance is demanding and not always executed with the necessary level of expertise, possibly leading to disagreement among experts” (EUROJUST, 2014: p.32).

41. EnviCrimeNet (2014) similarly reports:

“Officials from a Central European MS 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. At the same time, law enforcement in the same country holds intelligence about ongoing OC activity but lacks the human resource capacity to launch investigations. The interviewed officials are convinced that this situation is not unique and that neighbouring countries suffer from similar problems” (p.21).

42. This case, reported by EUROPOL, also exemplifies the need for specialist training when dealing with cases involving chemicals, whilst also demonstrates the overlap with waste transportation cases:

“Case 1: Lack of Prosecutions in the Transport of Hazardous Waste - As part of its traffic and road safety mandate, the German Traffic Police regularly stop and check heavy goods vehicles (HGVs). They reported that they regularly find HGVs loaded with leaking barrels of battery acid or other chemical substances, using a risk-based approach to identify particularly dangerous appearing vehicles. HGVs and barrels containing toxic and hazardous waste are (temporarily) confiscated to deal with the immediate danger. However, the case reports are rarely accepted by the competent criminal police unit or public prosecutor agency as the incident is not high enough a priority. A competent HGV management authority cannot be identified easily, as the HGVs are in transit. There are no fines issued and the police are often left to pay for the waste disposal. Cases are not stored in national data systems; the origin or destination of the HGV is not investigated, nor is the business structure which may be behind the hazardous waste transport. There is a neighbouring MS with a national database which actually would cover such cases. However, the coding system in use is too complicated for an untrained patrol or traffic officer to systematically use” (EUROPOL, 2013: p.23)

43. Some jurisdictions have responded by setting up specialist services to investigate such crime, including one in the Netherlands, which,

according to the EUROJUST report (2014) is attached to the Department of Infrastructure and Environment, with general powers of investigation (particularly with regard to hazardous wastes, chemicals and pesticides and persistent organic pollutants) - special investigative officers (supervisory officers with additional power to investigate) partly attached to the Department of Infrastructure and Environment - Dutch Customs Organisation (Belastingdienst/Douane).

44. The EnviCrimeNet Intelligence Project on Environmental Crime (2015) also highlights that the trafficking in hazardous chemicals/fuels is a problem in its own right, and one that is connected to organised crime. Links are also drawn between the illegal (parallel) import of pesticides and other chemicals to public health concerns.

3.3 – Prosecution of chemical pollution and other modes of enforcement

45. Rosell and Banque's (2016) study on the implementation of Directive 2008/99/ec on the Protection of the Environment through Criminal Law' provides some data related to criminalisation of pollution-related offences in the analysis of Member countries approaches to Article 3a of the Environmental Crime Directive (the discharge, emission or introduction of a quantity of materials or ionising radiation into air, soil or water, which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants) and Article 3d (the operation of a plant in which a dangerous activity is carried out or in which dangerous substances or preparations are stored or used and which, outside the plant, causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants).
46. Additionally, the collection of country reports by Milieu Law and Policy Consultants regarding the implementation of the ECD indicate the success of the transposition of the ECD into the national legislation of 24 EU countries. In addition to Articles 3a and 3d, Article 3i - the production, importation, exportation, placing on the market or use of ozone-depleting substances – may in some definitions be relevant to pollution violations. The following table summarises Member State's efforts in this regard.

Table 6: Transposition of the Environmental Crime Directive pollution related articles

COUNTRY	3a	3d	3i
Austria	Y	Y	Y
Belgium	Partial	N/A	Incomplete in Wallonia
Bulgaria	Y	Y	Y
Cyprus	Y	Y	Y
Czech	Y	Y	Incomplete and incorrect
Denmark	Fails to make discharge, emission or introduction of ionising radiation into	Y	Y

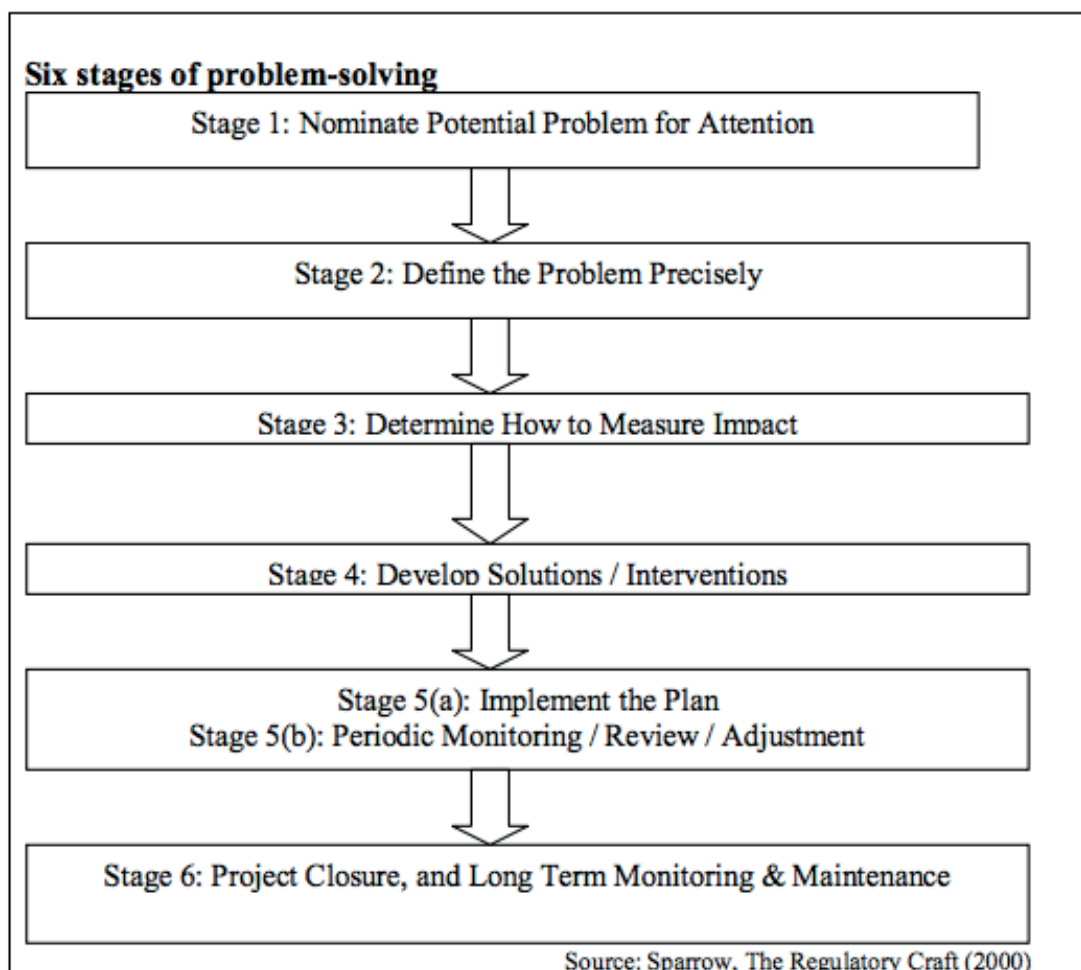
	the environment a criminal offence		
Estonia	Y	Incomplete - serious negligence is missing	Incomplete - missing negligence
Finland	Y	Y	Y
Greece	Y	Y	Y
Croatia	Y	Y	Y
Ireland	Incomplete	Y	Incomplete
Italy	Incomplete	Y	Y
Latvia	Incomplete	Incomplete	Incomplete
Lithuania	Y	Y	Y
Luxembourg	Broader	Broader	Y
Malta	Y	Y	Y
Netherlands	Y	Y	Y
Poland	Y	Incomplete - only damage by substances	Incomplete - nothing about recovery and destruction
Portugal	Incomplete - only ionising materials	Incomplete - only to dangerous substances not including those plants in which "preparations are stored or used".	Incorrect - conduct to be qualified as criminal requires it to cause significant deterioration and losses in protected species
Slovakia	Incomplete - no endangerment	Incomplete - no endangerment	Incorrect - transposing legislation requires damage to the environment as a result of illegal handling of ODS to trigger criminal liability.
Slovenia	Y	Y	Y
Spain	Y	Y	Incomplete - missing negligence
Sweden	Y	Y	Y
UK	Stricter	Y	Y

'Y' indicates yes that this portion of the Article has been transposed. 'N' indicates no and where the information was available in the Milieu Country Report more information is provided.

47. The Scottish Environmental Protection Agency (SEPA) produces some very detailed environmental enforcement reports every year which include useful case studies concerning chemical cases. Hence, the 2014/15 report (SEPA, 2015) describes a case in which a site was located 300 metres from Wishaw General Hospital and adjacent to the main West Coast rail line, numerous industrial premises and several densely populated residential areas, including schools, a nursery and care homes. SEPA used statutory powers to remove the majority of the 114,000 tyres and chemicals from the site in order to reduce the potential impact in the event of a fire. The same report covers a case involving a fine in excess of £7,500 in which on 13 and 14 May 2014 at Glenfarg Water Treatment works, Aluminium Sulphate was discharged into the River Farg, a tributary of the River Earn, and the River Tay, resulting in the death of approximately 4,900 fish and other organisms. SEPA's investigation revealed a water valve had accidentally been left open overnight, storage tanks had overflowed and the chemical had entered the River Farg via a surface water drain on site. The discharge caused the almost complete removal of trout, and possibly salmon, together with the complete removal of all fry from the preceding spawning season along the 3km stretch of the River Farg, in addition to impacting on lamprey, eels and stickleback populations. The 2012/13 SEPA report (SEPA,

2013) also discusses what it calls a ‘problem-solving approach’ for dealing with the most serious environmental problems, which it sets out in the following diagram:

FIG.2 (from SEPA, 2013:p.6)



3.4 – Sentencing in chemical pollution cases

48. In the literature, Glicksman and Earnhart (2007a) have conducted an investigation, related to our analysis, in which they assess the comparative effectiveness of different government instruments for enforcing the federal Clean Water Act regulation on facilities in the US chemical industry. More specifically, they investigate the effects of inspections, monetary fines, injunctive relief and supplemental environmental projects on general and specific deterrence. Thereby, they make a double distinction between federal and state sanctions, imposed through the administrative and the criminal track respectively. Their methodology is twofold: they conduct an empirical analysis of the level of wastewater discharges relative to facility-specific effluent limitations and they conduct a survey among facilities in the same industry to analyse

self-reported effectiveness of government interventions. The authors found that there is significant variability in the effectiveness of intervention techniques, depending on the level of government which is responsible (federal or state) and on the implementation track chosen (criminal or administrative). In a further contribution, Glicksman and Earnhart (2007b) investigate competing theories of regulatory behaviour to induce firm compliance. Based on the same survey of facilities regulated under the Clean Water Act, they assess the existence of deterrence-based and cooperative enforcement efforts. They find that both approaches are present in the regulator-regulated entity relationship and that there is not one single dimension which accurately reflects the ways in which both parties interact.

49. EU Member States also have adopted a multi-faceted approach to the regulation of pollution violations. The following tables detail the range of sanctions available to 24 Member States, but as noted above these are sanctions that are available rather than an indication of actual prosecutions and sentencing.

Table 7: Penalties for Article 3a for Natural and Legal Persons

Country	Natural Persons	Legal Persons
Austria	With intent: up to 3 years of imprisonment, and, if with aggravating circumstances, imprisonment of 6 months to 5 years or 5 to 15 years or 10 to 20 years or lifelong depending on the offence. With negligence: up to 1 year imprisonment or fine up to 360 daily units, and if with aggravating circumstances, up to 2 years or fine up to 360 daily units or 3 years or of 6 months to 5 years.	Intentional - Abstract endangerment: up to 85 daily units; In case of concrete damage: up to 100 units. With negligence - Abstract endangerment: fine up to 55 daily units; Concrete damage: fine up to 70 daily units.
Belgium	Federal - 8 days – 10 years, €250 – 7,000,000; Flanders - 1 month – 5 years, €100 – 500,000; Brussels - 8 days – 3 years, €0.6445 – 75,000; Wallonia - 8 days – 3 year, €100 – 1,000,000.	Federal - €500 – 14,000,000; Flanders - €500 – 1,000,000; Brussels - €500 – 150,000; Wallonia - €500 – 2,000,000.
Bulgaria	One to five years and a fine of €2 500 - 15 000 (BGN 5 000 to BGN 30 000). When the offence causes the death of or serious bodily harm to one or more persons, imprisonment of five to twenty years and a fine of €5 000 - 25 000 (BGN 10 000 to BGN 50 000) shall be imposed. When non-minor damages to the environment are caused, imprisonment of two to eight years and a fine of €5 000 - 25 000 (BGN 10 000 to 50 000 BGN) shall be imposed. If the act has been committed by negligence, imprisonment of up to three years and a fine of €1 000 - 10 000 (BGN 2 000 to BGN 20 000) shall be imposed.	Coercive administrative measures can be imposed in the cases of occurrence of an immediate danger of environmental pollution or of damage to human health or property and prevention or termination of administrative violations related to environmental protection, as well as prevention and/or elimination of the harmful consequences of such violations. The type of these sanctions shall be prescribed in a reasoned order issued by a competent authority. A pecuniary penalty of €500 - 10 000 (BGN 1 000 to BGN 20 000) can be imposed for any violation of the act that does not constitute a criminal offence. Any person, who intentionally causes environmental pollution or damage to another person, shall compensate the aggrieved party (civil liability). In case of repeated offence, the respective pecuniary penalty is doubled.
Cyprus	With gross negligence, the person found guilty of such offence, is subject to imprisonment not exceeding three years or to a fine not exceeding €100 000 or to both sentences; with intent, the person found	Same as Natural

	guilty is subject to imprisonment for a period not exceeding seven years or to a fine not exceeding €200 000 or to both of these sentences; irrespective of whether they were committed with gross negligence or with intent that have the result of substantial damage to the quality of air, soil water or to animals or plants the person found guilty is subject to imprisonment for a period not exceeding ten years or to a fine not exceeding €500 000 or to both of these sentences.	
Czech	With intent, imprisonment of up to three years or disqualification Additionally, if with intent: imprisonment from one to five years, in case the offender commits an offence: a) repeatedly, or b) violating an important obligation arising from the employment, profession, position or function, or an obligation imposed by law, or c) caused permanent or long-term damage of a component of the environment, or d) the removal of the consequences requires expenses in a large extent, or e) with the intention of gaining a substantial benefit for themselves or someone else. Also with intent: imprisonment from two to eight years, in case the offender commits an offence with the intention of gaining a large-scale benefit for themselves or someone else. By negligence: imprisonment of up to six months or disqualification. Additionally by negligence: imprisonment up to two years or disqualification, in case the offender commits an offence: a) violating an important obligation arising from the employment, profession, position or function, or an obligation imposed by law, or b) caused permanent or long-term damage of a component of the environment, or c) the removal of the consequences requires expenses in a large extent.	Violation of the environmental legislation: disqualification.
Denmark	Intentional: • Endangerment: fines; • Actual damage: fines or imprisonment for a term of maximum two years. With negligence: • Endangerment: fines. • Endangerment: fines or imprisonment for a term of maximum two years where the offence is committed through gross negligence. • Actual damage: fines or imprisonment for a term of maximum two years where the offence is committed through gross negligence. Under particular aggravating circumstances the term of imprisonment is up six years under the Criminal Code. Where there are no or limited aggravating circumstances is typically DKK 20 000 (approx. €2 700). The recommended minimum fine for violation of the obligation to apply for a permit for new or existing (IPPC) installations is DKK 50 000 (approx. € 7 000) and for failure to comply with the conditions of a permit or conditions laid down pursuant to the EPA or rules	fine; other sanction - Seizure/confiscation of any profits earned

	issues in pursuance thereof is DKK 10,000 (approx. € 1,350). Other sanctions - Seizure/confiscation of any profits earned; Revocation of permit/right to carry out an activity.	
Estonia	fine or up to 5 years imprisonment (see overview for fine levels)	fine of €3,200 to 16,000,000
Finland	Destruction of the environment: a fine or imprisonment of up to two years. • Aggravated environmental destruction: imprisonment of four months to six years • Health endangerment (radiation related offences): imprisonment of four months to four years (aggravated: imprisonment of two to six years; with gross negligence: imprisonment of four months to four years) • Careless handling: fine or imprisonment of up to 6 months.	Same as Natural. Forfeiture.
Greece	Imprisonment of at least one year (up to five years) and/or monetary penalty from €3000 - 60000, in case of intent. • If the act is performed by negligence, imprisonment up to maximum one year or and a monetary penalty from €150 - 15 000. • In case of a danger of serious or wide spread pollution or degradation, imprisonment of at least two years or and a monetary penalty of € 20 000 - 150 000. • In case of a danger of death of an embryo or a person, or to the emergence of a serious bodily or mental illness to a neonate, or to a heavy bodily or mental illness of a person, imprisonment up to ten years or and monetary penalty from €150 000 - 500 000. • In case of a serious or wide pollution or degradation, or the death of an embryo or person or the emergence of a heavy bodily or mental illness to a neonate or the heavy bodily or mental illness of a person, imprisonment from five up to twenty years is imposed, or and a monetary penalty from €150 000 - 500 000. • In cases of acts resulting to danger of widespread pollution, danger of death, widespread pollution, danger of death of a person or embryo, or heavy bodily or mental illness, committed by negligence, imprisonment of at least one year (up to five years) or and a monetary penalty from €60 000 - 150 000.	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; or • A temporary, or in case of relapse a final cessation of the business activity; or • A temporary or final disqualification from any public funding or aid; or • The publication, at its own expenses, of the irreversible condemnatory court decision in two daily newspapers of wide circulation or combination of all the above sanctions.
Croatia	• In case of risk of endangering the quality of air, soil, sub-soil, water or the sea, or animals, plants or fungi, life or health of humans: imprisonment from 6 months to 5 years. With negligence: imprisonment not exceeding two years. • In case of serious injury to one or more persons, or changes caused by pollution that cannot be remedied for a longer period of time, or a major accident: imprisonment for one to ten years. With negligence: imprisonment for six months to five years. • In case of death of one or more persons: imprisonment for three to fifteen years. With negligence: imprisonment for one to eight years. endangerment of the human life and health even if the conduct at stake is not unlawful. The sanction envisaged for this crime is imprisonment from one to eight years while negligence	Fines and termination of the legal entity. Also: - If the criminal offence is punishable by a fine or imprisonment for a term of up to one year, the legal person may be punished by a fine of 5,000.00 (app. €655.00) to 8,000,000.00 kuna (app. €1,049,000.00) - If the criminal offence is punishable by imprisonment for a term of up to five years, the legal person may be punished by a fine of 15,000.00 (app. €1,966.00) to 10,000,000.00 kuna (app. €1,310,374.00) - If the criminal offence is punishable by imprisonment for a term of up to ten years, the legal person may be punished by a fine of 30,000.00 (app. €3,930.00) to 12,000,000.00 kuna (app. €1,572,880.00) - If the criminal offence is punishable by imprisonment for a term of up to fifteen years, the legal person may be punished by a

	is punishable by imprisonment not exceeding three years. Fine is imposed according to daily income. It amounts to at least thirty and not more than three hundred sixty daily incomes, except for criminal offences committed for personal gain when the maximum fine may amount to five hundred daily incomes.	fine of 50,000.00 (app. €6,553.00) to 15,000,000.00 kuna (app. €1,966,100.00) The penalty of termination of a legal person may be imposed if the legal person has been established for the purpose of committing criminal offences or if it has used its activities primarily to commit criminal offences.
Ireland	Depending on the offence, the maximum penalty is €3,000 and/or 12 months in prison if convicted summarily or 5 years in prison and/or €15,000,000 if convicted on indictment.	Same as Natural
Italy	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Latvia	For natural persons: imprisonment for a term not exceeding four years or custodial arrest, or community service, or a fine not exceeding two hundred times the minimum monthly wage (€56 914).	Fine from €284 570 - 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequences.
Lithuania	Where an unlawful act has caused a threat to human life or health or it could have caused substantial damage to water, air, soil, animals or plants or serious consequences to the environment: a fine of up to €18 825, or restriction of liberty of 3 to 24 months, or arrest of 15 to 90 days, or an imprisonment for a term of up to three years; Where an unlawful act has caused substantial damage to water, air, soil, animals or plants or serious consequences to the environment: a fine of up to €37 650, or arrest of 15 to 90 days, or an imprisonment for a term of up to six years.	Fine of up to €1,882,530; or restriction of operation of the legal entity or liquidation of the legal entity.
Luxembourg	- Imprisonment from eight days to five years and/or a fine from €250 -750 000. - Other criminal sanctions: the judge can order the restoration of the place to its previous state (rétablissement des lieux dans leur état antérieur) at the expenses of the offender, the seizure of tools and machines used by the offender to commit the offence, the seizure of products, elements or materials that are in breach of the law because of the non-respect by producers, holders and importers of their management waste obligations, the seizure of GMOs or products containing GMOs, the closing of the establishment and the special seizure of goods.	Fine up to €1 500 000; Administrative sanctions - The confiscation of any type of property, and/or the exclusion from public procurement and/or the dissolution of the legal persons.
Malta	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Netherlands	Intentional exposure: 1. with imprisonment not exceeding fifteen years or a fine of the fifth category [€78,000 maximum], in case of a reason to fear a threat to public health or fatal injury to somebody else; 2. with life imprisonment or a term of imprisonment not exceeding thirty years or a fine of the fifth category [€78,000 maximum], in case of reason to fear the life of somebody else, and the act results in somebody's death. Culpable: 1. with	Fine can be increased up to €780 000 maximum or €78 000 for the Economic Offences Act.

	imprisonment not exceeding one year or a fine of the fourth category [€19,500], in case of a reason to fear a threat to public health or fatal injury to somebody else; 2. with imprisonment not exceeding two years or a fine of the fourth category [€19,500], in case of reason to fear the life of somebody else, and the act results in somebody's death. (same for natural and legal persons). Intentional introduction: 1. with imprisonment not exceeding twelve years or a fine of the fifth category [€78,000], in case of a reason to fear a threat to public health or fatal injury to somebody else; 2. with a term of imprisonment not exceeding fifteen years or a fine of the fifth category [€78,000], in case of reason to fear the life of somebody else, and the act results in somebody's death. Culpable: 1. with imprisonment not exceeding one year or a fine of the fourth category [€19,500], in case of a reason to fear a threat to public health or fatal injury to somebody else; 2. with imprisonment not exceeding two years or a fine of the fourth category [€19,500], in case of reason to fear the life of somebody else, and the act results in somebody's death If convicted under the Economic Offences Act: First category of environmental criminal offence under the Law on Economic Offences - Felony: Imprisonment not exceeding six years, and fine of fifth category [€78,000] Misdemeanour: Imprisonment not exceeding one year and fine of the fourth category [€19,500].	
Poland	1. For the offence committed intentionally – a sanction of deprivation of liberty for a term between three months and five years. 2. For the offence committed unintentionally – a fine or a sanction of restriction of freedom or a sanction of deprivation of liberty for a term up to two years. 3. If the offence has been committed intentionally and in connection with the operation of an installation within a plant and in connection with the use of environment which requires a permit – a sanction of deprivation of liberty for a term between six months and eight years. 4. If the offence specified above under 3) was committed unintentionally – a sanction of deprivation of liberty for a term up to three years. Administrative sanctions: 1) For the emission into air or water caused by an installation without the required permit or in violation of provisions of the permit: - administrative fine (the amount of such a fine is calculated on the basis of the type of substance emitted, its amount and the term of emission). - non-obligatory stopping of the operation of the installation. 2) In case of an IPPC installation, when the emission is caused by the installation operated without the required IPPC permit provisions - obligatory stopping of the operation of the installation.	Same as Natural

Portugal	• Harm to environmental legal interests with intent - term of imprisonment up to three years and fine up to 600 days; • Creation of danger to environmental legal interests with intent - term of imprisonment up to two years and fine up to 360 days; • Harm to environmental legal interests with negligence - term of imprisonment up to one year and fine up to 240 days; • Creation of danger to environmental legal interests with negligence - term of imprisonment up to six months and fine up to 120 days; • Creation of danger to life or physical integrity with intent - term of imprisonment from one to eight years, and; • Creation of danger to life or physical integrity with negligence- term of imprisonment up to five years. Administrative sanctions: When term of imprisonment applicable is not over two years, it may be replaced by work in benefit of the community. If the term of fine applicable to the agent is not over 240 days, the court may only deliver a reprimand.	Fine up to 600 days (harm of environmental legal interests with intent). Fine up to 360 days (creation of danger to environmental legal interests with intent). Fine up to 240 days (harm of environmental legal interests with negligence). Fine up to 120 days (creation of danger to environmental legal interests with negligence). Administrative sanctions: In alternative to the term of fine, if the applicable fine is not over 240 days, legal persons may be subjected to a reprimand delivered by the court; if the term of fine applicable to the legal person is less than 600 days, legal persons may be only subjected to court supervision or the fine may be replaced by a deposit of good conduct.
Slovakia	Violation of the environmental legislation: • with intent: imprisonment of up to three years • by negligence: imprisonment of up to one year Substantial environmental damage: • with intent: imprisonment from three to eight years • by negligence: imprisonment of up to three years Large scale environmental damage: • with intent: imprisonment from four to ten years • by negligence: imprisonment from three to eight years In addition, the commission of an offence by negligence to a zone of natural healing resources and natural resources of mineral table water may lead to up to three years of imprisonment.	Confiscation of a sum of money in amount of €800 - 1 660 000. 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.
Slovenia	Natural persons 1. term of imprisonment 30 days to five years; 2. if the offence referred results in serious bodily injury or actual damage to the quality of air, soil or water or animals or plants: imprisonment 30 days – eight years; 3. if the offence results in death of one or more persons: imprisonment one to twelve years; 4. if the offence from 1 is committed by negligence: a fine or imprisonment of up to two years; 5. f the offence is committed in a criminal society to carry out these acts: imprisonment of one to 12 years. If perpetrator committed any of the above offences out of greed, a monetary fine may also be imposed in the amount of between 30 and 360 times the daily wage of the perpetrator.	For the above offences for which the prescribed punishment for a natural person is under three years of imprisonment: fine up to EUR 500,000 or a fine of maximum one hundred times of the resulting damage or of the proceeds from the offence. For the above offences for which the prescribed punishment for a natural person is over three years: fine from €50,000 - 1,000,000 or a fine of maximum two hundred times of the resulting damage or of the proceeds from the offence.
Spain	imprisonment from 6 to 12 years and the prohibition to exercise a professional activity or to serve in public office for a period of 6 to 10 years. If actual damage is caused as a result of the action, according to Article	Criminal - fine between 2 and 5 years. In addition to fines, the general criminal sanctions are of application. Admin - very serious infringements include a fine from EUR 200,000 to 2,000,000, the temporary (2 to 5

	343.2, the judge will consider only the action that carries the highest sanction, and will impose the latter within the upper half. If the action is done with recklessness, the sanction imposed will be reduced by one degree.	years) or permanent closure of the installation, disqualification to exercise the professional activity for a period between 1 and 2 years, and the withdrawal or suspension of the licence for a period between and 5 years. On top of this, the law foresees the publication of the sanctions in the media, including the names and surnames of natural persons, the name of the legal person involved, and the nature and seriousness of the infringements.
Sweden	Fine (max €17,250) or imprisonment not exceeding two years. If the offence is serious, term of imprisonment between six months and six years.	Corporate fine not less than 5000 SEK nor more than 10,000,000 SEK (app. €500 - 1 000 000).
UK	For a number of the offences listed under Article 3(a) the maximum sanction that can be imposed on summary conviction (i.e., before a judge alone) is a fine not exceeding level 5 on the standard scale (up to £5,000), or on conviction on indictment (i.e., before a judge and jury), a fine. However, for offences falling under the permitting legislation, as well as a number of the main offences under water legislation in Scotland and Northern Ireland, the maximum fines that can be imposed on summary conviction are £50,000, £40,000 and £30,000 in England and Wales, Scotland and Northern Ireland respectively. In addition or as an alternative, imprisonment of up to 6 or 12 months can be imposed depending on the offence. On conviction on indictment, an unlimited fine can be imposed and/or a term of imprisonment not exceeding 5 years, or both fine and imprisonment. The introduction of 'civil sanctions' in England and Wales has given the regulator administrative powers to deal with environmental offences. These include the power to impose a variable monetary sanction, fixed money penalty, restoration notice, compliance notice, stop notice or enforcement undertaking. A number of the transposition measures also provide the regulator with a range of administrative powers to carry out its enforcement functions. These include the power to serve notices, including enforcement notices and suspension notices. The regulator also has the power to carry out works and recover the costs. The Court can also order the cause of the offence to be remedied.	Same as Natural

Table 8: Penalties for Article 3d for Natural and Legal Persons

Country	Natural Persons	Legal Persons
Austria	Operation of a plant constituting a risk to the environment: - With intent: up to 2 years of imprisonment or fine up to 360 daily units, and, with aggravating circumstances, of 5 to 15 years or 10 to 20 years or lifelong imprisonment; or up to 3 years imprisonment or fine up to 360 daily units depending on the offence - With serious negligence: up to 6 months imprisonment or fine up to 360 daily units, and if with aggravating circumstances, up to 1 year of imprisonment or fine up to 360 daily units; or imprisonment of up to 3 years	Intentional - Abstract endangerment: up to 70 daily units; In case of a concrete damage: up to 85 units. With negligence - Abstract endangerment: fine up to 40 daily units; Concrete damage: fine up to 55 daily units.

	or of 6 months to 5 years depending on the offence	
Belgium	Federal - N/V; Flanders - 1 month – 2 years, €100 – 250,000; Brussels - 3 months – 5 years, €250 – 100,000; Wallonia - 8 days – 3 years, €100 – 1,000,000.	Federal - N/A; Flanders - €500 – 500,000; Brussels - €1,500 – 200,000; Wallonia - €500 – 2,000,000.
Bulgaria	Imprisonment of up to four years and a fine of €1 000 - 2 500 (BGN 2 000 to BGN 5 000) for storage of dangerous substances or preparations in violation of the established rules. Imprisonment of one to five years and a fine of €2 500 - 10 000 (BGN 5 000 to BGN 20 000) shall be imposed for putting into operation or ordering putting into operation of a plant or plants in violation of the established rules. If death or serious bodily harm to one or more persons has been caused, imprisonment of eight to fifteen years and a fine of €5 000 to 15 000 (BGN 10 000 to BGN 30 000) shall be imposed. If non-minor damages to the environment are caused, imprisonment of two to eight years and a fine of €7 500 to 15 000 (BGN 15 000 to BGN 30 000) shall be imposed. If the acts have been committed by negligence, imprisonment of up to two years or probation shall be imposed.	A coercive administrative measure can be imposed in the cases of occurrence of an immediate danger of environmental pollution or of damage to human health or property and prevention or termination of administrative violations related to environmental protection, as well as prevention and/or elimination of the harmful consequences of such violations. A pecuniary penalty of €500 to 10,000 (1,000 to 20,000 leva) can be imposed for any violation of the act that does not constitute a criminal offence; a pecuniary penalty of €15,000 to 50,000 (30,000 to 100,000 leva) for carrying out an activity without a permit (for establishments and installations where dangerous substances are present). In case of repeated offence, the respective pecuniary penalty is doubled.
Cyprus	With gross negligence, the person found guilty of such offence, is subject to imprisonment not exceeding three years or to a fine not exceeding €100 000 or to both sentences; with intent the person found guilty is subject to imprisonment for a period not exceeding seven years or to a fine not exceeding €200 000 or to both of these sentences; irrespective of whether they were committed with gross negligence or with intent that have the result of substantial damage to the quality of air, soil water or to animals or plants the person found guilty is subject to imprisonment for a period not exceeding ten years or to a fine not exceeding €500 000 or to both of these sentences.	Same as Natural
Czech	With intent: imprisonment of up to three years or disqualification - with intent: imprisonment from one to five years, in case the offender commits an offence: - repeatedly, or - violating an important obligation arising from the employment, profession, position or function, or an obligation imposed by law, or - caused permanent or long-term damage of a component of the environment, or - the removal of the consequences requires expenses in a large extent, or - with the intention of gaining a substantial benefit for themselves or someone else. - with intent: imprisonment from two to eight years, in case the offender commits an offence with the intention of gaining a large-scale benefit for themselves or someone else. - By negligence: imprisonment of up to six months or disqualification - by negligence: imprisonment up to two years or disqualification, in case the offender commits an offence:	Violation of the environmental legislation: disqualification

	a) violating an important obligation arising from the employment, profession, position or function, or an obligation imposed by law, or b) caused permanent or long-term damage of a component of the environment, or c) the removal of the consequences requires expenses in a large extent.	
Denmark	Intentional: • Endangerment: fines; • Actual damage: fines or imprisonment for a term of maximum two years. With negligence: • Endangerment: fines. • Endangerment: fines or imprisonment for a term of maximum two years where the offence is committed through gross negligence. • Actual damage: fines or imprisonment for a term of maximum two years where the offence is committed through gross negligence. Under particular aggravating circumstances the term of imprisonment is up six years under the Criminal Code. Fines range from DKK 10 000 to 50 000 (€1 500 to 7 000).	Fine; other sanctions - Seizure/confiscation of any profits earned.
Estonia	fine or up to 3 years imprisonment (see overview for fine levels).	fine of €3,200 to 16,000,000
Finland	Destruction of the environment: a fine or imprisonment of up to two years • Aggravated environmental destruction: imprisonment of four months to six years.	Same as Natural. Forfeiture.
Greece	Imprisonment of at least one year (up to five years) and/or monetary penalty from €3000 up to 60000, in case of intent. • If the act is performed by negligence, imprisonment up to maximum one year or and a monetary penalty from €150 up to 15 000. • In case of a danger of serious or wide spread pollution or degradation, imprisonment of at least two years or and a monetary penalty of €20 000 up to 150 000. • In case of a danger of death of an embryo or a person, or to the emergence of a serious bodily or mental illness to a neonate, or to a heavy bodily or mental illness of a person, imprisonment up to ten years or and monetary penalty from €150 000 up to 500 000. • In case of a serious or wide pollution or degradation, or the death of an embryo or person or the emergence of a heavy bodily or mental illness to a neonate or the heavy bodily or mental illness of a person, imprisonment from five up to twenty years is imposed, or and a monetary penalty from €150 000 up to 500 000. • In cases of acts resulting to danger of widespread pollution, danger of death, widespread pollution, danger of death of a person or embryo, or heavy bodily or mental illness, committed by negligence, imprisonment of at least one year (up to five years) or and a monetary penalty from €60 000 up to 150 000.	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; or • A temporary, or in case of relapse a final cessation of the business activity; or • A temporary or final disqualification from any public funding or aid; or • The publication, at its own expenses, of the irreversible condemnatory court decision in two daily newspapers of wide circulation or combination of all the above sanctions.
Croatia	• In case of risk of endangering the quality of air, soil, sub-soil, water or the sea, or animals, plants or fungi, life or health of humans: imprisonment from 6 months to	fines and termination of the legal entity - If the criminal offence is punishable by a fine or imprisonment for a term of up to one year, the legal person may be punished by a

	5 years/negligence: imprisonment not exceeding two years. - In case of serious injury to one or more persons, or changes caused by pollution that cannot be remedied for a longer period of time, or a major accident: imprisonment for one to ten years/negligence: imprisonment for six months to five years. - In case of death of one or more persons: imprisonment for three to fifteen years/negligence: imprisonment for one to eight years. Fine is imposed according to daily income. It amounts to at least thirty and not more than three hundred and sixty daily incomes, except for criminal offences committed for personal gain when the maximum fine may amount to five hundred daily incomes.	fine of 5,000.00 (app. €655.00)1 to 8,000,000.00 kuna (app. €1,049,000.00) - If the criminal offence is punishable by imprisonment for a term of up to five years, the legal person may be punished by a fine of 15,000.00 (app. €1,966.00) to 10,000,000.00 kuna (app. €1,310,374.00) - If the criminal offence is punishable by imprisonment for a term of up to ten years, the legal person may be punished by a fine of 30,000.00 (app. €3,930.00) to 12,000,000.00 kuna (app. €1,572,880.00) - If the criminal offence is punishable by imprisonment for a term of up to fifteen years, the legal person may be punished by a fine of 50,000.00 (app. €6,553.00) to 15,000,000.00 kuna (app. €1,966,100.00) The penalty of termination of a legal person may be imposed if the legal person has been established for the purpose of committing criminal offences or if it has used its activities primarily to commit criminal offences.
Ireland	On summary conviction, the maximum penalty is €3,000 and/or 12 months in prison.	Same as Natural
Italy	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Latvia	custodial arrest or community service, or a fine not exceeding one hundred times the minimum monthly wage (€28 457).	fine from €284 570 to 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequences
Lithuania	Where an unlawful act has caused a threat to the human life or health or it could have caused substantial damage to water, air, soil, animals or plants or serious consequences to the environment: a fine of up to €18 825, or restriction of liberty of 3 to 24 months, or arrest of 15 to 90 days, or an imprisonment for a term of up to three years; Where an unlawful act has caused substantial damage to water, air, soil, animals or plants or serious consequences to the environment: a fine of up to €37 650, or arrest of 15 to 90 days, or an imprisonment for a term of up to six years.	Fine of up to €1,882,530; or restriction of operation of the legal entity or liquidation of the legal entity.
Luxembourg	- Imprisonment from eight days to six months and/or a fine from €251 - EUR 125 000. - Other criminal sanctions: the judge can order the closing of the establishment and the special seizure of goods	Fine up to €250 000. Administrative sanctions - the confiscation of any type of property, and/or the exclusion from public procurement and/or the dissolution of the legal persons.
Malta	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Netherlands	Under the Economic Offences Act: Felony: Imprisonment not exceeding six years, and fine of fifth category [€78,000] Misdemeanour: Imprisonment not exceeding one year and fine of the fourth category [€19,500].	fine can be increased up to €780 000 maximum or €78 000 for the Economic Offences Act. Also accessory sanctions: The total or partial cessation of the enterprise for maximum of one year. Confiscation of certain objects; Placing enterprise under judicial supervision; Provision of compensatory services.
Poland		Same as Natural

	A sanction of deprivation of liberty for a term between six months and eight years. For the offence committed unintentionally, fine or sanction of restriction of freedom, or sanction of deprivation of liberty for a term of up to 2 years. Administrative sanctions: 1) If the activity is carried out in the installation without the required permit or in violation of provisions of the possessed permit - non-obligatory stopping of the operation of the installation. 2) If the activity is carried out in the installation operated without the required IPPC permit provisions - obligatory stopping of the operation of the installation. 3) If the installation (IPPC or non-IPPC) causes emission into air or water caused and the operator does not possess a permit or operates the installation in violation of provisions of the permit - administrative fine (the amount of such a fine is calculated on the basis of the type of substance emitted, its amount and the term of emission). 4) When relevant - obligations imposed under the provisions transposing the Environmental Liability Directive.	
Portugal	• Harm to environmental legal interests with intent - term of imprisonment up to three years and fine up to 600 days; • Creation of danger to environmental legal interests with intent - term of imprisonment up to two years and fine up to 360 days; • Harm to environmental legal interests with negligence - term of imprisonment up to one year and fine up to 240 days; • Creation of danger to environmental legal interests with negligence - term of imprisonment up to six months and fine up to 120 day; • Creation of danger to life or physical integrity with intent - term of imprisonment from one to eight years, and; • Creation of danger to life or physical integrity with negligence- term of imprisonment up to five years. Administrative sanctions: When term of imprisonment applicable is not over two years, it may be replaced by work in benefit of the community. If the term of fine applicable to the agent is not over 240 days, the court may only deliver a reprimand.	Fine up to 600 days (harm of environmental legal interests with intent). Fine up to 360 days (creation of danger to environmental legal interests with intent). Fine up to 240 days (harm of environmental legal interests with negligence). Fine up to 120 days (creation of danger to environmental legal interests with negligence). Administrative sanctions: In alternative to the term of fine, if the applicable fine is not over 240 days, legal persons may be subjected to a reprimand delivered by the court; if the term of fine applicable to the legal person is less than 600 days, legal persons may be only subjected to court supervision or the fine may be replaced by a deposit of good conduct.
Slovakia	Violation of the environmental legislation: • with intent: imprisonment of up to three years • by negligence: imprisonment of up to one year Substantial environmental damage: • with intent: imprisonment from three to eight years • by negligence: imprisonment of up to three years Large scale environmental damage: • with intent: imprisonment from four to ten years • by negligence: imprisonment from three to eight years In addition, the commission of an offence by negligence to a zone of natural healing resources and natural resources of mineral table water may lead to up to three years of imprisonment.	Confiscation of a sum of money in amount of €800 up to 1 660 000. 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.

	Administrative sanctions: not classified as criminal offence, then administrative sanction in the form of fine up to 99,- € may be imposed.	
Slovenia	1. imprisonment 30 days to five years; 2. if the offence results in serious bodily injury or in actual damage to the quality of air, soil or water or animals or plants: imprisonment 30 days to eight years; 3. if the offence results in death of one or more persons: imprisonment of one to twelve years; 4. if the offence from 1 is committed by negligence: fine or imprisonment of 30 days to two years. If perpetrator committed any of the above offences out of greed, a monetary fine may also be imposed in the amount of between 30 and 360 times the daily wage of the perpetrator.	For the above offences for which the prescribed punishment for a natural person is under three years of imprisonment: fine up to EUR 500,000 or a fine of maximum one hundred times of the resulting damage or of the proceeds from the offence. For the above offences for which the prescribed punishment for a natural person is over three years: fine from EUR 50,000 to EUR 1,000,000 or a fine of maximum two hundred times of the resulting damage or of the proceeds from the offence.
Spain	Imprisonment from 1 to 2 years, plus a fine from 10 to 14 months. Fines are imposed on the basis of a system called 'day-fine'. The fine itself will be expressed in number of days, with each day carrying a monetary fine. The monetary fine per day varies from €2 to 400. impose a prohibition to exercise a professional activity for a period of 1 to 2 years. In case of actual damage, the sanction will be imposed in its upper half. If the action is done with recklessness, the sanction imposed will be reduced by one degree.	Criminal - fine of one to three years, or two to four times the damage caused when the resulting amount would be higher if the offense committed by the individual carries a sentence of more than two years' imprisonment. When the offence committed by a natural person carries a sentence of less than two years' imprisonment, the sanction applicable to legal persons is a fine of six months to two years, or double to triple the damage caused if the resulting amount was higher. Administrative sanctions - include fines from € 3 005 to 601 012. 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. In addition, the administrative authority can impose additional sanctions such as the impossibility of receiving subsidies, the prohibition to contract with the public authorities, for a period between 2 and 5 years.
Sweden	fine (max €17,250) or term of imprisonment not exceeding two years.	Corporate fine not less than 5000 SEK nor more than 10,000,000 SEK (app. €500 - 1 000 000). Environmental sanction charges (different amounts depending on which of the Sections of the EHA that has been breached)
UK	The maximum sanction that can be imposed is imprisonment for a term not exceeding 12 months (6 months in NI), or a fine not exceeding £20,000, or both, and the sanction on conviction on indictment is imprisonment for a term not exceeding 2 years, or a fine, or both. Administrative sanctions - none	Same as Natural

50. As with wildlife crimes, the range of penalties from a few hundred euros to multi-million euros fine is evident depending upon numerous factors such as negligence, intent and environmental harm.
51. The EIR (European Commission 2016b) finds that chemical and water pollution are one of the main concerns across the EU and argues for a more cohesive approach to tackling the implementation of environmental legislation.

3.5 - General conclusions on chemical pollution

52. Given the overlap with other forms of environmental crime, it is perhaps best understood in terms of the specialist scientific and practical knowledge required to identify and investigate such crimes. Thus, whilst general 'waste' crime may be obvious even to untrained investigators, it will not always be obvious what crimes and what hazards are involved with chemical pollution.
53. Chemical pollution is challenging to identify, regulate and prosecute because of the need for (and often lack of) specialist knowledge within regulatory and prosecutory agencies which do not always prioritise this type of crime.
54. Whilst many examples revolve around relatively small-scale discharges of chemical pesticides into water sources, this area of crime can be on a much larger scale and in these cases can be transnational in nature.
55. As with other forms of environmental crime, there can be links to trafficking networks and with organised crime.
56. This environmental crime in particular would benefit from more consensus on definitions and collection of data on offences.

3.6 - Summary and recommendations

57. It is difficult to speculate on the trends related to chemical pollution since, as mentioned, there is little consensus on use of the classification and no shared data repository for these incidents. Whereas countries, such as Ireland, that keep detailed case studies of incidents, is useful, member states should consider discussions on more harmonised definitions of environmental crimes like chemical pollution in order to facilitate a single repository for data related to actions and offences.

4 - Waste

4.1 – Sources of information on waste crime

58. The broad issue of ‘waste’ encompasses a great deal of environmentally destructive and illegal activities and, as such, is probably the most widely discussed issue across the available literature, reports and data sources. Generally, the term ‘waste’ encompasses a range of matters including the national and international transportation/trafficking of undeclared industrial, chemical, nuclear and electronic waste as well as the falsification of official papers. EnviCrimeNet’s (2015) Intelligence Project on Environmental Crime (2015) highlights continued problems relating to the illegal transport of asbestos. INTERPOL’s (2015) strategic report highlights further related issues including cases of weapons concealed in illegally exported waste in France and a number of financial crimes linked to the illegal transport and treatment of hazardous waste in Switzerland. Furthermore, e-waste dumping in Europe has been associated with “waste tourists”, referring to individuals and organised groups travelling to the United Kingdom to arrange the export of waste to developing countries in order to make a profit.
59. The broad understandings and wide implications of illegal waste have been highlighted in the final summary report of the wide-ranging Countering WEEE Illegal Trade (CWIT) project (Huisman et al, 2015)¹⁴. The report views this state of affairs as deeply problematic given the profusion of unclear definitions and misinterpretation of concepts. The CWIT report itself has some of the clearest figures available as to the scale of the problem represented by WEEE in Europe, summarised in the following terms:
- “The research undertaken by the Countering WEEE Illegal Trade (CWIT) project found that in Europe, only 35% (3.3 million tons) of all the e-waste discarded in 2012, ended up in the officially reported amounts of collection and recycling systems. The other 65% (6.15 million tons) was either: exported (1.5 million tons), recycled under non-compliant conditions in Europe (3.15 million tons), scavenged for valuable parts (750,000 tons) or simply thrown in waste bins (750,000 tons)” (Huisman et al, 2015: p.6)
60. In addition, the EFFACE Conclusions and Recommendations summary (Faure et al., 2016) offers its own clear map of the scale and impacts of illegal dumping of WEEE. EUROJUST (2014) has also highlighted the problems associated with defining ‘waste’ in its 2014 report of its Strategic Project on Environmental Crime.
61. The WEEE Forum¹⁵ is a European not-for-profit association representing 32 electrical and electronic equipment waste producer compliance

¹⁴ The project website is at <http://www.cwitproject.eu/>

¹⁵ Website: www.weee-forum.org

schemes is also a pertinent source of information, as might the other constituent organisations involved in the CWIT project, which were: Compliance & Risks Ltd.; the Cross-border Research Association; INTERPOL (coordinator); United Nations Interregional Crime and Justice Research Institute (UNICRI); United Nations University (UNU) (scientific coordinator) and Zanasi and Partners. We might also mention here the IMPEL Transfrontier Shipment of Waste database¹⁶ which can also be used by practitioners to increase their knowledge, raise awareness, share best practice and facilitate cooperation among practitioners. It could be used as an example in other environmental crime areas.

62. Again, a lack of basic data and, in particular, *comparable* data between jurisdictions on enforcement practices is a frequent theme of the available reports. The EFFACE (Gerstetter et al., 2016) synthesis report thus notes:

“However, for other types of environmental crime, little data exists. For example, as far as illegal waste trade is concerned very little data is available; not all Member States have established a national inventory of contaminated sites” (p.28)

4.2 – Investigation of waste crime

63. To an even greater extent than other forms of environmental crime discussed above, the illegal shipment and disposal of harmful waste material is consistently flagged as both an inherently transnational issue (EURPOL, 2013) as well as one that is connected with (for some dominated by) organised criminal groups. The EUROPOL (2013) Threat Assessment and Intelligence Project on Environmental Crime discusses this issue in some detail:

“Various types of OCGs (organised crime groups) are active in this crime area and the nature of their activities depends to a large degree on the groups’ access to resources, specialist expertise and contacts. OCGs with significant resources and expertise, such as Italian OCGs, are able to participate in large-scale illegal waste management and trafficking activities including manipulating tender processes and disposing of multi-ton amounts of waste. Smaller groups with fewer resources often focus on technically less demanding activities such as the trafficking of car batteries and other smaller items (p.10)”

64. Strong links between illegal waste transportation and organised crime groups have also been emphasised in the main conclusions and recommendation of the EFFACE project (Faure et al., 2016). In the case of Italy, it is clear that these kinds of activities are being carried out in conjunction with existing Mafia or Mafia-like groups. This was highlighted both by EUROPOL (2013) in the 2013 Environment Crime Threat Analysis and in the EnviCrimeNet (2014) report of November 2014. The

¹⁶ See <http://www.basel.int/Default.aspx?tabid=2932>

latter report does however emphasise that Italian authorities are particularly active in combating waste related crimes. Officials there regularly provide presentations at conferences and meetings, point at the various problems and often conclude that large amounts of waste are trafficked from Italy to other countries. The EUROPOL (2013) Threat Analysis further emphasises how organised crime groups from all countries proactively exploit existing weaknesses in both member state and EU waste regulations and laws.

65. In terms of the international scope of the issue, IMPEL's (Faure and Heine, 2000) report on Criminal Enforcement of Environmental Law in the European Union gives a number of well documented examples of specific cases of transboundary waste cases. The report notes:

“Most cross-border environmental cases relate to the illegal transfer of waste products and to the illegal trading in endangered animal and plant species. Specifically, with regard to the illegal transfer of waste products, all sorts of documents (transportation documents, invoices, ...) are falsified, in particular in respect of the origin, the destination, and the nature of the waste matter. The criminals shift their field of action to better places as the authorities elsewhere are close on their heels: from the Netherlands to Flanders, then to the Brussels and the Walloon Region, to end up executing illegal dumping in the north of France. More than once they operate by way of a complicated network of companies, always led by the same persons, with the sole intention of preventing the illegal waste circuit from being uncovered” (p.109).

66. This extract highlights an important prevailing theme: that a lack of joined up thinking and consistency between jurisdictions means that organised and serious crime groups involved in waste trafficking frequently appear to transfer their operations between jurisdictions based on how favourable the legal or regulatory climate is to their operation. The EnviCrimeNet report (2014) puts the issues in the following terms:

“At EU level there is no coordination in particular for waste shipment incl. e-waste (WEEE) and crimes related to endangered species (incl. timber and the trade in domestic animals). There is no international or European electronic system or database, not even for waste movements. A common EU system for illegal conducts below the threshold of a crime is absent. There is no international multi-agency approach for this area of crime, no official (EU) body. Even more so, environmental crime is not an international or European priority, which might encourage more jurisdictions to focus on this crime area or to establish suitable specialised police or LE forces EU wide” (p.15)

67. IMPEL's (Faure and Heine, 2000) report on Criminal Enforcement of Environmental Law in the European Union sets out the case in some detail for closer collaborations between jurisdictions on these issues. In some cases, however, it appears that the specific problems relate not to a lack of cooperation of neighbouring states, but to the material problem

that for instance in cases of transboundary shipment of waste, organised crime is able to get itself involved in a complex network of various firms in different countries. This emphasises that quite often the ‘illegal’ economy here very much overlaps with - and is difficult to disentangle from - the legal one. Hence, for example, a great deal of WEEE trafficked outside the EU to Africa and China is subject to the extraction of useful components for use in the legal electronics production industry.

68. In moving forwards, EnviCrimeNet (2015) has emphasised the need to

“Follow the money and target the profits, given the mainly economic nature of environmental crimes” as an enforcement strategy” (p.2)

69. The CWIT report (Huisman et al., 2015) (and INTERPOL (2015)) recommended the creation of National Environmental Security Task Forces (NESTs) formed by different authorities and partners, to enable a law enforcement response that is collaborative and coordinated at national, regional, and international level: as well as dedicated training of judges and prosecutors.

70. The EIR (European Commission 2016b) highlights that waste *prevention* must be a focus going forward along with environmental legislation that implements movement towards a circular economy. Presumably, this will create regulatory challenges and possibilities for new forms of crime and evading regulation.

4.3 – Prosecution of waste crime and other modes of enforcement

71. The ENEC (Rosell and Banque (2016) study provides data regarding criminalisation of the collection, transport, recovery or disposal of waste (Article 3b of Directive 2008/99) and shipment of waste (Article 3c) that causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants.

72. Furthermore, the Milieu Law and Policy Consultants study also provides an overview. In addition to the transposition of Articles 3b and 3c, Article 3e - the production, processing, handling, use, holding, storage, transport, import, export or disposal of nuclear materials or other hazardous radioactive substances – is also relevant:

Table 9: Transposition of Articles 3b and 3c, Article 3e

COUNTRY	3b	3c	3e
Austria	Y	Y	Y
Belgium	N/A	No criminal provisions in Wallonia regarding waste shipments.	N
Bulgaria	Y	Incomplete. Seriousness of the consequences/impacts rather than the volume/quantity of the waste	Incomplete - does not cover the acts of handling, use and storage

		shipment. Does not refer to once or in several shipments.	
Cyprus	Y	Y	Y
Czech	Y	Incomplete	Incorrect - Czech legislation requires the criminal offences to be committed only intentionally and not by negligence, as required by the Directive.
Denmark	Y	Y	Incomplete - Fails to include the production, processing, handling, use, holding, storage, transport, import, export or disposal of nuclear materials or other hazardous radioactive substances
Estonia	Incorrect – does not include supervision and aftercare of waste.	Incomplete - serious negligence missing	Incorrect and incomplete - requires large numbers of people and vague on use of terms.
Finland	Y	Y	Y
Greece	Y	Y	Y
Croatia	Y	Incomplete - serious negligence missing	Y
Ireland	Y	Y	Y
Italy	Y	Y	Y
Latvia	Incomplete - only hazardous waste	Incomplete	Incomplete
Lithuania	Y	Incomplete - serious negligence missing	Y
Luxembourg	broader	Y	Broader
Malta	Y	Y	Y
Netherlands	Y	Y	Y
Poland	Y	Y	Y
Portugal	Y	Y	Y
Slovakia	Incomplete - no endangerment	Incomplete - serious negligence missing	Incomplete - no endangerment, or gross negligence; does not refer to the handling, storage and disposal
Slovenia	Incomplete - the transposing provision does not mention all elements of the offence (supervision, aftercare and action taken as a dealer or a broker).	Y	Y
Spain	Y	Ambiguous around amount of waste.	Incomplete - no negligence
Sweden	Incomplete - no sanctions on collection of waste, the supervision and aftercare of disposal sites, as well as action taken as a dealer or a broker are not covered by the sanctions	Y	Y
UK	Stricter	Incomplete - no non-negligible quantity	Y

'Y' indicates yes that this portion of the Article has been transposed. 'N' indicates no and where the information was available in the Milieu Country Report more information is provided.

73. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted on 22 March 1989 by the Conference of Plenipotentiaries in Basel, Switzerland and its website¹⁷ has a number of key resources including a database of the different definitions of 'waste' and related activities used in the signatory countries. Unlike CITES, however, there are no regularly mandated country-specific reports. The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. Its scope of application covers a wide range of wastes defined as "hazardous wastes" based on their origin and/or composition and their characteristics, as well as two types of wastes defined as "other wastes" - household waste and incinerator ash.
74. The CWIT (Huisman et al., 2015) report calls for much closer harmonisation of regulation between jurisdictions as does the EIR (European Commission 2016b).
75. EUROJUST's Environmental Crime Report (2014) has a particularly illuminating chapter on the challenges posed by the trafficking of waste. This confirms that the trafficking in waste remains under reported and under investigated. It also shows the interconnectedness of waste trafficking with the legal economy as legal businesses take advantage of the difference in price of disposing of waste in other jurisdictions. Environmental legislation often requires a high level of expertise and understanding of rather technical issues, such as the different categories of waste, its composition and its definitions. This expertise is not yet sufficiently developed throughout the EU. In the field of trafficking in waste, it can be particularly difficult to prove the intention of the perpetrators of such offences. Due to the complexity of the relevant regulatory framework and the technical expertise required to understand the different requirements for certain categories of waste, suspects will regularly defend their actions as involuntary mistakes and lack of awareness of their illegal nature, and it is difficult to prove the contrary. Also, the shippers of waste will typically claim to have been unaware of the contents of a shipment. From the information gathered through the Project Team's activities, it also appears that prosecutions often focus on the producer alone and keep a purely national perspective. This approach - limited to achieving a conviction solely for the 'national' aspect of the offence - can hamper an effective fight against this criminal phenomenon, which has by definition a cross-border nature.
76. Although it may now be somewhat out of date this may be a useful source to pursue for further details. Slovakia and Poland are also often highlighted in the reports as going further than the other countries in providing much more detailed provisions on different environmental offences, ranging from nature to waste, water or nuclear protection. The most remarkable case is Poland where codified criminal environmental law is much more developed than in the other four countries, reflecting

¹⁷ <http://www.basel.int/>

the direct influence of the German Umweltstrafrecht or Droit pénal de l'environnement. On the positive side, the authors of the report also report some examples of 'best practices', such as in Gothenburg, where the police have a special 'equipped van' which allows the investigators to approach and interrogate witnesses and suspects at the site of the crime, creating a potential for storing samples. Another example is the cooperation between some police units, prosecutors and supervisory authorities concerning inspections at harbours or roads to find illegal transports of waste. According to Andrea Hjärne Dalhammar, as of 2011 the police have been granted an extra 4.8 million SEK per year for improvement of the criminal enforcement of illegal waste transports. The enforcement takes place in cooperation with relevant authorities such as the County Administrative Boards and Customs.

77. This lack of data was certainly evident during the research phase for the present report, with very few country representatives able to provide exact figures. One exception was the representative from the Denmark environment agency, who noted:

“I can inform you that Denmark inspected 315 waste shipments (vehicles) in 2015. Of the 315 inspected shipments, 22 were illegal shipments (in varying degrees). Fines were at a total of about 42.000 Euro in 2015 for the 22 illegal shipments. Parallel to the illegal shipments, 31 shipments were lacking transport registration (the fine for this is usually 670 euro). We have no statistic (sic) information available to the public”.

4.4 – Sentencing in waste crime cases

78. The CWIT report (Huisman et al., 2015) notes that the penalties for the illegal trade in e-waste vary greatly in terms of monetary fines and prison durations. In the current system, the participation in WEEE illegal activities does not appear risky to offenders due to the low probability of being prosecuted and sentenced. Even if cases are successfully prosecuted, the penalties foreseen in legislation and/or penalties applied in court decisions are typically low. In many cases, the fines imposed are less than the profits to be gained from one illegal shipment. Suggested actions to harmonise and enhance penalty systems include:

- Assess the national penalty system to ascertain if sanctions are proportionate and dissuasive.
- Increase penalty levels for natural persons who are company representatives.
- Harmonise offences related to WEEE crimes at EU level (wording, definitions and severity).
- Harmonise penalty types at EU level.

- Adjust the penalty system related to organised crime (i.e. specific penalties to tackle organised crime involvement in WEEE illegal activities)” (p.35).

79. In terms of jurisdictions’ *responses* to the challenges of illegal waste dumping and trafficking it is notable that in 2014 amendments to the EU’s Waste Shipment Regulation were adopted to achieve more uniform implementation of the regulation throughout the EU. By 1st January 2017, Member States will have to establish inspection plans. As noted already, lack of or inconsistent enforcement of relevant legislation is often highlighted as a key issue. EUROJUST for example has noted that:

“Due to the high profits generated, the relatively low risk of detection, and – quite commonly – lenient penalties, environmental crime is often linked to organised crime, in particular illegal trafficking or dumping of waste and trafficking in endangered species” (Strategic Project on Environmental Crime: (EUROJUST, 2014: p.38)

80. The EFFACE (Gerstetter et al., 2016) Synthesis report notes under ‘problems in enforcing rules against illegal waste in EU member states’ the following case study:

“A report by the Netherlands Court of Audit (Algemene Rekenkamer) which summarises the findings of eight national audits identified significant weaknesses in the enforcement of the EU’s Waste Shipment Regulation. The countries analysed were Bulgaria, Greece, Hungary, Ireland, Poland, Norway, the Netherlands and Slovenia. According to the report, there are huge differences in the number and nature of inspections, the available resources, the enforcement actors involved and the existence of an enforcement strategy between these countries. The number of checks of (electronic) waste shipments varies from a dozen to several thousands per year (such as in the Netherlands). In six countries enforcement policy is insufficiently underpinned by an explicit risk assessment. In five countries enforcement is impeded by a lack of well-trained staff and technical equipment. But even in Member States with more than average resources and staff such as in the Netherlands and Belgium, port authorities emphasize that personnel and financial limitations are severe obstacles to achieving better export control. The involvement of multiple actors – customs, police services, environmental agencies, environmental inspectorates, etc. – creates challenges to coordination and cooperation in the enforcement of the EU’s Waste Shipment Regulation. [Source: Geeraerts/Illes/Schweitzer 2015]” (p.36)

81. IMPEL’s 2000 report (Faure and Heine, 2000) notes that prohibition orders seem to play an important role in Italy, Portugal and in the United Kingdom: the relevant cases being mostly ones of waste disposal.

82. The final conclusions from EFFACE (Faure et al., 2016) emphasise the frequent application of minimum sanctions regimes in relation to trafficking of waste in particular. The group also emphasised the Swedish

jurisdiction as offering many examples of best practice in relation to waste management and regulation. The exact sanctions offered for the three relevant parts of Article 3 are found below as adapted from the Milieu Law and Policy Consultants study:

Table 10: Penalties for violations of Article 3b

Country	Natural Persons	Legal Persons
Austria	Treatment and transport of waste constituting a risk to the environment: - With intent: up to 2 years imprisonment, or fine up to 360 daily units, and if with aggravating circumstances, up to 3 years, from 5 to 15 years or 10 to 20 years or lifelong depending on the offence. - With negligence: up to 6 months of imprisonment or fine up to 360 daily units, and if with aggravating circumstances, up to 3 years or 6 months to 5 years imprisonment; or up to 1 year imprisonment or fine up to 360 daily units depending on the offence.	Intentional - Abstract endangerment: up to 70 daily units; In case of concrete damage: up to 85 units. With negligence, Abstract endangerment: fine up to 40 daily units; Concrete damage: fine up to 55 daily units.
Belgium	Federal - N/A; Flanders - 1 month – 5 years, €100 – 500,000; Brussels - 1 month – 5 years, €25 – 100,000; Wallonia - 8 days – 3 year, €100 – 1,000,000.	Federal - N/A; Flanders - €500 – 1,000,000; Brussels - €500 – 200,000; Wallonia - €500 – 2,000,000.
Bulgaria	See 3a additionally, for failure to ensure the proper functioning of an installation or site for waste recovery or disposal, imprisonment of five to twenty years and a fine of €5 000 - 25 000 (BGN 10 000 to BGN 50 000) (for death or serious bodily harm to one or more persons) or imprisonment of two to eight years and a fine of €5 000 - 25 000 (BGN 10 000 to BGN 50 000) (for non-minor damages to the environment) shall be imposed.	A number of coercive administrative measures can be imposed such as suspension of operations of collection, storage, transport, recovery or disposal of waste; issuing of prescriptions for the elimination of waste at the expense of the offender or suspension of the operation of waste treatment facilities. A pecuniary penalty of €1 000 - 20 000 (BGN 2 000 to BGN 40 000) can be imposed for any violation of the act that does not constitute a criminal offence. In case of repeated offence, the respective pecuniary penalty is doubled.
Cyprus	In cases of gross negligence, the person found guilty of such offence, is subject to imprisonment not exceeding three years or to a fine not exceeding €100 000 or to both sentences; with intent the person found guilty is subject to imprisonment for a period not exceeding seven years or to a fine not exceeding €200 000 or to both of these sentences; irrespective of whether they were committed with gross negligence or with intent that have the result of substantial damage to the quality of air, soil water or to animals or plants the person found guilty is subject to imprisonment for a period not exceeding ten years or to a fine not exceeding €500 000 or to both of these sentences.	Same as Natural
Czech	Unauthorized waste management, with intent or by negligence · imprisonment up to two years or disqualification · imprisonment of six months to three years or disqualification, in case the offender commits an offence: a) as a member of an organised group, or b) gained a substantial benefit for themselves or another person, or c) repeatedly. · imprisonment of one to five years or monetary penalty, in case the offender	Unauthorized waste management · disqualification · monetary penalty, in case the offender commits an offence: a) gained large-scale benefit for themselves or another person, or b) refers to hazardous waste.

	commits an offence: a) gained large-scale benefit for themselves or another person, or b) refers to hazardous waste.	
Denmark	Intentional: • Endangerment: fines; • Actual damage: fines or imprisonment for a term of maximum two years. With negligence: • Endangerment: fines. • Endangerment: fines or imprisonment for a term of maximum two years where the offence is committed through gross negligence. • Actual damage: fines or imprisonment for a term of maximum two years where the offence is committed through gross negligence. Under particular aggravating circumstances the term of imprisonment is up to six years under the Criminal Code. Fines ranges from DKK 5 000 to 40 000 (approx. €700 - 5 500) depending on the offence and type of waste.	Fine; other sanctions - Seizure/confiscation of any profits earned.
Estonia	Fine or up to 3 years imprisonment (see overview for fine levels).	fine of €3,200 - 16,000,000
Finland	Fine or imprisonment of up to two years	Same as Natural. Forfeiture.
Greece	Imprisonment of at least one year (up to five years) and/or monetary penalty from €3000 up to 60000, in case of intent. • If the act is performed by negligence, imprisonment up to maximum one year or and a monetary penalty from €150 up to 15 000. • In case of a danger of serious or wide spread pollution or degradation, imprisonment of at least two years or and a monetary penalty of €20 000 up to 150 000. • In case of a danger of death of an embryo or a person, or to the emergence of a serious bodily or mental illness to a neonate, or to a heavy bodily or mental illness of a person, imprisonment up to ten years or and monetary penalty from €150 000 up to 500 000. • In case of a serious or wide pollution or degradation, or the death of an embryo or person or the emergence of a heavy bodily or mental illness to a neonate or the heavy bodily or mental illness of a person, imprisonment from five up to twenty years is imposed, or and a monetary penalty from €150 000 up to 500 000. • In cases of acts resulting to danger of widespread pollution, danger of death, widespread pollution, danger of death of a person or embryo, or heavy bodily or mental illness, committed by negligence, imprisonment of at least one year (up to five years) or and a monetary penalty from €60 000 up to 150 000.	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; or • A temporary, or in case of relapse a final cessation of the business activity; or • A temporary or final disqualification from any public funding or aid; or • The publication, at its own expenses, of the irreversible condemnatory court decision in two daily newspapers of wide circulation or combination of all the above sanctions.
Croatia	· In case of risk of endangering the quality of air, soil, sub-soil, water or the sea, or animals, plants or fungi, life or health of humans: imprisonment from 6 months to 5 years. With negligence: imprisonment not exceeding two years. · In case of serious injury to one or more persons, or changes caused by pollution that cannot be remedied for a longer period of time, or a major accident: imprisonment for one to ten years. With negligence: imprisonment for six months to five years. · In case of death of one or more persons: imprisonment for three to fifteen years/negligence: imprisonment for one to eight years. Fine is	fines and termination of the legal entity- If the criminal offence is punishable by a fine or imprisonment for a term of up to one year, the legal person may be punished by a fine of 5,000.00 (app. €655.00) ¹ to 8,000,000.00 kuna (app. €1,049,000.00)- If the criminal offence is punishable by imprisonment for a term of up to five years, the legal person may be punished by a fine of 15,000.00 (app. €1,966.00) to 10,000,000.00 kuna (app. €1,310,374.00)- If the criminal offence is punishable by imprisonment for a term of up to ten years, the legal person may be punished by a fine of 30,000.00 (app. €3,930.00) to 12,000,000.00 kuna (app.

	imposed according to daily income. It amounts to at least thirty and not more than three hundred sixty daily incomes, except for criminal offences committed for personal gain when the maximum fine may amount to five hundred daily incomes.	€1,572,880.00)- If the criminal offence is punishable by imprisonment for a term of up to fifteen years, the legal person may be punished by a fine of 50,000.00 (app. €6,553.00) to 15,000,000.00 kuna (app. €1,966,100.00)The penalty of termination of a legal person may be imposed if the legal person has been established for the purpose of committing criminal offences or if it has used its activities primarily to commit criminal offences.
Ireland	Depending on the offence, the maximum penalty is €3,000 and/or 12 months in prison if convicted summarily or 5 years in prison and/or €15,000,000 if convicted on indictment.	Same as Natural
Italy	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Latvia	Collection, transportation, recovery, disposal of hazardous waste the natural persons are imposed with imprisonment for a term not exceeding four years, or custodial arrest, or community service, or a fine not exceeding one hundred fifty times the minimum monthly wage (€42 686). As regards the disposal of waste, the sanctions applicable for this crime is imprisonment for a term not exceeding four years, or custodial arrest, or community service, or a fine not exceeding one hundred times the minimum monthly wage (€28 457).	Fine from €284 570 - 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequence.
Lithuania	Where an unlawful act has caused a threat to the human life or health or it could have caused substantial damage to water, air, soil, animals or plants or serious consequences to the environment: a fine of up to €18 825, or restriction of liberty of 3 to 24 months, or arrest of 15 to 90 days, or an imprisonment for a term of up to three years;Where an unlawful act has caused substantial damage to water, air, soil, animals or plants or serious consequences to the environment: a fine of up to €37 650, or arrest of 15 to 90 days, or an imprisonment for a term of up to six years.	Fine of up to €1,882,530; or restriction of operation of the legal entity or liquidation of the legal entity.
Luxembourg	- Imprisonment from eight days to five years and/or a fine from €251 - 750 000. - Other criminal sanctions: the judge can order the seizure of products, elements or materials that are in breach of the law because of the non-respect by producers, holders and importers of their management waste obligations. The judge can order the restoration of the place to its previous state (rétablissement des lieux dans leur état antérieur) at the expenses of the offender.	Fine up to €1 500 000. Admin - The confiscation of any type of property and/or the exclusion from public procurement and/or the dissolution of the legal persons.
Malta	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Netherlands	Under the Economic Offences Act: Felony: Imprisonment not exceeding six years, and fine of fifth category [€78,000] Misdemeanour: Imprisonment not exceeding one year and fine of the fourth category [€19,500].	Fine can be increased up to €780 000 maximum or €78 000 for the Economic Offences Act. Also accessory sanctions: The total or partial cessation of the enterprise for maximum of one year. Confiscation of certain objects; Placing enterprise under judicial supervision; Provision of compensatory services.
Poland	- For the offence committed intentionally – a sanction of deprivation of liberty for a term between three months and five years. - For the offence committed unintentionally	Same as Natural

	– a fine or a sanction of restriction of freedom or sanction of deprivation of liberty for a term up to two years. Admin: 1) When the offence violated at the same time as the provisions of the 2001 Act on Waste (and most probably it would do so) – administrative fine of PLN 10 000 (€2 500). 2) When the activity is carried out in the installation operated without the required IPPC permit provisions - obligatory stopping of the operation of the installation. 3) When relevant - obligations imposed under the provisions transposing the Environmental Liability Directive.	
Portugal	• Harm to environmental legal interests with intent - term of imprisonment up to three years and fine up to 600 days; • Creation of danger to environmental legal interests with intent - term of imprisonment up to two years and fine up to 360 days; • Harm to environmental legal interests with negligence - term of imprisonment up to one year and fine up to 240 days; • Creation of danger to environmental legal interests with negligence - term of imprisonment up to six months and fine up to 120 days; • Creation of danger to life or physical integrity with intent - term of imprisonment from one to eight years, and; • Creation of danger to life or physical integrity with negligence- term of imprisonment up to five years). Admin: When term of imprisonment applicable is not over two years, it may be replaced by work in benefit of the community. If the term of fine applicable to the agent is not over 240 days, the court may only deliver a reprimand.	Fine up to 600 days (harm of environmental legal interests with intent). Fine up to 360 days (creation of danger to environmental legal interests with intent). Fine up to 240 days (harm of environmental legal interests with negligence). Fine up to 120 days (creation of danger to environmental legal interests with negligence). Admin: In alternative to the term of fine, if the applicable fine is not over 240 days, legal persons may be subjected to a reprimand delivered by the court; if the term of fine applicable to the legal person is less than 600 days, legal persons may be only subjected to court supervision or the fine may be replaced by a deposit of good conduct.
Slovakia	Unauthorized waste management • in small amount: imprisonment of up to two years • on a large scale: imprisonment from six months to three years • on a considerable scale: imprisonment from one to five years • on an extensive scale: imprisonment from three to eight years. For substantial environmental damage or large scale environmental damage, same as 3(a). Admin: not classified as criminal offence, then administrative sanction in the form of fine up to 99,- € may be imposed.	Confiscation of a sum of money in amount of €800 - 1 660 000. When determining the amount of money to be confiscated the court shall consider the seriousness of the committed criminal offence, the scope of the offence, the benefit gained, the damage arisen, the circumstances of the commission of the criminal offence and the consequences for the legal person.
Slovenia	1. imprisonment of up to five years; 2. if the offence from 1. results in serious bodily injury or in actual damage to the quality of air, soil or water or animals or plants: imprisonment from 30 days to eight years; 3. If the offence results in death of one or more persons: imprisonment of one to twelve years; 4. if the offence from 1. is committed by negligence: a fine or imprisonment from 30 days to two years; 5. if the offence is committed in a criminal society to carry out these acts: imprisonment of one to 12 years. If perpetrator committed any of the above offences out of greed, a monetary fine may also be imposed in the amount of between 30 and 360 times the daily wage of the perpetrator.	For the above offences for which the prescribed punishment for a natural person is under three years of imprisonment: fine up to EUR 500,000 or a fine of maximum one hundred times of the resulting damage or of the proceeds from the offence. For the above offences for which the prescribed punishment for a natural person is over three years: fine from €50,000 - 1,000,000 or a fine of maximum two hundred times of the resulting damage or of the proceeds from the offence.

Spain	Imprisonment between 1 and 2 years. If damage is actually done, the sanction will be imposed in its upper half. If the action is done with recklessness, the sanction imposed will be reduced by one degree.	Criminal - fine of one to three years, or two to four times the damage caused when the resulting amount would be higher if the offence committed by the individual carries a sentence of more than two years' imprisonment. When the offence committed by a natural person carries a sentence of less than 2 years imprisonment, the sanction imposed to the legal person will be a fine of six months to two years, or double to triple the damage caused if the resulting amount was higher. In addition, when the commission of those acts is done in one of the ways foreseen in Article 326 paragraphs a), b), c) or d), the sanction shall be imposed in its higher half within the foreseen range, without prejudice to the imposition of any other sanction that may apply under the SCC. Article 326 reads as follows: a) That the industry or activity works secretly, without obtaining the required authorisation or administrative approval of their facilities; b) That they have disobeyed the explicit orders of the administrative authority requesting correction or suspension of the activities defined in the previous article; c) That information on the environmental aspects of the activity has been falsified or withheld; d) That the inspection activities of the Administration have been hampered. Administrative serious infringements include a fine between €45,001 to 1,750,000, or from €300,001 to 1,750,000 in case of dangerous waste. The law foresees also the prohibition to carry out the professional activity for a period between 1 and 10 years, the temporary or permanent closure of the installations of equipment, or the temporary withdrawal of the authorisation for a period between 1 and 10 years.
Sweden	Fine (max €17,250) or imprisonment not exceeding two years. If the offence is serious, term of imprisonment between six months and six years	Corporate fine not less than 5000 SEK nor more than 10,000,000 SEK (app. €500 - 1 000 000).
UK	For a number of the offences listed under Article 3(b) the maximum sanction that can be imposed on summary conviction is a fine not exceeding level 5 on the standard scale (up to £5,000), or on conviction on indictment, a fine. Under the EPA 1990 and the WCL (NI) Order 1997, which set out the overarching waste duty of care, the maximum fine that can be imposed on summary conviction is £50,000 in relation to England, Wales and Northern Ireland and £40,000 in Scotland. In addition, or as an alternative, imprisonment of up to 6 or 12 months can be imposed depending on the offence. On conviction on indictment, an unlimited fine can be imposed and/or a term of imprisonment not exceeding 5 years (2 years in the case of Scotland), or both fine and imprisonment. Where the offence involves hazardous/special waste, higher sanctions may be imposed, for example in Scotland where up to 5 years imprisonment may then be imposed. Administrative sanctions - The introduction of 'civil sanctions' in England and Wales has given the regulator administrative powers to deal with environmental offences. These include	Same as Natural

	the power to impose a variable monetary sanction, fixed money penalty, restoration notice, compliance notice, stop notice or enforcement undertaking. A number of the transposition measures also provide the regulator with a range of administrative powers to carry out its enforcement functions. These include the power to serve notices, including enforcement notices, suspension notices and also fixed sanction notices. The regulator also has the power to carry out works and recover the costs. The Court can also order the cause of the offence to be remedied.	
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Table 11: Penalties for Article 3c

Country	Natural Persons	Legal Persons
Austria	Treatment and transport of waste constituting a risk to the environment: - With intent with mitigating consequences: up to 1 year of imprisonment or fine up to 360 daily units - With serious negligence and mitigating circumstances: up to 6 months of imprisonment or fine up to 360 daily units.	Intentional • fine up to 55 daily units With serious negligence • fine up to 55 daily units
Belgium	Federal - 8 days – 3 years, €40 – 8,000,000; Flanders - 1 month – 5 years, €100 – 500,000; Brussels - 1 month – 5 years, €125 – 100,000. Wallonia - 8 days – 3 year, €100 – 1,000,000	Federal - €500 – 8,000,000; Flanders - €500 – 1,000,000; Brussels €500 – 200,000; Wallonia - €500 – 2,000,000.
Bulgaria	Imprisonment of up to four years and a fine of €1 000 - 2 500 (BGN 2 000 to BGN 5 000). If the act has been committed by negligence, imprisonment of up to two years or probation shall be imposed.	A number of coercive administrative measures can be imposed such as provisional immobilization of the shipment (additional financial guarantee may be requested to be paid); removal of the road vehicle together with the waste to a suitable location at the expense of the carrier (additional financial guarantee may be requested to be paid); return of the waste to the country of dispatch or environmentally sound treatment of the waste. A pecuniary penalty of €5,000 to 25,000 (10,000 to 50,000 leva) can be imposed and for non-compliance with the prescribed coercive administrative measures.
Cyprus	With gross negligence, the person found guilty of such offence, is subject to imprisonment not exceeding three years or to a fine not exceeding €100 000 or to both sentences; with intent the person found guilty is subject to imprisonment for a period not exceeding seven years or to a fine not exceeding €200 000 or to both of these sentences; irrespective of whether they were committed with gross negligence or with intent that have the result of substantial damage to the quality of air, soil water or to animals or plants the person found guilty is subject to imprisonment for a period not exceeding ten years or to a fine not	Same as Natural

	exceeding €500 000 or to both of these sentences;	
Czech	Unauthorized waste management, with intent or by negligence · imprisonment up to one year or disqualification · imprisonment of six months to three years or disqualification, in case the offender commits an offence: a) as a member of an organised group, or b) gained a substantial benefit for themselves or another person, or c) repeatedly. · imprisonment of one to five years or monetary penalty, in case the offender commits an offence: a) gained large-scale benefit for themselves or another person, or b) refers to hazardous waste.	Unauthorized waste management · disqualification · monetary penalty, in case the offender commits an offence: a) gained large-scale benefit for themselves or another person, or b) refers to hazardous waste.
Denmark	Intentional: • Endangerment: fines; • Actual damage: fines or imprisonment for a term of maximum two years. With negligence: • Endangerment: fines. • Endangerment: fines or imprisonment for a term of maximum two years where the offence is committed through gross negligence. • Actual damage: fines or imprisonment for a term of maximum two years where the offence is committed through gross negligence. Under particular aggravating circumstances the term of imprisonment is up to six years under the Criminal Code. recommended minimum level of fines for violations of the Waste Shipment Regulation is 20 000 DKK (approx. €2 700) for waste requiring notification but where no written consent for the shipment is obtained, an additional fine of DKK 3 000 (approx. €500) per ton of waste is recommended. And for formal offences e.g. failure to present the transport document, the recommended minimum fine is DKK 10 000 (approx. €1 500).	Fine; other sanctions- Seizure/confiscation of any profits earned.
Estonia	Fine or up to 1 year imprisonment (see overview for fine level).	Fine of €3,200 to 16,000,000.
Finland	Waste management violation: a fine	Same as Natural. the corporate fine varies from €850 to 850 000. Forfeiture has no monetary limits but the legal conditions for forfeiting must be fulfilled.
Greece	Imprisonment of at least one year (up to five years) and/or monetary penalty from €3000 up to 60000, in case of intent. • If the act is performed by negligence, imprisonment up to maximum one year or and a monetary penalty from €150 up to 15 000. • In case of a danger of serious or wide spread pollution or degradation, imprisonment of at least two years or and a monetary penalty of €20 000 up to 150 000. • In case of a danger of death of an embryo or a person, or to the emergence of a serious bodily or mental illness to a neonate, or to a heavy bodily or mental illness of a person, imprisonment up to ten years or and monetary penalty from €150 000 up to 500 000. • In case of a serious or wide pollution or degradation, or the death of an embryo or person or the emergence of a heavy bodily or mental illness to a neonate or the heavy bodily or mental illness of a person, imprisonment from five up to twenty years is imposed, or and a monetary penalty	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; or • A temporary, or in case of relapse a final cessation of the business activity; or • A temporary or final disqualification from any public funding or aid; or • The publication, at its own expenses, of the irreversible condemnatory court decision in two daily newspapers of wide circulation or combination of all the above sanctions.

	from €150 000 up to 500 000. • In cases of acts resulting to danger of widespread pollution, danger of death, widespread pollution, danger of death of a person or embryo, or heavy bodily or mental illness, committed by negligence, imprisonment of at least one year (up to five years) or and a monetary penalty from €60 000 up to 150 000.	
Croatia	Unlawful shipment of waste the prescribed punishment is imprisonment up to two years. If such conduct has resulted in serious injury to one or more persons, or changes caused by pollution which cannot be remedied for a longer period of time, or a major accident, the prescribed punishment is imprisonment from one to ten years, while the penalty for negligence is imprisonment from six months to five years. Fine is imposed according to daily income. It amounts to at least thirty and not more than three hundred and sixty daily incomes, except for criminal offences committed for personal gain when the maximum fine may amount to five hundred daily incomes.	Fines and termination of the legal entity - If the criminal offence is punishable by a fine or imprisonment for a term of up to one year, the legal person may be punished by a fine of 5,000.00 (app. €655.00) to 8,000,000.00 kuna (app. €1,049,000.00) - If the criminal offence is punishable by imprisonment for a term of up to five years, the legal person may be punished by a fine of 15,000.00 (app. €1,966.00) to 10,000,000.00 kuna (app. €1,310,374.00) - If the criminal offence is punishable by imprisonment for a term of up to ten years, the legal person may be punished by a fine of 30,000.00 (app. €3,930.00) to 12,000,000.00 kuna (app. €1,572,880.00) - If the criminal offence is punishable by imprisonment for a term of up to fifteen years, the legal person may be punished by a fine of 50,000.00 (app. €6,553.00) to 15,000,000.00 kuna (app. €1,966,100.00) The penalty of termination of a legal person may be imposed if the legal person has been established for the purpose of committing criminal offences or if it has used its activities primarily to commit criminal offences.
Ireland	On summary conviction, the maximum penalty is a fine of €3,000 and/or 3 months in prison or on conviction on indictment, a fine of €500,000 and/or 3 years imprisonment.	Same as Natural
Italy	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Latvia	Import of hazardous waste imprisonment for a term not exceeding five years or custodial arrest, or community service, or a fine not exceeding two hundred times the minimum monthly wage (€56 914).	fine from €284 570 - 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequences.
Lithuania	Community service of one month to one year (the sanction can be imposed only with the consent of the convict), or a fine of up to €18 825, or restriction of liberty of 3 to 24 months, or arrest of 15 to 90 days, or imprisonment for a term of up to three years.	Fine of up to €1,882,530; or restriction of operation of the legal entity or liquidation of the legal entity.
Luxembourg	- Imprisonment from eight days to six months and/or a fine from €251 - 100 000. - Other criminal sanctions: the judge can order the seizure of tools and machines used by the offender to commit the offence. He /she can also seize products, elements or materials that are in breach of the law because of the non-respect by producers, holders and importers of their waste management obligations.	Fine up to €200 000. Administrative sanctions - The confiscation of any type of property and/or the exclusion from public procurement and/or the dissolution of the legal persons.

Malta	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Netherlands	Under the Economic Offences Act: Felony: Imprisonment not exceeding six years, and fine of fifth category [€78,000] Misdemeanour: Imprisonment not exceeding one year and fine of the fourth category [€19,500].	Fine can be increased up to €780 000 maximum or €78 000 for the Economic Offences Act. Also accessory sanctions: The total or partial cessation of the enterprise for maximum of one year. Confiscation of certain objects; Placing enterprise under judicial supervision; Provision of compensatory services.
Poland	1. For the offence committed intentionally – a sanction of deprivation of liberty for a term between three months and five years. 2. For the offence committed unintentionally – a fine or a sanction of restriction of freedom or a sanction of deprivation of liberty for a term up to two years. Administrative sanctions: Administrative fine in the amount of between PLN 50,000 (€12 500) and PLN 300 000 (€75 000).	Same as Natural
Portugal	Term of imprisonment up to three years or fine up to 600 days (intent). Term of imprisonment up to one year or fine up to 360 days (negligence). Administrative sanctions: When term of imprisonment applicable is not over two years, it may be replaced by work in benefit of the community. If the term of fine applicable to the agent is not over 240 days, the court may only deliver a reprimand.	Fine up to 600 days (intent). Fine up to 360 days (negligence). Administrative sanctions: In alternative to the term of fine, if the applicable fine is not over 240 days, legal persons may be subjected to a reprimand delivered by the court; if the term of fine applicable to the legal person is less than 600 days, legal persons may be only subjected to court supervision or the fine may be replaced by a deposit of good conduct.
Slovakia	Unauthorized waste management • in small amount: imprisonment of up to two years • on a large scale: imprisonment from six months to three years • on a considerable scale: imprisonment from one to five years • on an extensive scale: imprisonment from three to eight years. Administrative sanctions: not classified as criminal offence, then administrative sanction in the form of fine up to 99,- € may be imposed.	Confiscation of a sum of money in amount of €800 - 1 660 000. When determining the amount of money to be confiscated the court shall consider the seriousness of the committed criminal offence, the scope of the offence, the benefit gained, the damage arisen, the circumstances of the commission of the criminal offence and the consequences for the legal person.
Slovenia	1. imprisonment 30 days to five years; 2. if the offence from 1 is committed by negligence: fine or imprisonment from 30 days to two years; 3 if the offence is committed in a criminal society to carry out these acts: imprisonment of one to 12 years. If perpetrator committed any of the above offences out of greed, a monetary fine may also be imposed in the amount of between 30 and 360 times the daily wage of the perpetrator.	For the above offences for which the prescribed punishment for a natural person is under three years of imprisonment: fine up to €500,000 or a fine of maximum one hundred times of the resulting damage or of the proceeds from the offence. For the above offences for which the prescribed punishment for a natural person is over three years: fine from €50,000 - 1,000,000 or a fine of maximum two hundred times of the resulting damage or of the proceeds from the offence.
Spain	Imprisonment from 1 to 2 years. If, in addition to endangerment there is actual damage caused, the sanction will be imposed in its upper half. If the action is done with recklessness, the sanction imposed will be reduced by one degree.	Criminal - fine of one to three years, or two to four times the damage caused when the resulting amount would be higher if the offence committed by the individual carries a sentence of more than two years' imprisonment. When the offence committed by a natural person carries a sentence of less than 2 years imprisonment, the sanction imposed to the legal person will be a fine of six months to two years, or double to triple the damage caused if the resulting amount was higher. In addition, when the commission of those acts is done in one of the ways foreseen in Article 326 paragraphs a), b), c) or d), the sanction shall be imposed in its higher half within the foreseen range, without

		prejudice to the imposition of any other sanction that may apply under the SCC. Article 326 reads as follows: a) That the industry or activity works secretly, without obtaining the required authorisation or administrative approval of their facilities; b) That they have disobeyed the explicit orders of the administrative authority requesting correction or suspension of the activities defined in the previous article; c) That information on the environmental aspects of the activity has been falsified or withheld; d) That the inspection activities of the Administration have been hampered. Administrative sanctions - very serious infringements include a fine between €45,001 - 1,750,000, or from €300,001 - 1,750,000 in case of dangerous waste. The law foresees also the prohibition to carry out the professional activity for a period between 1 and 10 years, the temporary or permanent closure of the installations of equipment, or the temporary withdrawal of the authorisation for a period between 1 and 10 years.
Sweden	Fine (max €17,250) or term of imprisonment not exceeding two years.	Corporate fine not less than 5000 SEK nor more than 10,000,000 SEK (app. €500 - 1 000 000).
UK	The maximum sanction that can be imposed is (a) on summary conviction, a fine not exceeding the statutory maximum or to imprisonment not exceeding 3 months or to both; or (b) on conviction on indictment, to a fine or to imprisonment for a term not exceeding 2 years or to both. The transposition measures for Regulation (EC) No 1013/2006 and Regulation (EC) No 1418/2007 make provision for fixed penalties, civil sanctions (England only) and enforcement and prohibition notices.	Same as Natural

Table 12: Penalties for violations of Article 3e

Country	Natural Persons	Legal Persons
Austria	Illegal handling of nuclear material, radioactive substances or ionising installations: up to 3 years of imprisonment, and with aggravating circumstances, imprisonment of 1 to 10 years; or of 5 to 15 years or 10 to 20 years or lifelong depending on the offence; and in aggravating conditions, imprisonment of 6 months to 5 years - With negligence: Imprisonment up to 1 year or fine up to 360 daily units; and with aggravating circumstances, of up to 2 years or fine up to 360 daily units; or Imprisonment up to 3 years or of 6 months to 5 years depending on the case.	Intentional - Abstract endangerment: up to 85 daily units; In case of a concrete damage: up to 130 units. With negligence - Abstract endangerment: fine up to 55 daily units; Concrete damage: fine up to 70 daily units. No differentiation between portions of the code. See main overview.
Belgium	Federal - 3 months – 2 years, €1,000 - 1,000,000. All others N/A.	Federal - €1,500 – 2,000,000; Others all N/A
Bulgaria	Provides for imprisonment of one to six years. When a risk for possible damages to the environment has been caused, the level of sanction is increased to imprisonment of two to eight years. When damages to the environment have been caused, imprisonment of five to ten years shall be imposed. When a risk for the life or health of another person has been caused, imprisonment of two to eight years shall be	A pecuniary penalty of €2,500 to 10,000 (5,000 to 20,000 leva) can be imposed for activities with sources of ionising radiation without a permit or licensing. A pecuniary penalty of €1,500 - 5,000 (3,000 to 10,000 leva) for non-compliance with the issued permit or license. Coercive administrative measures that can be imposed for prevention and termination of administrative violations - suspension or limitation of the activity for

	imposed. When an average or serious bodily harm to one or more persons when the perpetrator did not want or have not foreseen these consequences has been caused, imprisonment of five to ten years shall be imposed. When death of one or more persons when the perpetrator did not want or have not foreseen these consequences has been caused, imprisonment of eight to 15 years and a fine of €5 000 - 10 000 (BGN 10 000 to BGN 20 000) shall be imposed. If the act has been committed by negligence, imprisonment of up to three years shall be imposed.	which a permit or license has been issued; temporary withdrawal of a certificate of qualification; ordering the following to be carried out - a) analyses, expert reviews, inspections, testing of substances and products, installations, equipment, parts thereof, systems, or components; b) modification of the conditions and limits set for the facility operations; c) amendments to projects and constructions which are related to nuclear safety, radiation protection, physical protection and accident preparedness or d) supplementing and amending the curricula and courses and provision of additional training, including check-ups on the knowledge and skills. In case of repeated offence, the size of the respective pecuniary penalty is multiplied by three or five.
Cyprus	With gross negligence, the person found guilty of such offence, is subject to imprisonment not exceeding three years or to a fine not exceeding €100 000 or to both sentences; with intent the person found guilty is subject to imprisonment for a period not exceeding seven years or to a fine not exceeding €200 000 or to both of these sentences; irrespective of whether they were committed with gross negligence or with intent that have the result of substantial damage to the quality of air, soil water or to animals or plants the person found guilty is subject to imprisonment for a period not exceeding ten years or to a fine not exceeding €500 000 or to both of these sentences.	Same as Natural
Czech	Unauthorised Production and Possession of Radioactive Substances and Highly Dangerous Substances, with intent:· imprisonment of one to five years or monetary penalty or disqualification· imprisonment of two to ten years or forfeiture of property, in case the offender commits an offence:a) caused grievous bodily harm, or b) to a large extent, or c) gained a substantial benefit for themselves or another person· imprisonment of eight to sixteen years or forfeiture of property, in case the offender commits an offence:a) caused grievous bodily harm to at least two persons or death, or b) gained large-scale benefit for themselves or another person, or c) as a member of an organised group, or d) during a state of national emergency or war. Unauthorised Production and Possession of Nuclear Material, with intent: imprisonment of two to ten years.Unauthorised Production and Possession of Special Fissionable Material, with intent: imprisonment of 8 to 15 years.	Unauthorised Production and Possession of Radioactive Substances and Highly Dangerous Substances:· monetary penalty or disqualification· forfeiture of property, in case the offender commits an offence:a) caused grievous bodily harm, or b) to a large extent, or c) gained a substantial benefit for themselves or another person· forfeiture of property, in case the offender commits an offence: a) caused grievous bodily harm to at least two persons or death, or b) gained large-scale benefit for themselves or another person, or c) as a member of an organised group, or d) during a state of national emergency or war.
Denmark	?	?
Estonia	Fine or up to 3 years imprisonment (see overview for fine levels).	fine of €3,200 to 16,000,000
Finland	Destruction of the environment: fine or imprisonment of up to two years • Aggravated environmental destruction: imprisonment of four months to six years • Health endangerment (nuclear related offences) : imprisonment of four months to four years (aggravated: imprisonment of two to six years; with gross negligence:	Same as Natural. Forfeiture.

	imprisonment of four months to four years; Nuclear device offence: imprisonment of two to ten years) • Nuclear energy use offence: fine or imprisonment of up to one year.	
Greece	Imprisonment of at least one year (up to five years) and/or monetary penalty from €3000 up to 60000, in case of intent. • If the act is performed by negligence, imprisonment up to maximum one year or and a monetary penalty from €150 up to 15 000. • In case of a danger of serious or wide spread pollution or degradation, imprisonment of at least two years or and a monetary penalty of €20 000 up to 150 000. • In case of a danger of death of an embryo or a person, or to the emergence of a serious bodily or mental illness to a neonate, or to a heavy bodily or mental illness of a person, imprisonment up to ten years or and monetary penalty from €150 000 up to 500 000. • In case of a serious or wide pollution or degradation, or the death of an embryo or person or the emergence of a heavy bodily or mental illness to a neonate or the heavy bodily or mental illness of a person, imprisonment from five up to twenty years is imposed, or and a monetary penalty from €150 000 up to 500 000. • In cases of acts resulting to danger of widespread pollution, danger of death, widespread pollution, danger of death of a person or embryo, or heavy bodily or mental illness, committed by negligence, imprisonment of at least one year (up to five years) or and a monetary penalty from €60 000 up to 150 000.	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; or • A temporary, or in case of relapse a final cessation of the business activity; or • A temporary or final disqualification from any public funding or aid; or • The publication, at its own expenses, of the irreversible condemnatory court decision in two daily newspapers of wide circulation or combination of all the above sanctions.
Croatia	• In case of risk of endangering the quality of air, soil, sub-soil, water or the sea, or animals, plants or fungi, life or health of humans: imprisonment from 6 months to 5 years/negligence: imprisonment not exceeding two years. • In case of serious injury to one or more persons, or changes caused by pollution that cannot be remedied for a longer period of time, or a major accident: imprisonment for one to ten years/negligence: imprisonment for six months to five years. • In case of death of one or more persons: imprisonment for three to fifteen years/negligence: imprisonment for one to eight years. Fine is imposed according to daily income. It amounts to at least thirty and not more than three hundred and sixty daily incomes, except for criminal offences committed for personal gain when the maximum fine may amount to five hundred daily incomes.	fines and termination of the legal entity - If the criminal offence is punishable by a fine or imprisonment for a term of up to one year, the legal person may be punished by a fine of 5,000.00 (app. €655.00) to 8,000,000.00 kuna (app. €1,049,000.00) - If the criminal offence is punishable by imprisonment for a term of up to five years, the legal person may be punished by a fine of 15,000.00 (app. €1,966.00) to 10,000,000.00 kuna (app. €1,310,374.00) - If the criminal offence is punishable by imprisonment for a term of up to ten years, the legal person may be punished by a fine of 30,000.00 (app. €3,930.00) to 12,000,000.00 kuna (app. €1,572,880.00) - If the criminal offence is punishable by imprisonment for a term of up to fifteen years, the legal person may be punished by a fine of 50,000.00 (app. €6,553.00) to 15,000,000.00 kuna (app. €1,966,100.00) The penalty of termination of a legal person may be imposed if the legal person has been established for the purpose of committing criminal offences or if it has used its activities primarily to commit criminal offences.
Ireland	Depending on the offence, on summary conviction the maximum penalty is €5,000 and/or 3 months imprisonment or on conviction on indictment the maximum penalty is €500,000 and/or 3 years imprisonment.	Same as Natural
Italy	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.

Latvia	production, processing, handling, use, holding, storage of nuclear materials or other hazardous radioactive substances imprisonment for a term not exceeding four years, or custodial arrest, or community service, or a fine not exceeding two hundred times the minimum monthly wage (EUR 56 914). Disposal of nuclear materials or other hazardous radioactive substances are for natural persons: imprisonment for a term not exceeding four years, or custodial arrest, or community service, or a fine not exceeding one hundred times the minimum monthly wage (EUR 28 457). Import and export imprisonment for a term not exceeding five years or community service, or a fine not exceeding one hundred times the minimum monthly wage (EUR 28 457), with or without confiscation of property.	fine from EUR 284 570 to EUR 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequences. AND Import export if repeatedly committed or in a group of persons pursuant to prior agreement, or if such is committed on a large scale or if the crime is committed in an organised group: fine from EUR 284 570 to EUR 2 845 700. Confiscation of property may also be applied to a legal person as an additional coercion measure, if as a result of the offence, the legal person has gained a material benefit and limitation of rights or monetary levy have also been applied as basic coercion measures. Compensation for harm caused may be applied as an additional coercive measure to a legal person, if as a result of the criminal offence, the legal person has caused substantial harm or serious consequences
Lithuania	Fine of up to €56 475, or restriction of liberty of 3 to 24 months, or arrest of 15 to 90 days, or imprisonment for a term of up to 10 years.	Fine of up to €1,882,530; or restriction of operation of the legal entity or liquidation of the legal entity.
Luxembourg	• Imprisonment from eight days to one years and/or a fine from EUR 251 to EUR 25 000	Fine up to €50 000. Administrative sanctions - the confiscation of any type of property and/or the exclusion from public procurement and/or the dissolution of the legal persons.
Malta	See overview for general sanctions - country report provides nothing specific.	See overview for general sanctions - country report provides nothing specific.
Netherlands	Under the Nuclear Energy Act: In case of an intentional act in violation of results in a certain threat of severe bodily harm for another or substantial damage of goods or the environment, the guilty shall be punished with imprisonment of maximum twelve years or a fine of the fifth category [€78 000]. (for legal persons, fine can be increased up to €780 000). Under the Economic Offences Act: Felony: Imprisonment not exceeding six years, and fine of fifth category [€78,000] Misdemeanour: Imprisonment not exceeding one year and fine of the fourth category [€19,500]	Fine can be increased up to €780 000 maximum or €78 000 for the Economic Offences Act. Also accessory sanctions: The total or partial cessation of the enterprise for maximum of one year. Confiscation of certain objects; Placing enterprise under judicial supervision; Provision of compensatory services.
Poland	1. For the offence committed intentionally – a deprivation of liberty for a term between three months and five years. 2. For the offence committed unintentionally – a fine or a sanction of restriction of freedom or a sanction of deprivation of liberty for a term up to two years. Administrative sanctions: Administrative fine imposed on the director of the entity subject to regulations of the 2001 Nuclear Law Act and violating certain provisions of that Act.	Same as Natural
Portugal	• Harm to environmental legal interests with intent - term of imprisonment up to three years and fine up to 600 days; • Creation of danger to environmental legal	Fine up to 600 days (harm of environmental legal interests with intent). Fine up to 360 days (creation of danger to environmental legal interests with intent).

	interests with intent - term of imprisonment up to two years and fine up to 360 days; • Harm to environmental legal interests with negligence - term of imprisonment up to one year and fine up to 240 days; • Creation of danger to environmental legal interests with negligence - term of imprisonment up to six months and fine up to 120 day; • Creation of danger to life or physical integrity with intent - term of imprisonment from one to eight years, and; • Creation of danger to life or physical integrity with negligence- term of imprisonment up to five years. Administrative sanctions: When term of imprisonment applicable is not over two years, it may be replaced by work in benefit of the community. If the term of fine applicable to the agent is not over 240 days, the court may only deliver a reprimand.	Fine up to 240 days (harm of environmental legal interests with negligence). Fine up to 120 days (creation of danger to environmental legal interests with negligence). Administrative sanctions: In alternative to the term of fine, if the applicable fine is not over 240 days, legal persons may be subjected to a reprimand delivered by the court; if the term of fine applicable to the legal person is less than 600 days, legal persons may be only subjected to court supervision or the fine may be replaced by a deposit of good conduct.
Slovakia	Illicit manufacturing and possession of nuclear materials, radioactive substances, hazardous chemicals and hazardous biological agents and toxins• imprisonment from one to five years,• imprisonment from three to ten years if committed in a more serious manner or by reason of specific motivation,• imprisonment from 10 to 20 years, if it causes grievous bodily harm or death or if the offender obtains a considerable benefit through the commission of the crime, or is a member of a dangerous group. • imprisonment from 20 to 25 years or life sentence if it causes grievous bodily harm or death to several persons or the offender obtains a large-scale benefit through the commission of the crime or acts under a crisis situation. For substantial environmental damage or large scale environmental damage, same as 3(a). Administrative sanctions: not classified as criminal offence, then administrative sanction in the form of fine up to 99,- € may be imposed.	Confiscation of a sum of money in amount of €800 - 1 660 000. 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.
Slovenia	1.) imprisonment 30 days to five years; 2. if the offence from 1 results in serious bodily injury or property damage or a substantial actual harm to the environment: imprisonment from six months to eight years. If perpetrator committed above offence out of greed, a monetary fine may also be imposed in the amount of between 30 and 360 times the daily wage of the perpetrator. By negligence, imprisonment of up to three years.	Fine from €50,000 - 1,000,000 or a fine of maximum two hundred times of the resulting damage or of the proceeds from the offence.
Spain	Imprisonment from 1 to 5 years. In addition, if the action is committed using force, the sanction will be imposed in its upper half, and one degree higher if it is committed with violence or intimidation against persons. Last but not least, if nuclear or radioactive materials are produced without authorisation, the sanction imposed will be one degree higher.	Administrative only - Very serious sanctions can raise up to €30 million in the case of nuclear installations. Moreover, very serious infringements can also lead to the temporary or permanent withdrawal of authorisations, licences and inscription in registries, as well as to the prohibition for the person responsible to obtain any type of authorisation or licence
Sweden	Nuclear materials: fine or term of imprisonment not exceeding two years. The nuclear material may also be declared forfeited in cases where there was no permit for the conduct. Other hazardous radioactive	Corporate fine not less than 5000 SEK nor more than 10,000,000 SEK (app. €500 - 1 000 000).

	substances: fine or term of imprisonment not exceeding two years. The materials that were subject to an offence under the RPA should be confiscated unless it is clearly unreasonable. (Again max of €17,250).	
UK	The maximum sanction that can be imposed is (a) on summary conviction, to a fine not exceeding the statutory maximum or to imprisonment for a term not exceeding 3 months or both, or (b) on conviction on indictment, to a fine or to imprisonment for a term not exceeding 2 years or both. Where the offence relates to breach of permitting requirements the maximum sanction that can be imposed in England and Wales is (a) on summary conviction to a fine not exceeding £50,000 or imprisonment for a term not exceeding 12 months, or to both, or (b) on conviction on indictment to a fine or imprisonment for a term not exceeding 5 years, or to both, and in Scotland and Northern Ireland is (a) on summary conviction, to a fine not exceeding £20,000 or to imprisonment for a term not exceeding 6 months, or both, or (b) on conviction on indictment, to a fine or to imprisonment for a term not exceeding 5 years, or both. Admin - The transposition measures for Directive 96/29/Euratom and Directive 2006/117/Euratom make provision for enforcement notices and prohibition notices.	Same as Natural

4.5 – General conclusions on waste crime

83. It is clear that the lack of joined up thinking and common standard of regulation and enforcement across EU jurisdictions are in fact facilitating the continuation and escalation of the problems raised by waste trafficking and illegal dumping. This is exacerbated by limited knowledge and expertise in agencies that must act together in a co-ordinated way to prove a crime has taken place, and the identity of those involved.
84. This is principally because the perpetrators of these crimes are frequently linked to organised crime groups and are geographically mobile, able to ‘shop around’ for the most beneficial regulatory climate in much the same way as a legitimate international corporation.
85. The broad scope of ‘waste’ as a concept is to some extent confusing matters and clearer guidance/understanding/expertise is required.
86. Waste crime itself is linked to a large number of other kinds of trafficking as well as financial crime.
87. Some of the best data available is on WEEE and it is almost certainly worth exploring how knowledge in this area has developed more clearly and consistently than for other aspects of waste.

4.6 – Summary and recommendations

88. The above overview of literature and data points to the inescapable conclusion that waste crime often needs to be considered alongside other forms of transnational, organised crime (people, drug and weapon trafficking, etc.). Like these crimes, and perhaps to an even greater extent than they, addressing waste crime both in terms of enforcement and prosecution requires specialist knowledge, training and equipment. The move towards specialised judges, and in cases specialist courts, in some jurisdictions must therefore be seen as a positive step. Consistency of approach between jurisdictions is vital as there is a strong tendency for these criminal groups to shift their basis of operations to whichever regime is least disruptive (either in terms of law and regulation, or more often in terms of practical implementation) to their business model.

5 - Sanctioning & Judicial Practice

5.1 – Quality of data on sanctioning

89. This report has touched upon sanctioning and judicial practice across the EU a number of times in its previous sections and will here try to offer a summary of available information (or lack of information). It is clear that sources of reliable and consistent, *comparable* data for environmental sanctioning are difficult to amalgamate. Almost every report acknowledges this difficulty with an associated call for better data. This itself breaks down into calls for more robust systems of reporting and recording environmental transgressions and more consistent responses to those transgressions both nationally and internationally. Where data are available they are often incomplete. For example, EnviCrimeNet's (2014) Intelligence Report on Environmental crime notes:

“In most cases we received police data only without figures on prosecutions or court sentences. As with other crime areas the amount of detected crime is much higher than the amount of actually prosecuted cases. The same applies to the relation of prosecuted cases to court sentences. However, some of the responses indicate that, for environmental crime, those figures are way below the average of other types of crime. One of the reasons given is the fact that environmental crimes are usually victimless ‘control crimes’. Supervisory authorities are, in most jurisdictions, the main source for reporting crimes to mandated LEAs” (p.10)

90. The report goes on to highlight the serious negative implications of this situation from a research and practitioner's perspective:

“The available statistics are not productive. Next to the usual problems of comparing EU crime statistics, the main issue is different in this case. Environmental crimes are control crimes, where the number of cases are in direct correlation to the number of (efficient) controls. As pointed out by many respondents and experts, the detection rate for environmental crime is directly linked to the activities of national, mostly administrative management and supervisory agencies in charge of monitoring compliance with a multitude of highly complex regulations linked to almost all areas of modern day life. If minor infringements are detected, those agencies and authorities can use fines as sanctions. If the threshold is reached qualifying the incident as a crime, be it through particularly serious or accumulated activities, they have to report this to LEAs, typically the police. If the work of all those different authorities is inhibited or inefficient or the interface for transferring cases is ineffective, criminal environmental cases will not come to the attention of investigating bodies or prosecuting authorities. This is reportedly the case in the majority of EU MS and makes an in-depth analysis of available statistics practically obsolete” (p.22)

91. EUROPOL's (2013) Threat Assessment and Intelligence Project on Environmental Crime emphasises the complexity and hidden nature of the relevant statistics as they often overlap with other crime types:

"Statistics are not available in a number of jurisdictions; some did not report on this question, others have databases which can provide partial statistics only. In many jurisdictions the statistics are part of the more general police or crime statistics with the usual difficulties that the value is limited due to limited compatibility. Also, quite often the 'lead crime' is used for statistics. Many cases of environmental crime are, however, not prosecuted as environmental crime but rather as 'conventional crimes', which can be more easily proven and prosecuted, such as fraud, forgery of documents or OCG activities. This is particularly the case for larger investigations. The statistical figures, if available, include many minor cases. The numbers range from less than a dozen to a few thousand, depending on jurisdiction size or population. In most cases we received police data only without figures on prosecutions or court sentences. As with other crime areas the amount of detected crime is much higher than the amount of actually prosecuted cases. The same applies to the relation of prosecuted cases to court sentences. However, some of the responses indicate that, for environmental crime, those figures are way below the average of other types of crime" (p.11)

92. The EFFACE project likewise noted that this lack of data led to a lack of consistent application of the Environmental Crime Directive:

"Information on the sanctions effectively imposed by the judiciary is also lacking. Such information is often not collected in a consistent way by Member States; as a consequence, no reliable or comprehensive data is available for the EU, either. If that type of information is lacking, it becomes very difficult to judge to what extent criminal enforcement can be considered as "effective, proportionate and dissuasive" as required by the ECD" (Gerstetter et al., 2016: p.29)

93. As such, EFFACE made it a core proposal of its Conclusions and Recommendations to

"Impose an obligation on Member States to provide data on the number of violations, prosecutions and imposed sanctions for violations of national provisions implementing European environmental law, commonly referred to as the environmental acquis" (Faure et al., 2016: p.13).

94. The data that was shared with us for this project does however provide evidence of good practice. The Environment Agency of England keeps a comprehensive spreadsheet, which includes defendant name, offender type, industry sector, date, action type (court case), fine amount, costs awarded, incident area, incident type (waste or water quality), specific offence, verdict, and defendant sentence. Germany collects similarly robust data though theirs was shared with us in the form of several

reports. One report in particular is a compilation of all crime data and *includes* environmental crime. Placing environmental crime data with conventional crime data seems to similarly place it in terms of seriousness.

95. The 24 country reports produced by Milieu Law and Policy Consultants that examine the transposition of the ECD into national legislation also provide an assessment as to whether the various approaches of the Member States are in fact ‘effective, proportionate and dissuasive’. The following table provides a summary of that assessment.

Table 13: Summary of Sanctions available to Member States and Assessment of Effective, Proportionate and Dissuasive (EPD) nature of penalties

Country	Sanctions and Assessment
Austria	Ambiguity if sanctions are effective, proportionate and dissuasive in regard to legal persons. Natural persons - Daily unit (DU) €4-5000 - max fine 360 DU. Prison range 6 months to 5-15/10-20/life for aggravated serious offences. Legal persons only DU €50 - 10000 DU max 180 depending on revenue and severity with numerous exceptions.
Belgium	Sanctions vary between Federal level and each region. Range of prison 8 days to 10 years for natural persons depending on mitigating factors. Fines range €6-1,000,000 and are adjusted for inflation. Legal persons fines of €500-14,000,000. Overall EPD but questionable in relation to CITES offences and Wallonia.
Bulgaria	Sanctions for natural persons range from €500-25,000 fines; imprisonment up to 20 years with reductions for mitigating circumstances and increases for aggravating conditions. In line with EPD due to increased penalties and specific environmental legislation, but in practice needs to be assessed after cases are tried. Sanctions for legal persons are relatively low, but thought to be EPD.
Cyprus	No mitigating or aggravating circumstances. EPD difficult to assess as only in effect from 2012. Penalties appear high enough to be dissuasive, but depend on judge's discretion. Other sanctions available - at any stage of the proceedings before or after the issuing of the final judgment, the court can issue an injunction by which it orders the defendant to take any measures it deems necessary for the restitution or mitigation of the damage and bear the financial cost of these.
Czech	Sanctions for natural persons range from 6 months to 16 years with disqualification and forfeitures prevalent. Few monetary fines, which are more reserved for administrative penalties of legal persons. Monetary penalty as another possible sanction, the daily rate can range from CZK 1,000 (€40) to CZK 2 million (€80 000) and according to § 68 of the Criminal Code the number of daily rates can range from 20 to 730, which would mean that a fine may be up to €58.4 million. Thought to be EPD.
Denmark	Sanctions for natural persons range from fines to a max of two years. Up to 6 for serious offences. Imprisonment only with aggravating circumstances including gross negligence and intent. Thought to be EPD.
Estonia	Minor sanctions compared to other offences. None ever tried as serious. EPD is doubtful. Criminal offences: 30-500 daily rates at €3.20/day for natural persons. €3,200 to 16,000,000 on a legal person. Thirty days to twenty years, or life imprisonment. Imprisonment for a term of more than ten years or life imprisonment shall not be imposed on a person who at the time of commission of the criminal offence is less than 18 years of age. A court may impose the compulsory dissolution on a legal person who has committed a criminal offence if the commission of criminal offences has become part of the legal person's activities. Administrative: Fines for natural persons thus range from €12 to 1,200. Fines for legal persons range from €32 up to 32,000. up to 30 days confinement. Supplementary sanctions such as loss of licences also available. There are mitigating and aggravating factors.
Finland	Natural persons: 4 months to 6 years; fines on daily calculation (see specific articles). Corporate fines (€ 850 - 850 000, potential forfeiture) and corporate liability cover environmental offences in penal code. EPD not assessed specifically.
Greece	Sanctions on natural persons are the same across the 9 sections. They range from 1-20 years prison and €150-500,000 fine for criminal offences. Legal persons are also subject to sanctions. Administrative sanctions range from €500-2,000,000. Thought to be EPD.
Croatia	Sanctions for natural persons range from 1-20 years prison and €150 - 500,000 fine for criminal offences. Fines on legal persons range from €1966 - 1,966,100 and can also include confiscations and public announcements. Thought to be EPD but no case law yet to assess.

Ireland	3a, b, d - sanctions attached to the relevant offences allow for only summary conviction and the maximum sanction is €5,000 and €3,000 respectively and/or up to one-year imprisonment. Legal persons are liable to sanctions, but the sanctions are not considered to be dissuasive. Normal range of sanctions for natural persons is now €3,000-€5,000 and/or three or six months on summary trial, with €500,000 and/or three years on trial by indictment. Waste - The range here is from €3,000 and/or 12 months on summary trial to €15 million or 10 years on trial by indictment. Legal persons are sanctioned the same as natural persons, which is an incorrect transposition.
Italy	Sanctions for natural persons has been incorrectly transposed since the transposing legislation does not provide for effective, proportionate and dissuasive sanctions. Sanctions for natural persons are typically misdemeanours, which means sanctions less than imprisonment no longer than three years and/or lighter fines (€10,000). Reduced sanctions are possible and common making the sanctions very light. For legal persons one quota is worth between €258 and €1.549. Sanctions range from 150 to 800 quotas (i.e. a maximum between €232,350 and €1 239 200). *unclear which sanctions apply to which article section as all grouped in 3a in country report.
Latvia	The national legislation provides only for criminal liability in case of actual damage and not endangerment which is also required. In theory EPD, but no practical application of sanctions, little case law and no law enforcement training means in reality not effective. Sanctions for natural persons: Imprisonment (the term of imprisonment is indicated in each provision regarding particular criminal offence); Custodial arrest (short-term compulsory imprisonment for a term of not less than three days and not exceeding three months); community service; fines - minimum amount is €28 457 and the maximum amount is €56 914. In Latvia, fines are expressed as minimum monthly wages which usually changes every year. Coercive measures may be imposed on that legal person if the act is done for the legal person's benefit. Sanctions for legal persons: liquidation; limitation of rights; monetary levy (a fine, not less than one thousand and not exceeding ten thousand times the minimum monthly wage specified in the Republic of Latvia at the moment of the rendering of the judgment – from €284 570 - 2 845 700); confiscation, compensation. These apply to all 9 offences.
Lithuania	Limiting or revoking of special rights and confiscation are also possible sanctions. Administrative sanctions - The Code lays down sanctions for the violation of environmental legislation which include warnings, fines and removal of the right to hold a certain position. Fines are the main sanctions enforced for most of administrative offences. As a rule, fines for environmental offences range from a fine of €29 - 2896 for natural persons and a fine of €58 - 14 481 for officials. Legal persons: a fine; or restriction of company's activity; or liquidation of the legal entity. For environmental crimes the following sanctions for legal persons may be imposed: a fine of up to €1 882 530; restriction of company's activity; liquidation of the legal entity, remediation. Thought to be EPD.
Luxembourg	Ambiguity in regards to liability of legal persons. Incorrect EPD as low sanctions (3c, d and e). Administrative: • Suspension after sending a letter of formal notice, of all or part of the operation or works through a temporary measure or have the establishment or site closed in full or in part and sealed. • Suspension after sending a formal notice, of all or part of the activity of traders, dealers, collectors and transport of waste through a temporary measure or have the relevant establishments or site closed in full or in part and sealed. • Prohibition of the operation of an installation or a storage facility or part of these if the measures taken by the operator for the prevention or the reduction of major-accidents are not sufficient. Criminal sanctions for legal persons can be either a fine, the confiscation of any type of property, the exclusion from public procurement and dissolution. In case of very serious offences (en matière criminelle) the amount of the criminal fine can be up to €750 000, and for serious offences (en matière correctionnelle) the fines applicable to legal persons must be twice as much as the criminal fines for natural persons.
Malta	No administrative fines - most common types of administrative sanctions are withdrawal of permits and the forfeiture of bank guarantees. Wilful acts by natural persons: Natural persons: If a person dies as a result of the offence the punishment awarded to the perpetrator would be life imprisonment. If a person suffers from grievous bodily harm with serious consequences the offender shall be liable to a punishment of a prison term with a minimum of 9 months to 9 years maximum. The punishment may be increased by one degree and entail imprisonment for a maximum term of 12 years or by two degrees which could lead to a maximum prison term of 20 years. If the grievous bodily harm has less serious consequences the punishment awarded may vary from a prison term with a minimum of 3 months to 3 years maximum. The CAEA however provides that even in such cases the punishment can be increased by 1 degree and this would lead to a prison term with a maximum of up to 5 years or even two degrees which would lead to imprisonment for a maximum term of 6 years. If grievous bodily harm is caused to two or more persons the Criminal Code stipulates that punishment shall not be awarded in its minimum. If only serious damage is caused to the quality of the air, soil or water, or to animals or plants, or to the environment in any other manner, the punishment would be imprisonment for a term from eight months to seven years or a fine (multa) of not less than €12,000 and not exceeding €2,500,000, or such imprisonment and fine (multa). Negligence or imprudence: If a person dies the punishment is imprisonment for a term not exceeding four years or to a fine (multa) not exceeding €11,646.87, which may be increased by 1 degree and this would lead to a

	term of imprisonment with a maximum of 5 years, or increased by two degrees that would entail imprisonment for a maximum of 6 years. If a person suffers from grievous bodily harm with serious consequences the punishment would be imprisonment for a term not exceeding four years or to a fine (multa) not exceeding €10,000 if there are less serious consequences the punishment awarded would be imprisonment for a term not exceeding one year or to a fine (multa) not exceeding €5,000. In all other cases, the punishment would be imprisonment for a term not exceeding six months or to a fine (multa) not exceeding €1,000. Person acting on behalf of Legal persons: payment of a fine (multa) of not less than €1,164.69 and not more than €1,164,686.17. Legal persons (body corporate) A fine (multa) of not less than €11,646.87 and not more than €2,329,373.40. The suspension or cancellation of any licence, permit or other authority to engage in any trade, business or other commercial activity; The temporary or permanent closure of any establishment which may have been used for the commission of the offence; The compulsory winding up of the body corporate. No distinction for wilfulness and negligence. Thought to be EPD.
Netherlands	Imprisonment cannot be issued against a legal person. However, those that ordered the act, as well as those that actually oversaw the prohibited behaviour, can be subject to imprisonment. EPD though higher fines may improve.
Poland	Thought to be EPD. Legal persons sanctions: The court shall impose on the collective entity a fine in amount between PLN 1 000 (€250) and PLN 5 000 000 (€1 210 000), but not higher than 3 per cent of the yearly income of the entity. In addition, the court shall impose on the collective entity the forfeiture of: Items directly or indirectly derived from an offence or which served to commit an offence; Financial benefits directly or indirectly derived from the offence. In addition, the court may impose on the collective entity the ban of: Promotion or advertising of its activity, products or services; Use of public financial resources; Use of the aid of international organisations (in practice: EU); Taking part in public tenders. All the bans may be imposed for the term of between one and five years. The court may also decide to make the sentencing judgement public.
Portugal	Existing legal framework is effective, proportionate and dissuasive when compared with the benchmarks identified above. The practice however is that there are few condemnations for environmental offences and those that have been pronounced have either decided on suspended term of imprisonment or fixed very low fines to legal persons considering the environmental damages that can result from the illegal behaviour and the economic benefit that can be obtained.
Slovakia	Ambiguous elements in 3b, c, d, and e. The national criminal system provides for the possibility to impose protective measures on legal persons. Protective measure that may be imposed on a legal person where environmental criminal offence has been committed in connection with the power of representation of this legal person is the confiscation of a sum of money. Where the criminal offence has been committed in connection with the operation of a legal person (if any of the elements of Article 6 of the Directive have been fulfilled), then a sum of €800 - 1,660,000 may be confiscated to the legal person. EPD in principal.
Slovenia	Administrative offences are fines, in the range from €40 - 5 000 for the natural persons, from €200 - 150 000 for individual entrepreneur, from €200 - 250 000 for small legal persons and from €400 to 500 000 for large legal persons. Thought to be EPD.
Spain	No cases where legal persons have been condemned in criminal law for environmentally damaging conducts. The Spanish Criminal Code creates criminal liability for environmental damage, it does not attach specific sanctions to the conducts mentioned in Article 3(e), 3(f), 3(g) and 3(h), with the result that they cannot be punished criminally. Whilst this is not a breach of Article 6 of the Directive, it requires an examination of the corresponding administrative sanctions in order to determine whether they are effective, dissuasive and proportionate. Difficult to assess EPD.
Sweden	Day-fines (which are imposed for environmental offences as well as other offences) are determined in a number between 30 and 150. Each day-fine is imposed as a fixed amount from 30 up to 1000 SEK. Sanctions on legal persons not EPD due to lack of deterrence to big companies. Sanctions on legal persons: conditional fines (proportionate to person's financial circumstances), forfeiture, and corporate fines (fines ranges between 5,000 SEK and 10,000,000 SEK.). Admin sanctions: the charges are at least 1000 SEK or at most 1,000,000 SEK. Currently, the office of the environmental prosecutors is looking into the possibility to publish the names of companies which have been found in breach of environmental provisions. They are looking into whether such publicity would be ethically and legally correct.
UK	Aside from criminal sanctions, the UK system provides the regulator (the EA, SEPA and the NIEA) with a range of administrative enforcement measures to carry out its enforcement functions. See country report for details of civil sanctions available to EA. Thought to be EPD.

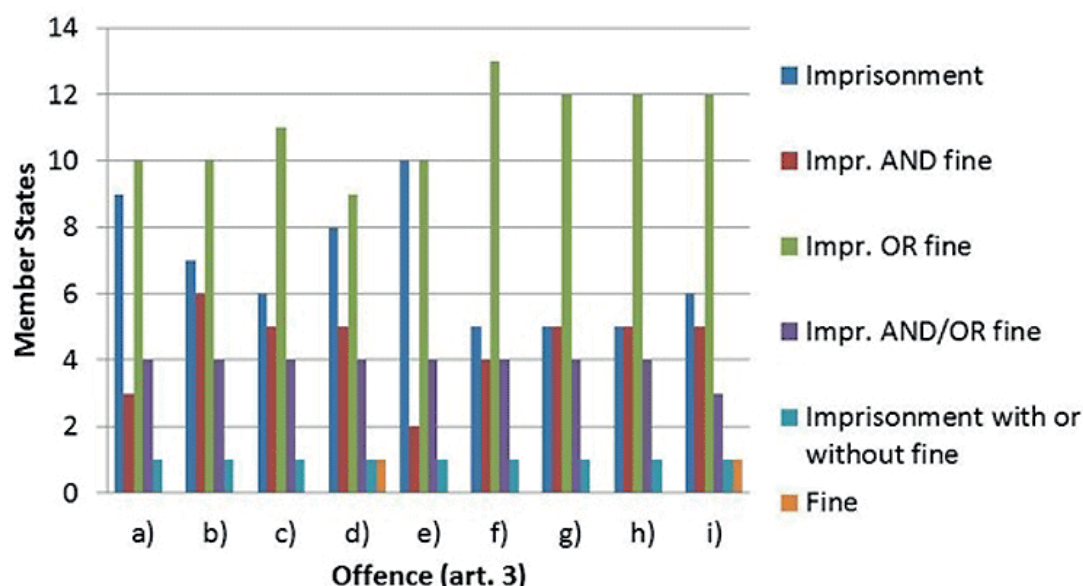
96. In summary, four of 24 countries are assessed as not having environmental legislation that is effective, proportionate and dissuasive (EPD) as required by the ECD. Six are thought to have EPD legislation, another three also potentially are compliant, but there are concerns about

the level of fines in the Netherlands the actual sentences given in Portugal and Slovakia. In eleven countries, it is unclear whether their legislation is EPD because there have not been enough cases to make the assessment and/or the legislation is too recently introduced.

97. The ENEC (Rosell and Banque, 2016) study found a high compliance with implementation of the ECD, but still found gaps, which they recommended need to be addressed.

98. Where successful comparisons have been made between countries, most conclusions emphasise the inconsistency of environmental sanctioning regimes between (and even within) jurisdictions as well as the variance in the practical application of such systems by actors and agencies on the ground. The 2004 Milieu Report, “Study on Measures other than criminal ones in cases where environmental Community law has not been respected in the EU Member States” (Milieu, 2004) argues that in theory, environmental crimes in all countries are sanctioned with similar penalties to traditional crimes, including with fines, prison and community sentences. However, in practice, fines are by far the most commonly used sanction for environmental offences and it is extremely rare for prison sentences to be issued. Rosell and Banque (2016) study found the following in terms of the six typologies of criminal sanctions employed for each of the nine offences in the ECD:

FIG.3 (from Rosell and Banque (2016))



99. It should be reiterated, these are the sanctions that are *available*, not necessarily the sanctions that are given upon conviction. So, for instance, where the sanction could be imprisonment OR fine, this data does not indicate which sanction was given. The above tables in the previous sections break down what the amount of the fines are and the length of

imprisonment for both natural and legal persons. The level of sanctions for specific crimes differs greatly between Member States as well as between Directives and Regulations and between specific crimes detailed in individual articles of Directives and Regulations. However, a general trend can be noted in all Member States towards more severe sentencing of environmental crimes; a trend which is being encouraged by the competent authorities. It can also be noted that the number of prosecutions for environmental crimes are increasing in nearly all Member States. This can be explained partly by an increase in the amount of environmental legislation and partly by an increasing willingness and ability for competent authorities to bring prosecutions, which reflects an increasing public concern over environmental damage.

100. The CWIT report (Huisman et al, 2015) into the illegal trade of WEEE notes that, the difference between the level of applicable sanctions and the average sanctions effectively imposed was stressed as a relevant indicator of legal implementation and enforcement:
101. The penalties for the illegal trade in WEEE varied greatly in terms of prison durations and monetary fines. However, based on the data received from EU countries, there did not appear to be a relationship between the magnitude of the penalty and WEEE collection rates. Some Member States have high penalties in place yet show low official collection rates. Some countries punish WEEE crimes differently on the basis of whether or not organised criminal groups are involved (p.21)
102. As noted in previous sections, EUROJUST (2014) has argued that such inconsistency between jurisdictions is leading to ‘forum shopping’ amongst environmental offenders and organised crime groups. Nevertheless, some commentators note that the blame for this state of affairs traces back to the relevant EU legislation itself. In particular, the Environmental Crime Directive is criticised in so much as it merely requires Member States take the necessary measures to ensure that the environmental offences are punishable “by effective, proportionate and dissuasive criminal penalties” (Art.5). However, there is no uniform interpretation of those terms (‘effective, proportionate and dissuasive’) among the Member States. Also, the importance that Member States give to this particular crime area varies (EUROJUST, 2014). EFFACE (Gerstetter, 2016) argues that addressing this position is now much more achievable after the Lisbon treaty:

“Some consider that fact that the ECD does not harmonise sanctions (e.g. by providing rules on minimum sanctions) a weakness. Historically, the EU had no competence to prescribe the use of minimum sanctions; however, this has changed with the Lisbon Treaty” (p.32)

103. Furthermore:

“To sum up, the approach towards criminalising environmental harm of the ECD makes it difficult to determine which behaviour constitutes environmental crime” (p.29)

104. The Ship-Source Pollution Directive is noted to have similar definitional limitations.

105. Having established the inconsistent application of environmental law and environmental sanctioning regimes in different countries, most commentators argue for greater harmonisation. The EFFACE conclusions (Faure et al., 2016) offered a succinct summation of the main pros and cons of such harmonisation which are worth reproducing here:

106. *Arguments in favour of harmonisation of sanctions:*

- Disparities between sanctioning levels in Member States could lead to a race to the bottom and to so-called “pollution havens”. This would mean that if one Member State would for instance have very low statutory sanctions, it would be able to attract businesses that could relocate to that “pollution haven”. Minimum sanctions would hence be needed to avoid such a race to the bottom. This argument probably is less strong in the case of minimum maximal sanctions, because there is no guarantee that increasing the maximum sanction for a certain crime will also lead to an increase in average sanctions and hence help avoid the creation of “pollution havens”.
- The harmonisation of sanctions could be needed to signal what was mentioned as a starting point in the introduction - i.e. that environmental crime is serious crime. Minimum and maximum sanctions would send an important signal towards the national legislator in the Member States, but also towards prosecutors and other actors in the enforcement chain such as the judiciary, that they should take environmental crime more seriously.
- Harmonised sanctions are needed to ensure that all Member States fulfil the formal preconditions for using certain instruments of judicial cooperation, where often a certain sentence is required for a certain crime as a precondition for using the particular instrument of judicial cooperation in investigating/prosecuting the crime in question.
- The EIR (European Commission 2016b) notes that a strategic and comprehensive approach to legislation and compliance allows ‘the identification and tackling of the root causes of implementation gaps’.

107. *Arguments against harmonisation of sanctions:*

- There is so far no convincing proof or evidence that the minimum statutory sanctions in Member States for environmental crime or the maximal sanctions are too low. Hence, it is not clear that there is a

real problem to be solved with minimum or minimum maximal sanctions.

- Imposing minimum or minimum maximal sanctions through EU legislation may be problematic in terms of the internal coherence of the legal orders of Member States. Fixed minimum fines could have a different dissuasive effect depending upon, for instance, income levels in particular states and would, if adopted, therefore have to be differentiated accordingly. Moreover, if EU-defined minimum or minimum maximal sanctions only exist in the field of environmental crime, this may lead to a situation where in a given Member State the sanctions for environmental crime may be disproportionately high as compared to those for other serious forms of crime.
- Harmonising minimum levels of sanctions in statutes would not necessarily be an effective solution to the race to the bottom as long as inspections and monitoring are not harmonised either and crime may therefore go undetected or not prosecuted. Moreover, prosecutorial discretion cannot be controlled either, nor can the freedom of the judiciary to determine the appropriate sanctions in a given case.
- There is hence a danger that minimum sanctions would merely constitute window-dressing, which could potentially have serious perverse effects. Experience in the US where mandatory sentencing guidelines existed has shown that those had devastating effects for the sanctions actually imposed for environmental crime. Judges considered those minimum sanctions too harsh and thus avoided imposing the sanctions. Also, if prosecutors feel that those sanctions are considered as unfair or unreasonable, the consequence may be that no criminal prosecution at all takes place in order to avoid the minimum sanctions.
- Since local specific circumstances in Member States may differ, so may specific sanctioning goals. This is rather an argument for leaving discretion to Member States. If anything is proposed with respect to harmonising sanctions at EU level, a wide range of sanctions should be provided for, leaving large discretion to Member States. Stronger minimum or minimum maximal sanctions for aggravating circumstances, for instance, when environmental crime is committed as organised crime, are a more flexible approach than to establish minimum or minimum maximal sanctions for any kind of environmental crime. It should also be kept in mind why certain sanctions are imposed (e.g. changing behaviour, eliminating financial incentives of crime, proportionality, compensation and deterrence).
- Increasing the statutory level of penalties does not automatically increase the level of deterrence; criminological literature has

indicated that higher statutory penalties do not necessarily lead to more deterrence.

108. For its part EFFACE recommended that harmonisation be pursued through the development of non-binding bottom-up guidelines concerning how prosecution and sentencing policy are formulated, to be used by prosecutors and judges and enforcement authorities in cases of environmental crime. These should ideally be developed bottom-up, building on existing efforts at collaboration between judges and prosecutors working in the field. Such guidelines could relate e.g. to the types of violations that would necessitate a prosecution via the criminal law rather than via other means (civil or administrative) as well as to the crucial role of restoration of environmental harm and how that could be achieved in specific cases. Moreover, guidelines could be formulated concerning particular types of penalties requested and imposed for particular types of environmental harm as well as in relation to what constitutes an “organised crime”. They could also include examples of sanctions applied in the existing case law in various Member States. CWIT’s report on WEEE (Huisman et al, 2015) advocates harmonisation¹⁸. Similarly, EUROJUST’s strategic report argues:

“Eventually, these efforts could even include the drafting of guidelines for punishment and the harmonizing of fines and other sanctions across Europe. The networks could produce guidance, tools, common standards and approaches to the prosecution of environmental offences. The networks should furthermore promote the development of environmental law as a substantial part of criminal law. Some replies mentioned as a possible role for the different networks the possibility to exchange information on current criminal cases, facilitate the collection of data, including operational information where possible. One respondent also suggested the creation of specialized teams” (EUROJUST, 2014: p.71).

109. IMPEL makes the important point that “It is obviously much easier to harmonise material environmental law than legal practice” (Faure and Heine, 2000: p.94).
110. In reviewing different country’s approach to the transposing EU environmental law, it becomes very clear that most countries have opted for some combination of criminal and administrative regimes. Indeed, EFFACE make it one of their core recommendations to “Make clear in the language of Directive 2008/99 that not only criminal sanctions can provide ‘effective, dissuasive and proportional’ sanctions” (Faure et al., 2016).
111. Rosell and Banque’s (2016) ENEC study categorises the criminal approaches into the six typologies mentioned earlier: only imprisonment, imprisonment and fine, imprisonment or fine, imprisonment and/or fine,

¹⁸ See in particular p.35 of the report.

imprisonment with or without fine and only (criminal) fine. As mentioned, they conclude there is a high level of compliance across Member States with criminalising environmental crime. IMPEL's report of 2000 remarks that:

“It is now generally held that these administrative penal sanctions can be quite useful, especially when they consist of direct measures aiming at the restoration of environmental harm. On the other hand, one should be aware of the fact that an administrative procedure cannot provide the same guarantees as the criminal trial; therefore one should bear in mind that not all enforcement of environmental law can be entrusted to these administrative penal systems” (Faure and Heine, 2000: p.91)

112. From the available data it remains clear that ““As far as criminal penalties are concerned, one could note a relatively rare use of other sanctions than fines” (Faure and Heine, 2000: p.91). EFFACE also makes the point that “one weakness of the system of sanctions, which is being defined by Member States in the absence of harmonised EU rules on the matter is that the mix of sanctions (administrative/criminal/civil) at Member State level is not always optimal” (Gerstetter, 2016: p.39).

113. Often however reports indicate that it is cultural reticence amongst the judiciary which leads to the more restrictive applications of what environmental sanctioning regimes exist. The Milieu (2004) study notes the following:

“But in the countries studied, the judges seem to hesitate to use their discretionary powers and do not evaluate the possible damage that the act could have caused, sometimes because the environment does not seem to be something that needs criminal law protection because of the potential social harm. Even in Slovakia where the environment is considered a public good and as property of the State and where it might be expected that criminal law provide for more effective protection, the jurisprudence has considered the public good as not absolute and require identification of the property interest to be protected” (p.15)

114. The Milieu (2003) *Executive Summary* report has quite a lot of detail on both legal regimes and sanctioning levels in a number of Eastern European countries, although this report is now a little old, notable extracts include:

“Fines are the most frequently applied penalty for environmental crimes and current judicial practice shows that they vary from 700 to 2,000 EUR, even though in theory the Criminal Code may stipulate maximum fines of 7,240 EUR (Lithuania), or even 120,400 EUR (Slovakia), 161,000 EUR (Czech Republic) and 180,000 EUR (Poland). As discussed in section 4.3 on criminal jurisprudence, most national experts noted that administrative authorities frequently give more severe penalties than the courts, notwithstanding that the reverse situation

should apply. Furthermore, cumulative fines may apply for a single administrative environmental offence” (p.11)

115. Furthermore:

“A very interesting penalty is the so-called ecological punitive damages that can be applied in Poland. This is an economic penalty, not only to compensate the damage, but large enough to also have a punitive effect, because of the specific social purpose related to environmental protection. The maximum amount associated to this kind of penalty is ten times the lowest monthly salary” (p.12)

5.2 – General Conclusions on Sanctioning and Judicial Practice

- 116. The need for centrally compiled, consistently recorded data sources for environmental sanctions at an EU level has been put forward by almost all studies in this area. The lack of such a resource is at present compounding difficulties witnessed both in lack of consistent application of EU-level environmental law as well as continued cultural reticence in some countries to apply the laws/other sanctioning regimes that are available. Furthermore, without consistently-recorded comparable data the ongoing discussion on the advantages and disadvantages of harmonisation of sanctions lacks an evidence base.
- 117. The data indicates that fines are by far the most frequently used criminal sanction and that on average these are still of a relatively low level.
- 118. Problems may trace back to the broad scope and lack of specific definitions in the primary EU legislation.

5.3 – Summary and recommendations

- 119. Some combination of criminal and administrative sanctioning regimes appears to offer the greatest potential to make genuine inroads into the problems of environmental crime, although different countries strike the balance at different points. Training programs for judges, prosecutors and police need to emphasise the multi-level impact of such offending as well as the availability and *suitability* of more serious criminal sanctions, including much higher fines.

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