

Instruments, Actors and Institutions in the Fight against Environmental Crime

Deliverable No. D2.5



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 320276.

ACKNOWLEDGEMENT

The research leading to these results has been carried out as part of the research project "European Union Action to Fight Environmental Crime" (www.efface.eu). EFFACE is a collaborative effort of 11 European universities and think tanks and is coordinated by the Ecologic Institute (www.ecologic.eu). The research leading to these results has received funding from the European Union FP7 under grant agreement No 320276.

AUTHORS

Prof. Michael Faure, University of Maastricht METRO (Chapter 3 and Section 4.3)Christiane Gerstetter, Ecologic Institute (Sections 2.2 and 4.2)Dr. Stephan Sina, Ecologic Institute (Sections 2.2 and 4.2)Dr. Grazia Maria Vagliasindi, University of Catania (Chapter 1 and Sections 2.1 and 4.1)

With contributions by:

Dr. Floriana Bianco, University of Catania (in Chapter 1 and Sections 2.1 and 4.1)

Katharina Klaas, Ecologic Institute (in Sections 2.2 and 4.2)

Dr. Annalisa Lucifora, University of Catania (in Chapter 1 and Sections 2.1 and 4.1)

Manuscript completed in January, 2015

This document should be cited as: Faure, M., Gerstetter, C., Sina, S., Vagliasindi, G.M. (2015). Instruments, Actors and Institutions in the Fight Against Environmental Crime. Study in the framework of the EFFACE research project, Berlin: Ecologic Institute. Available at www.efface.eu.

DISCLAIMER

The text reflects only the authors' views and the EU or the Ecologic Institute are not liable for any use that may be made of the information contained therein. The views expressed in this publication are the sole responsibility of the author/s and do not necessarily reflect the views of the European Commission.

For permission to reproduce, please contact the Ecologic Institute at envcrime@ecologic.eu.

ABSTRACT

This report aggregates the main outcomes of research conducted on instruments, actors and institution of relevance to the fight against environmental crime at the national, European and international level by individual researchers from various institutions.

The report reflects the multilevel approach of the research (international, European and national level) as well as its articulated content, which covers, at each level, e.g. legal instruments as well as actors and institutions, truly criminal as well as administrative offences (and related enforcement authorities), individual liability as well as corporate liability etc.

This results in a 'vertical' and 'horizontal' aggregation.

The 'vertical' aggregation describes the main features of those instruments which, at different levels (e.g. international and European), appear to be more relevant in tackling the most serious forms of environmental crime (e.g. illegal shipment of waste), as well as the role played by actors and institutions at the enforcement level. It also tries to the extent possible to individuate relevant multilevel normative and enforcement issues (such as organised environmental crime) and to highlight to the extent possible strengths and weaknesses of the regulatory framework as well as of the enforcement mechanisms (e.g. lack of cooperation between enforcement authorities at different levels and, on the contrary, effectiveness of environmental enforcement networks).

The 'horizontal' aggregation represents the core part of this report. It describes the main characteristics of the selected national legal systems on environmental crime and it provides a comparison among them (e.g. concerning the structure of the criminal offences, the levels of sanctions for the same criminal conduct or the role of administrative offences and related enforcement authorities in assuring the effectiveness of environmental protection). The report also highlights to the extent possible strengths and weaknesses of the different regulatory and enforcement systems on environmental crime.

On these grounds, this report formulates conclusions on the existing regulatory and enforcement settings and tries to provide a baseline for the formulation of policy recommendations to the EU legislator in order to enhance the regulatory and enforcement tools to fighting environmental crime.

Table of Contents

1	Introduction			10			
2 Instruments, actors and institutions at different levels							
	2.1		Instruments	15			
		2.1.1	Analysis of instruments of direct or indirect relevance in the fight against environmenta	Analysis of instruments of direct or indirect relevance in the fight against environmental			
	(crim	e at different levels	15			
	4	2.1.2	Instruments of direct relevance in the fight against environmental crime	22			
	4	2.1.3	Instruments on organised crime in the perspective of fighting environmental crime	26			
	4	2.1.4	Strenghts and shortcomings	31			
	2.2		Actors and institutions involved in combating environmental crime	32			
		2.2.1	Overview of actors and institutions	32			
	4	2.2.2	Tasks and activities of actors and institutions concerning environmental crime	33			
	4	2.2.3	Cooperation between actors and institutions in the area of environmental crime	37			
		2.2.4	Strengths and shortcomings	41			
3	l	Instr	uments, Actors and Institutions at national level	45			
	3.1		Introduction	45			
	3.2		Instruments: place and structure	46			
		3.2.1	Importance of the issue	46			
	3.2.2		Countries	47			
		3.2.3	Results	48			
	3.3		Instruments: how does criminal law protect the environment?	48			
	3.3.1 3.3.2 3.3.3		Ways of protecting the environment through criminal law	48			
			Abstract endangerment	50			
			Concrete endangerment	51			
		3.3.4	Autonomous crime	53			
	3.4		Instruments: sanctions	54			
		3.4.1	Main sanctions	54			
		3.4.2	Complementary sanctions	56			
	3.5		Instruments: the Environmental Crime Directive and the Ship-source Pollution Directive	58			

3.6		Actors: corporate crime	59
	3.6.1	Importance	59
3.6.2 3.6.3		2 Countries	60
		8 Results	63
3.7 Act		Actors: organised crime	64
	3.7.1	Importance	64
	3.7.2	2 Countries	64
	3.7.3	8 Result	65
3.8 Ac		Actors: Amtsträgerstrafbarkeit	65
	3.8.1	Importance	65
	3.8.2	2 Countries	66
	3.8.3	8 Results	66
3	.9	Institutions: who investigates?	67
	3.9.1	Importance	67
	3.9.2	2 Countries	68
	3.9.3	8 Results	69
3	.10	Institutions: the public prosecutor	70
	3.10	.1 Importance	70
	3.10	.2 Countries	71
	3.10	.3 Results	73
3	.11	Institutions: the courts	74
	3.11.	.1 Importance	74
	3.11.	.2 Countries	74
	3.11.	.3 Result	74
3	.12	Institutions: administrative authorities	75
	3.12.	.1 Importance	75
3.12		.2 Countries	75
	3.12.	.3 Result	77
3	.13	Institutions: administrative fines	77
	3.13.	.1 Importance	77

	3.13.2	Countries	78
	3.13.3	Results	79
3	.14 Enf	orcement practice	79
	3.14.1	Lacking data	79
	3.14.2	Enforcement deficit?	80
	3.14.3	Sanctions	80
	3.14.4	Effectiveness?	81
3	.15 Eva	luation	82
	3.15.1	Regulatory level	82
	3.15.2	Enforcement level	83
	3.15.3	Results	84
	3.15.4	Towards smart enforcement	84
4	Conclusi	ons	85
4	.1 Ins	truments at EU and international levels	86
4	.2 Act	ors and institutions at EU and international levels	88
4	.3 Ins	truments, actors and institutions at national level	89
	4.3.1	Instruments	89
	4.3.2	Actors	90
	4.3.3	Institutions	90
	4.3.4	Convergence or divergence?	91
	4.3.5	The way forward	92
5	Bibliogra	aphy	93
Ann	iex I - List	of EFFACE Reports	97

List of Tables

Table 1: Overview of the main actors and institutions analysed in the reports

Table 2: Place of environmental criminal law

Table 3: Corporate liability for environmental crime

LIST OF ABBREVIATIONS

CITESConvention on International Trade in Endangered Wild Species of Flora anCJEUCourt of Justice of the European UnionCOPConference of the PartiesCOSLStanding Committee on Operational Committee on Union	d Fauna
COP Conference of the Parties	
COSI Standing Committee on Operational Cooperation on Internal Security	
CPS Crown Prosecution Service (UK)	
DG Directorate General	
7EAP Seventh Environment Action Programme	
EC European Community	
ECHR European Convention on Human Rights	
ECOSOC Economic and Social Council	
ECtHR European Court of Human Rights	
ENPE European Network of Prosecutors of the Environment	
EnviCrimeNet European Network for Environmental Crime	
EPPOEuropean Public Prosecutor's Office	
ETS European Treaty Series	
EU European Union	
EUFJE European Union Forum of Judges for the Environment	
EUROJUST European Union's Judicial Cooperation Unit	
EUROPOL European Union's law enforcement agency	
ICCWC International Consortium on Combating Wildlife Crime	
IFAW International Fund for Animal Welfare	
IMPELEuropean Network for the Implementation and Enforcement of Environment	ental Law
INECE International Network for Environmental Compliance and Enforcement	
INTERPOL International Criminal Police Organisation	
ISF Internal Security Fund	
JHA Justice and Home Affairs	
LEAF Law Enforcement Assistance for Forests	
MARPOL International Convention for the Prevention of Pollution from Ships	
MEAs Multilateral Environmental Agreements	
NWCU National Wildlife Crime Unit (UK)	
OCGs Organised Crime Groups	
OCTA Organised Crime Threat Assessment	
ONG Non-governmental organisation	

OJ	Official Journal
PEBA	Planning and Environmental Bar Association (UK)
REMA	National Environmental Crimes Unit (Sweden)
SEPA	Scottish Environment Protection Agency
SEPRONA	Nature Protection Service (Spain)
SOCTA	Serious Organised Crime Threat Assessment
StGB	Strafgesetzbuch (Criminal Code)
TEC	Treaty establishing the European Community
TFEU	Treaty on the Functioning of the European Union
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNICRI	United Nations Interregional Crime and Justice Research Institute
UNODC	United Nations Office on Drugs and Corruption
WCO	World Customs Organisation

1 Introduction

Environmental crime is a serious threat to environmental, social and economic sustainability and is in conflict with key commitments and strategies of the European Union (EU),¹ including the Europe 2020 Strategy.

Over the last decades, awareness of the importance of enhanced action against environmental crime significantly increased within the EU institutions. EU efforts to combat environmental crime are intended to improve the effective enforcement of EU environmental law.

Directive 2008/99/EC on environmental crime² (in the following also the Environmental Crime Directive), Directive 2009/123/EC on ship-source pollution³ (in the following also the Ship-Source Pollution Directive) and the provisions of the Lisbon Treaty explicitly introducing shared competences in criminal matters of the EU,⁴ represent new instruments and opportunities for increasing the effectiveness of EU measures against environmental crime through harmonisation and/or co-ordination, aiming to eliminate the differences among the criminal laws of the Member States which give effect to the environmental protection requirements arising from EU law.

This report aggregates the main outcomes of research conducted on instruments, actors and institution of relevance to the fight against environmental crime at the national, European and international level by individual researchers from various institutions under a common set of guiding questions. This analysis is to serve as a basis for later work, including developing recommendations for enhanced EU action against environmental crime. An overview of the studies that feed into the present report is contained in Annex 1.⁵

In spite of the broader EU competences introduced by the Lisbon Treaty in Art. 83 of the Treaty on the Functioning of the European Union (TFEU) to harmonise criminal law to a certain extent,⁶ criminal law ultimately remains a core competence of the Member States.⁷ Moreover, to the extent that environmental criminal law has been harmonised by EU law, in particular Directive 2008/99/EC, Member States are still responsible for its implementation and enforcement. Equally, States that are parties to international conventions relevant to environmental crime are responsible for the implementation of these conventions in their national orders and for enforcement. Thus, national level institutions and actors are mainly responsible for the enforcement of rules against environmental crime: monitoring, investigating, prosecuting and sanctioning environmental crime is the core domain of national actors and institutions such as police, public prosecutors, courts, administrative authorities, customs etc.

¹ In this report, unless differently specified for clarity reasons reference to the European Union (EU) will be made; however the reader should be aware that a different institutional framework existed before 1 December 2009; within the latter, competences currently belonging to the EU pertained to the European Community (EC); for more information, see http://.europa.eu.

² Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law. *OJ L 328, 6.12.2008, p. 28–37*.

³ Directive 2009/123/EC of the European Parliament and of the Council of 21 October 2009 amending Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements. *OJ L 280, 27.10.2009, p. 52–55.*

⁴ See Art. 82-89 of the Treaty on the Functioning of the European Union (consolidated version). *OJ C 326, 26.10.2012, p. 47–390.*

⁵ All reports are available at www.efface.eu.

⁶ See 2.1. below and report Articles 82-86 of the Treaty on the Functioning of the European Union and Environmental Crime (in the following: Articles 82-86 TFEU), 2. The references in footnotes to the reports always refer to the numbers of the chapters and sections used in the reports.

⁷ See in particular the judgment of the Federal Constitutional Court of 30 June 2009, BVerfGE 123, 267; see report Fighting Environmental Crime in Germany: A Country Report (in the following: Report on Germany), 1.

However, actors and institutions at EU and international level may be, first of all, involved in regulating substantive environmental crime by creating and developing EU or international law relevant to environmental crime. Second, they may be involved in ensuring States' compliance with the obligations of these legal acts. Third, actors and institutions at EU and international level assume functions that can be overall described as supportive in relation to the national authorities enforcing environmental crime. Thus, it is necessary to look at all three governance levels – international, EU and national – when analysing institutions, actors and instruments relevant for combating environmental crime.

No agreement exists in the literature on what a **definition of environmental crime** should encompass.⁸ In the present report and the studies feeding into it, a descriptive/legal definition of environmental crime has been used ("an action or omission which constitutes an offence and is punishable by law"). From this perspective, the scope of the analysis encompasses the conduct mentioned by the Environmental Crime Directive and the Ship-Source Pollution Directive; administrative offences existing at national level in the same sectors covered by the two directives are also taken into consideration. In addition, the topic of organised environmental crime has been specifically addressed, due to the increasing relevance of the phenomenon and the related attention of European and international enforcement actors; provisions on corruption and, more generally, on civil servants liability for environmental crimes have been taken into consideration, in light of the possible links to environmental crime, either committed individually or in an organised manner. Finally, the issue of environmental liability as defined in Directive 2004/35/EC⁹ (the latter involving administrative procedures and links to tort law) and the links (if any) with environmental criminal provisions has been addressed.

This approach to defining environmental crime was chosen, because taking the scope of the Environmental Crime Directive and other existing legal acts as a starting point allows a rather clear delimitation of what is and is not covered in the present research. This facilitated consistency among the different reports and therefore reliability of results and feasibility of a correctly based comparative analysis. Moreover, the present analysis is predominantly legal in character; therefore, adopting a legal definition of environmental crime seemed appropriate. Finally, including environmental offences other than truly criminal ones seemed necessary in order to give a complete framework of the normative sanctioning tools against environmental harmful conduct, not least in light of the different general approaches that each EU Member State can have towards the use of criminal sanctions.

However, it should be noted that the evaluation of the regulatory and enforcement framework on environmental crime in some cases also implies assessments on whether certain environmentally harmful activities should or should not be made subject to criminal sanctions; in these cases, the legal definition of environmental crime is therefore used for normative purposes as it implies in addition a certain value judgment regarding the conduct in question.

Within the scope of the research thus defined, for analytical reasons a distinction has been made between instruments on the one hand, and actors and institutions on the other. In fact, such distinction is to some extent artificial (e.g. the rules on criminal procedure are both an instrument to combat environmental crime, as well as a set of rules setting out the role of certain actors and institutions); accordingly, the research was carried out in an integrated manner (e.g. the country reports comprise a description and analysis of both instruments and actors/institutions).

The research on **instruments** involved a stocktaking/inventory, description and analysis of the relevant legal instruments at international, European and national level. The following instruments have been analysed in individual studies, which the present report refers to:

• At the international level, the research leading to this report included the description of the general international framework for action towards sustainable development (the Stockholm

⁸ See for instance Mary Clifford and Terry D. Edwards, "Defining 'Environmental Crime'", in *Environmental Crime: Enforcement, Policy, and Social Responsibility*, ed. Mary Clifford (Burlington: Jones & Bartlett Learning, 1998), 6; Carole Gibbs and Sally Simpson, "Measuring Corporate Environmental Crime Rates: Progress and Problems", *Crime, Law and Social Change* 1 (2009): 51.

⁹ Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage. *OJ L 143, 30.4.2004, p. 56–75*.

Declaration, UNEP, the Brundtland Report, the Rio Declaration, Agenda 21, Johannesburg Declaration on Sustainable Development and Johannesburg Plan of Implementation and the Rio+20 Declaration) and the analysis of the most relevant legal instruments (Basel Convention, CITES Convention and MARPOL Convention), including relevant case law. It also focused on agreements and provisions on organised crime in the perspective of fighting environmental crime as well as on the case law of the European Court of Human Rights on issues related to environmental crime.

- At the European Union level, the research provided a general introduction to EU environmental law as well as an analysis of EU primary legislation concerning the EU competences in criminal matters (Art. 82-86 TFEU), with a special focus on Art. 83 TFEU. Also an analysis of EU secondary legislation on environmental crime, i.e. the Environmental Crime Directive and the Ship-Source Pollution Directive has been conducted. Moreover, EU legislation on organised crime (particularly the Council Framework Decision 2008/841/JHA on the fight against organised crime) has been described and the analysis has been conducted on the implications of Art. 83 TFEU and the competences defined therein.
- Concerning the national level, the research included the stock-taking, description and the analysis of instruments to fight environmental crime in seven selected member States (France, Germany, Italy, Poland, Spain, Sweden, UK). These were selected both in light of the expertise (language/content) of researchers conducting the analysis and with a view to having a representative sample of countries from all parts of the EU (North/South, old/new members, common law/civil law countries). The research on the national level focused, inter alia, on national legislation addressing environmental crime, before and after the implementation of Directive 2008/99/EC and Directive 2009/123/EC; on those characteristics of the national systems of criminal justice which might influence the evaluation of the national legal system on environmental crime (e.g. qualification of environmental crimes as felonies or misdemeanours, general rules on mens rea, general rules on circumstances according to which prosecution of crimes is no longer possible such as prescription of crimes); administrative offences and administrative authorities; liability of corporations and collective entities for environmental crimes/offences; liability of civil servants for environmental crimes/offences; provisions on organised crime; provisions on criminal procedure; provisions on cooperation; provisions implementing Directive 2004/35/EC on environmental liability and their links (if any) to environmental criminal provisions.

The research relating to **actors and institutions** relevant for fighting environmental crime and offences (including environmental crime committed in an organised manner) consisted of tacking stock of, describing and analysing the following actors and institutions:

- At the international level, actors and institutions such as the CITES Secretariat, INTERPOL, UNODC, UNEP, UNECE, WCO, and the European Court of Human Rights.
- At the European level, actors and institutions such as EUROJUST, EUROPOL, EPPO (in a perspective *de iure condendo*), the European Parliament, the Council of the European Union, the European Commission (DG Environment), and the European Fisheries Control Agency.
- At the national level, the actors and institutions in the seven already mentioned Member States. The research covers actors and institutions for enforcing environmental criminal law (police, prosecutors, courts etc.); capacities of the relevant actors and institutions; specialised structures; individuals and NGOs; administrative authorities; institutional cooperation within the State; cooperation with other States, EU and international institutions; actors and institutions related to organised crime.

The research on actors and institutions also refers to actors and institutions not mentioned in legal texts, e.g. environmental enforcement networks – INECE, IMPEL, EnviCrimeNet, EUFJE, ENPE – and NGOs active in the field of combating environmental crime. Some of them are only active at a certain governance level (e.g. one Member State); however, many work at different governance levels and across them.

In terms of **methodology**, an important point to be taken into account in any (comparative) analysis of instruments, actors and institutions of relevance to fighting environmental crime is that one should carefully distinguish between the way in which the functioning of instruments, actors and institutions has been laid down in formal rules (the regulatory level) and the way in which this functions in practice (enforcement). The effectiveness of environmental criminal law will to a large extent depend on the way in which it is implemented and enforced in practice. Moreover, if particular implementation deficits would be discovered it is equally important to discover whether this is due to faults at the regulatory level (i.e. shortcomings in formal competences, substantive criminal law or institutions) or at the implementation in practice. That distinction is of crucial importance, also with an eye on European harmonisation. European harmonisation has so far (via the Environmental Crime Directive and the Ship-Source Pollution Directive) largely focused on a harmonisation at the regulatory level, but the European policy-maker is increasingly concerned with the enforcement in practice as well. Finally, the effectiveness of legal instruments and the activities of actors and institutions depends on several critical factors – among them, the current lack of relevant information on costs, impacts and causes of environmental crime in the EU.

The aim of this report is to show, to the extent possible the real content, strengths and weaknesses of the law "in action". Thus, in principle, the analysis covers both the regulatory and enforcement dimensions; it refers to both formal legal aspects, such as constitutional rules and statutes, and empirical analysis of how effectively certain institutions and instruments function in combating environmental crime. However, assessing the effectiveness of legal rules and policy instruments is methodologically very difficult. Thus, while implementation and enforcement issues are addressed, this has happened only to the degree feasible within the time for this research.

Detailed guiding questions covering both the regulatory level and the enforcement level have been developed, to be addressed by individual researchers when undertaking the analysis and evaluation of instruments, actors and institutions.

The research has been conducted by reviewing and legal analysis of the relevant existing legislative provisions, statutes etc. and by drawing on the existing literature, document analysis, interviews with practitioners and involvement of external experts and stakeholders.

As for the latter, it is worth mentioning that four workshops have been held within the research leading to this report;¹⁰ workshop participants included academics, practitioners and representatives of NGOs and European and national public bodies. The workshops served to generate input for the research activities and receive feedback on the work carried out, as well as to generate policy recommendations through discussion among participants.

This report focuses on the main issues related to the functioning of instruments, actors and institutions at the regulatory as well as the enforcement level at the international, European Union and EU Member States levels. The goal of the present aggregation is not to repeat every detail of the various reports; not only this would make the assessment very long, but it would undoubtedly also lose its added value. For the same reason, not all issues discussed in the reports can be included or analysed in detail in this aggregation.

Within these limits, the **structure of the report** reflects the multilevel approach of the research (international, European and national level) as well as its articulated content, which covers, at each level, e.g. legal instruments as well as actors and institutions, truly criminal as well as administrative offences (and related enforcement authorities), individual liability as well as corporate liability etc. This results in a 'vertical' and 'horizontal' aggregation.

• The 'vertical' aggregation (Chapter 2) describes the main features of those instruments which, at different levels (e.g. international and European), appear to be more relevant in tackling the most serious forms of environmental crime (e.g. illegal shipment of waste), as well as the role played by actors and institutions at the enforcement level. It also tries to the extent possible to individuate relevant multilevel normative and enforcement issues (such as organised environmental crime)

¹⁰ Workshop on "Instruments, actors and institutions" (Berlin, Germany, January 2014); Workshop on "Environmental Crime and the Criminal Justice System" (Catania, Italy, June 2014); Workshop on "Organised Crime and Environmental Crime" (Catania, Italy, June 2014); Workshop on "Environmental Liability and Environmental Crime" (Brussels, Belgium, November 2014).

and to highlight to the extent possible strengths and weaknesses of the regulatory framework as well as of the enforcement mechanisms (e.g. lack of cooperation between enforcement authorities at different levels and, on the contrary, effectiveness of environmental enforcement networks).

• The 'horizontal' aggregation (Chapter 3) represents the core part of this report. It describes the main characteristics of the selected national legal systems on environmental crime and it provides a comparison among them (e.g. concerning the structure of the criminal offences, the levels of sanctions for the same criminal conduct or the role of administrative offences and related enforcement authorities in assuring the effectiveness of environmental protection). The report also highlights to the extent possible strengths and weaknesses of the different regulatory and enforcement systems on environmental crime.

On these grounds, this report formulates conclusions (Chapter 4) in a perspective *de iure condito* and tries to provide the adequate baseline for the formulation of policy recommendations to the EU legislator in order to enhance the regulatory and enforcement tools to fight environmental crime.

2 Instruments, actors and institutions at different levels

2.1 Instruments

At the international, European and national level numerous instruments deal - in a direct or indirect manner and with different intensity and impacts - with the issue of environmental crime.

2.1.1 Analysis of instruments of direct or indirect relevance in the fight against environmental crime at different levels

At the international level and European level, both "hard law" and "soft law" instruments are of direct or indirect relevance to the fight against environmental crime. The former category encompasses international conventions such as the Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal (Basel Convention) at international level and secondary law such as the Regulation 1013/2006/EC on shipments of waste at European level; examples of soft law instruments are the Stockholm Declaration on the Human Environment of 16 June 1972 at international level and the Environmental Action Programmes enacted since 1973 at European level.

The binding nature of hard law instruments might lead to identify them as the most effective instruments for environmental protection; nevertheless, as the following considerations will show, the propulsive role of international soft law instruments should not be neglected, in a double and complementary sense. These instruments have often given a decisive input to the development of international hard law instruments which have been either signed by the EU or, depending on cases, pushed the EU to enact normative instruments on the topics covered by the international agreements. At the same time, international soft law instruments have played a relevant role in raising awareness of the EU on the importance of environmental protection; therefore they have played a role in the creation of a European environmental policy and consequently, together with the international hard law instruments, on the enactment of EU legislation aimed at protecting the environment. Through this articulated path, the legal systems of the Member States have been impacted as well.

International level and European level non-binding instruments

The United Nations has played a key role in the development of international environmental law through its conferences on the protection of the environment and sustainable development. Through the Stockholm Declaration, the Bruntland Report, the Rio Declaration, Agenda 21, Johannesburg Declaration on Sustainable Development and Johannesburg Plan of Implementation and the Rio+20 Declaration,¹¹ the principles of international environmental law have been laid down and developed and several multilateral environmental agreements (MEAs) have resulted from these efforts to enhance environmental protection.¹²

None of the above mentioned United Nations conferences and declarations refers specifically to environmental crime¹³; nevertheless they address it indirectly, since they deal, amongst other issues, with implementation of and compliance with international environmental law.¹⁴

¹¹ For an overview of these Conferences and declarations, see report International Environmental Law and Environmental Crime: An Introduction (in the following: International Environmental Law and Environmental Crime), 3.

¹² See, for instance, the Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal.

¹³ See report International Environmental Law and Environmental Crime, 1.

¹⁴ See report International Environmental Law and Environmental Crime, 1.

In particular, the United Nations Environmental Program (UNEP), that was created by the Stockholm Conference on the Human Environment of 1972, has adopted several soft law instruments on compliance that are of indirect relevance for the fight against environmental crime. Among them, it is worth to mention the "Guidelines on compliance with and enforcement of multilateral environmental agreements".¹⁵ The Guidelines provide approaches for enhancing compliance with MEAs and strengthening the enforcement of normative tools implementing those agreements at the international-regional and national levels.¹⁶ Although the guidelines may inform and affect how parties implement their obligations under the agreements, they are non-binding and do not in any manner alter the obligations under the MEAs.¹⁷

As was already noted the previous mentioned UN conferences have not directly addressed the issue of environmental crime; nonetheless, they have had a seminal effect on domestic law and, in particular, on EU environmental law and Member States' legislation in terms of goals, action programmes and procedures.¹⁸ Therefore, the UN conferences have played an indirect role also in the adoption of European instruments on environmental crime aiming at enhancing the compliance with the EU environmental law (on these instruments see *infra*, 2.1.2).

Since 1973, and following the Stockholm Conference on the Human Environment of 1972, EU environmental policy has been guided by Action Programmes defining priority objectives to be achieved over a period of years.¹⁹ Environmental Action Programmes are not binding programmes for action, even if they contain lists of planned activities. As it has been noted in the literature, these are "medium-term programmes and strategic policy documents which reflect the fundamental elements of contemporary environmental thinking and problem perceptions, as well as strategic policy orientation. New action programmes often reflect a change in the general political climate of their time".²⁰

The current Seventh Environment Action Programme (7EAP), was approved, by the European Parliament and the Council of the EU, in November 2013, covering a period up to 2020.²¹ The 7EAP does not refer expressly to environmental crime nor make any reference to the criminalisation of actions that can damage the environment.²² However, it adopts as its priority objective 4, *the purpose of maximising the benefits of Union environment legislation by improving implementation.* Improving the implementation of the Union environmental acquis at Member States level will therefore be given top priority in the coming years.²³

It is therefore clear the input given by the international soft law instruments to the development of the EU environmental policy and consequently to the enactment of EU legal instruments through which this policy is implemented.

¹⁵ Guidelines on compliance with and enforcement of multilateral environmental agreements, UNEP GC Special Session (SS) Decision VII/4 (2002), available at http://www.unep.org/delc/Portals/119/UNEP.Guidelines.on.Compliance.MEA.pdf.

¹⁶ See report International Environmental Law and Environmental Crime, 2.

¹⁷ See report International Environmental Law and Environmental Crime, 2.

¹⁷ See report International Environmental Law and Environmental Crime, 2.

¹⁸ See report International Environmental Law and Environmental Crime. See Christian Hey, "EU Environmental Policies: A short history of the policy strategies", in *EU Environmental Policy Handbook* (Brussels: European Environmental Bureau, 2005), 18, available at http://www.eeb.org/publication/chapter-3.pdf; the author underlines that "After the first United Nations Conference on the Environment in Stockholm in 1972 and growing public and scientific concerns on the limits to growth, the Commission became active in initiating an original Community policy. On the basis of European Council commitments in 1972 to establish a Community environmental policy, the first EAP was decided upon in November 1973".

¹⁹ For an overview of the content of the Environmental Action Programmes, see report EU Environmental Law and Environmental Crime: An Introduction (in the following: EU Environmental Law and Environmental Crime), 2.4.

²⁰ See Hey, EU Environmental Policies: A short history of the policy strategies, 18.

²¹ Decision No. 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Environment Action Programme to 2020 "Living well, within the limits of our planet". *OJ L 354, 28.12.2013, p. 171-200.*

²² See report EU Environmental Law and Environmental Crime, 2.4.

²³ Para. 57 of the Seventh Environment Action Programme (7EAP).

International level and European level binding instruments

An (often indirect) interaction between levels (international and European) is also seen in considering hard law instruments of direct or indirect relevance in the fight against environmental crime.

At the international level no overarching instrument covering environmental damage has been adopted, but just sectoral instruments dealing with specific topics.

For this reason, the analysis of international legal instruments here is focused on three specific legal agreements, which represent the main instruments issued by the international community in the fight against environmental crime in light of the relevance of specific environmental problems they address as well as of the significance of the normative instruments they foresee: the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES); the Convention on the Prevention of Pollution from Ships (MARPOL) and the Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal (Basel Convention).²⁴

The CITES Convention,²⁵ signed in 1973 and entered into force in 1975, aims at ensuring that international trade in specimens of wild animals and plants does not threaten the survival of the species in the wild and accords varying degrees of protection to more than thirty-four thousand species of animals and plants. CITES works through the listing in Appendices of species of wild flora and fauna whose conservation status is threatened by international trade. The level of protection accorded to the species depends upon which Appendix of CITES it is listed. Once listed, imports and exports of the species concerned are subject to a permit system implemented by national management and scientific authorities. The protection and enforcement mechanisms under CITES are therefore not available to respond to illegal trade in endangered species that are not listed in the Appendices. In the context of CITES, enforcement generally relates to co-operative mechanisms at national, regional and international level between different enforcement agencies as well as to national enforcement of legislation implementing the Convention. In this regard, art. VIII states that the Parties shall take appropriate measures to enforce the provisions of the Convention and to prohibit trade in specimens, or both; and to provide for the confiscation or return to the State of export of such specimens.

It is worth to mention that the EU is not yet a Party to the CITES Convention; however, it has an observer status in the Conference of the Parties and in the other permanent committees meetings, where all the powers and the rights of the Parties under the Convention are exercised by the EU Member States – that are Parties to the Convention – 'in the interest' of the European Union.²⁶ Moreover, although the EU is not a Party to the Convention, it has already implemented unilaterally the provisions of CITES:²⁷ first, through Regulation 3626/82/EEC²⁸ and, later, by Regulation 338/97/EC on the protection of species of wild fauna and flora by regulating trade therein.²⁹

The MARPOL Convention 1973/1978³⁰ was adopted after the occurrence of severe accidental releases of oil and other substances from ships. The Convention includes regulations aimed at preventing and minimising pollution from ships - both accidental pollution and that from routine operations - and currently includes six technical Annexes; special Areas with strict controls on operational discharges are included in most Annexes. MARPOL requires its parties to adopt deterrent sanctions in order to increase the adoption of preventive measures by those companies in charge of the transport of oil. The enforcement of MARPOL can be done in three different ways: through ship inspections to ensure that vessels fulfil minimum technical standards; by monitoring ship compliance with discharge standards; by punishing ships violating the standards. As to the punishment of "any violations of the requirements of the Convention", Art. 4 provides a double system of national prohibitions and sanctions: first, violations are to be prohibited and sanctions to be established under the law of the Administration of the ship concerned,

²⁴ On the three Conventions, see report Analysis of International Legal Instruments Relevant to Fighting Environmental Crime (in the following: Analysis of International Legal Instruments).

²⁵ See report Analysis of International Legal Instruments, 4.

²⁶ See report Analysis of International Legal Instruments, 4.14.

²⁷ See report Analysis of International Legal Instruments, 4.14.

²⁸ OJ L 384, 31.12.1982, p. 1.

²⁹ *OJ L 61, 3.3.1997, p. 1-69.*

³⁰ See report Analysis of International Legal Instruments, 5.

wherever the violation occurs; and, secondly, violations are to be prohibited and sanctions established under the law of the Party within whose jurisdiction they occur.

Although the EU is not a Party to the Convention, in 2005 the EU decided to transpose into EU law the standards introduced by the MARPOL Convention related to the prohibition of polluting discharges into the sea,³¹ and in order to specify the sanctions to be imposed, adopted Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements as well as Directive 2009/123/EC amending Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements (see also below, 2.1.2).

The Basel Convention³² was adopted in 1989 in order to respond to growing international concern over the disproportionate environmental burdens borne by developing Countries from trade in hazardous wastes. At present, the Convention has 181 Parties and it constitutes a ground-breaking international environmental treaty that attempts to set right the unequal power equation that exists between the different players by regulating the hazardous waste trade. It does not seek to prohibit or restrict the hazardous waste trade, rather, the thrust is on providing a set of flexible regulatory principles.

The Convention is one of the few environmental treaties to define a prohibited activity as "criminal" even though the wording of Art. 4 does not impose a clear obligation to make illegal traffic criminal, as it simply says that parties "consider" it to be criminal (para. 3) and requires each Party to take appropriate legal, administrative and other measures to implement and enforce the provisions of this Convention, including measures to prevent and punish conduct in contravention of the Convention (para. 4).³³ Moreover, Art. 9 (para. 5) requires that Parties cooperate when dealing with illegal traffic. In practice, the enforcement of the Convention depends on the enactment of administrative and criminal law at the domestic level because the offender is a member of the State and is the one who operates without a license or violates license conditions.³⁴ The European Union, together with its Member States, has been a Party to the Basel Convention since 1994; it implemented the Basel Convention through, *inter alia*, Regulation 1013/2006.³⁵

These agreements have had strong support from the EU which has become a reference as it stands as an example of a regional organisation that provides a wide range of enforcement tools: from infringement procedures against its Member States as well as criminal provisions that they must incorporate into their domestic legislation to protect the environment.³⁶

The EU legal instruments have on occasion raised the level of the protection compared to what is provided for in these international agreements.³⁷

This is no wonder, considering the role that environmental protection progressively assumed at the European level. In fact, and in addition to what has already been mentioned concerning soft law instruments, although the environment and its protection were not a matter of concern to the drafters of the early Treaties, who did not provide any provisions on this sphere, in 1987 the Single European Act had extended the Community's competence to the environmental issues, allowing the European Institutions to intervene in matters related to environmental protection. That Act inserted into the Treaty a new Title – Title VII in the original version – including specific legal basis for the environmental protection at the heart of Community activity, inspiring and informing its policies, and, after the signature in Maastricht of the Treaty on European Union, it became an objective of the Community.³⁹ In the Amsterdam Treaty, the achievement of "a high level of protection of the environment and the improvement of its quality" was established as an autonomous objective. In addition, it is noteworthy that Art. 37 of the EU Charter of Fundamental Rights lays

³¹ See report Analysis of International Legal Instruments, 5.8.

³² See report Analysis of International Legal Instruments, 6.

³³ See report Analysis of International Legal Instruments, 6.8.

³⁴ See report Analysis of International Legal Instruments, 1.

³⁵ Regulation (EC) No. 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste. *OJ L 190, 12.7.2006, p. 1–98.*

³⁶ See report Analysis of International Legal Instruments, 1.

³⁷ See report Analysis of International Legal Instruments, 1.

³⁸ On the history of the EU Environmental provisions through EU Treaties, see report EU Environmental Law and Environmental Crime, 1.

³⁹ Opinion of Advocate General Ruiz-Jarabo Colomer delivered on 26 May 2005, Case C-176/03, *Commission of the European Communities v Council of the European Union*, European Court Reports 2005 I-07879, para. 55.

down a high level of environmental protection and improvement should be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.

Such a legal framework has allowed the EU to establish a significant amount of legislation and to develop policies which are considered as to cover, with some exceptions, all the main issues of environmental protection. Today the great majority of environmental policies and laws within the EU is developed at EU, rather than Member State level.

International regional (European) instruments

In this context, the role of the Council of Europe in developing legal instruments on environmental protection should not be neglected. Two Council of Europe conventions cover specifically environmental challenges: the Bern Convention on the Conservation of European Wildlife and Natural Habitats⁴⁰ and the Florence Convention (also known as European Landscape Convention).⁴¹ It is also worth to recall the Lugano Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment,⁴² which never entered into force, most likely because of the paramount effect of the almost contemporary adoption of instruments on environmental liability at the EU level.⁴³

The European Social Charter⁴⁴ includes the right to protection of health which is interpreted by the Charter's oversight body as covering the right to a healthy environment.⁴⁵

One peculiar feature of this instrument (*rectius* of the way it is enforced) indeed is that environmental protection is seen in the light of its impact on and links with human rights.

From this perspective, the *Parliamentary Assembly* of the Council of Europe has also made legislative proposals for a better recognition of the right to a healthy environment,⁴⁶ on the grounds that a public concern exists that environmental degradation - including degradation caused by environmental crime - hurts the fundamental human right to life which is enshrined in the European Convention on Human Rights.⁴⁷

The European Convention on Human Rights (ECHR) does not cover explicitly the right to a healthy environment; however, a number of judgments by the European Court of Human Rights (ECtHR) have given rise to case-law covering environmental problems; part of these decisions are of relevance as it concerns environmental crime.⁴⁸

In particular, the violation of the right to a healthy environment has been considered in connection with other fundamental rights expressly provided for, such as the right to life (Art. 2 ECHR), the right to private and family life (Art. 8 ECHR), the right to property (Art. 1- Additional Protocol n. 1 to ECHR), the right to a fair trial (Art. 6 ECHR) and the freedom of speech (Art. 10 ECHR).⁴⁹ An overview on the ECtHR case-law

⁴⁰ ETS No. 104, available at http://conventions.coe.int/Treaty/en/Treaties/Html/104.htm; it has been ratified by 50 States including non-member Countries and is in force since 1982.

⁴¹ ETS No. 176, available at http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm; it has been ratified by 37 States, signed by 3 States and is in force since 2004.

⁴² ETS No. 150, available at http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm.

⁴³ See Bernard Marquet, Speaking notes at the UNICRI-UNEP Conference on Environmental Crime - Current and Emerging Threats held in Rome on 29-30 October 2012.

⁴⁴ The European Social Charter of 1961 (ETS No. 035. available at http://conventions.coe.int/Treaty/en/Treaties/Html/035.htm) is the counterpart of the European Convention on Human Rights in the sphere of economic and social rights. It was opened for signature by the members of the Council of Europe, in Turin, on 18 October 1961 and entered into force on 26 February 1965. It is available at http://conventions.coe.int/Treaty/EN/Treaties/Html/035.htm.

⁴⁵ European Committee of Social Rights, *Marangopoulos v. Greece*, Collective complaint No. 30/2005, decision on the merits of 6 December 2006, paras. 203 and 205.

⁴⁶ Recommendation 1885 (2009) Drafting an additional Protocol to the European Convention on Human Rights concerning the right to a healthy environment, 30 September 2009 (32nd Sitting), available at http://www.coe.int/t/dghl/standardsetting/hrpolicy/other_committees/GT-DEV-ENV_docs/erec1885.pdf.

⁴⁷ Marquet, Speaking notes at the UNICRI-UNEP Conference on Environmental Crime - Current and Emerging Threats held in Rome on 29-30 October 2012.

⁴⁸ See report The European Court of Human Rights and Environmental Crime (in the following: The European Court of Human Rights).

⁴⁹ See report The European Court of Human Rights, 2.

shows how from the right to life (Art. 2) or to private life (Art. 8) could arise several positive obligations incumbent on the Contracting States, sometimes involving also the use of criminal law by the States, in order to comply with them.⁵⁰

Actually, besides *negative obligations* arising from the protection of the human rights provided for by the ECHR and imposing a duty on the States of not interfering in the individuals' enjoyment of their rights, the ECtHR has elaborated the so called "doctrine of positive obligation", which requires that States actively protect the human rights within their jurisdiction, even through the adoption of preventive and repressive measures against the infringements of human rights perpetrated not only by the State's action, but also by the private subjects (i.e. individuals, groups or organisations).⁵¹ Consequently, a State can be considered responsible by the ECtHR, when it did not comply with such a positive obligation of adopting preventive or repressive measures, if a violation of human rights derived from this lack of action.⁵²

From a criminal law perspective, particularly interesting are the situations when the compliance with the ECHR positive obligations requires the implementation and the enforcement of criminal law provisions, in order to ensure the effectiveness of the fundamental rights and the protection of individuals.⁵³ Criminal law plays in such cases, therefore, a crucial role as a tool of human rights protection, carrying out both a preventive and repressive function. Moreover, the States' choice for the adoption of criminal law provisions within their jurisdictions becomes partially forced by the ECtHR positive obligations.⁵⁴ As a result, the ECtHR can check the possible lack and omissions concerning the exercise of investigation and punishment powers, caused by the State's inactivity, and consider the same State liable for the human rights violation.⁵⁵

In the context of environmental matters, Art. 2 ECHR has been applied where certain activities endangering the environment are so dangerous that they also endanger human life.⁵⁶

In *Öneryildiz v. Turkey*, the Court states that, in the circumstances of that case, a domestic remedy which could merely result in an award of compensation cannot be considered to be a proper avenue of redress or one capable of discharging the respondent State of its obligation to set up a criminal-law mechanism commensurate with the requirements of Art. 2 of the Convention.⁵⁷ Indeed, the Court notes that administrative and criminal proceedings were instituted against those responsible for an accident and the first resulted in an order against the latter to pay damages and the second to a finding of guilt (paras. 92-94).⁵⁸ However, the criminal proceedings in question, the sole purpose of which was to establish the possible liability of the authorities for "negligence in the performance of their duties" could not in itself be regarded as "adequate" with regard to the allegations of violations of the applicant's right to life (para. 106).⁵⁹

Concerning Art. 8, the positive duties resulting from the right to private life may, under specific circumstances, even require the State to provide criminal law provisions for the protection of this right.⁶⁰ According to the ECtHR case-law, the decisions of national public authorities affecting the environment must be provided for *by law* and follow a legitimate aim, such economic well-being of the country or the protection of the rights and freedom of others.⁶¹ Moreover, they must be proportionate to the legitimate aim pursued: for this purpose, a fair balance must be struck between the interest of the individual and the interest of the community as a whole.⁶² Considering the complexity which often characterises the assessment of the technical and social aspects of environmental issues, the national public authorities can

⁵⁰ See report The European Court of Human Rights, 7.

⁵¹ See report The European Court of Human Rights, 7.

 $^{^{\}rm 52}$ See report The European Court of Human Rights, 7.

⁵³ See report The European Court of Human Rights, 7.

⁵⁴ See report The European Court of Human Rights, 7.

⁵⁵ See report The European Court of Human Rights, 7. See Valeria Scalia, *Profili penalistici e obblighi di tutela nella giurisprudenza della Camera dei diritti dell'uomo per la Bosnia e l'Erzegovina* (Torino: Giappichelli, 2009), 87 ff.

⁵⁶ See report The European Court of Human Rights, 8.

⁵⁷ Öneryildiz v. Turkey, Application No. 48939/99, 30 November 2004. See report The European Court of Human Rights, 3.2.

⁵⁸ See report The European Court of Human Rights, 8.

⁵⁹ See report The European Court of Human Rights, 8.

⁶⁰ See Robert Esser, "Nuclear Accidents: Human Rights Challenges in Criminal Proceedings", *European Energy and Environmental Law Review* (June 2013): 90.

⁶¹ See report The European Court of Human Rights, 9.

⁶² See in this respect ECtHR, 09.12.1994, *Lopez Ostra v. Spain*, application No. 16798/90, 03 December 1994, para. 51.

better identify what might be the best policy or the best provisions to enforce,⁶³ according to the so-called *doctrine of the margin of appreciation*. Therefore, despite the subsidiary nature of the ECHR system, where it is up to Contracting States, in the first place, to secure the rights and liberties it enshrines, the ECHR system does not give the Contracting States an unlimited power of appreciation.⁶⁴ The domestic margin of appreciation thus goes hand in hand with ECtHR's supervision,⁶⁵ which can check whether the national authorities have approached the problem with due diligence and have taken all the competing interests into consideration.⁶⁶

Last, but not least, to consider is the Council of Europe Convention on the Protection of the Environment through Criminal Law (the Convention), which was opened for the signature of States in Strasbourg on 4 November 1998⁶⁷.

The Convention provides for legislative obligations concerning substantive criminal law and procedural criminal law. It involves the *jus punendi* of the States and it is a harmonising mechanism of environmental criminal law of the States. ⁶⁸ In particular, with regard to substantive criminal law the Convention typifies intentional and negligent offences; the sanctions for these offences shall include imprisonment and pecuniary sanctions and may include reinstatement of the environment. Corporate liability shall also be enabled. As it concerns procedural criminal law, the Convention foresees the territorial, flag, national and *aut dedere aut judicare* principles; moreover, it aims at facilitating the participation of citizens in a process (*actio popularis*) and it intensifies the international judicial cooperation. On the other hand, the Convention does not make reference to international relapse and it does not allude to old problems as immunity and transborder pollution.⁶⁹

The Convention typifies risk misconducts, but, in doing so, seems however to recognise that criminal law is a means of last resort, i.e. an *ultima ratio*. This is evident both from the selection of the types of conduct to be criminally punished and in the Preamble, where it is claimed that "whilst the prevention of the impairment of the environment must be achieved primarily through other measures, criminal law has an important part to play in protecting the environment".⁷⁰

The Convention never entered into force for the lack of the necessary ratifications. Nevertheless, it should be underlined that while the "paucity of international environmental criminal legislation" cannot be neglected,⁷¹ the Convention demonstrates the relevance of the issue of the fight against environmental crime at the international (regional) level.⁷²

⁶³ See ECtHR, 08.07.2003, *Hatton and Others v. United Kingdom*, Grand Chamber, application No. 36022/97, 8 July 2003, paras. 97, 98 and 100; ECtHR, 21.02.1990, *Powell and Rayner v. UK*, application No. 9310/81, para. 44; ECtHR, 02.11.2006, *Giacomelli v. Italy*, application No. 59909/00, 26 March 2007, para. 80. See also, Malgosia Fitzmaurice and Jill Marshall, "The Human Right to a Clean Environment-Phantom or Reality? The European Court of Human Rights and English Courts Perspective on Balancing Rights in Environmental Case", *Nordic Journal of International Law* (2007): 120 ff.

⁶⁴ See report The European Court of Human Rights, 9.

⁶⁵ Such a supervision concerns both the aim of the measures challenged and its necessity; it covers not only the basic legislation, but also the decision applying it, even one given by an independent Court, see ECtHR, 07.12.1976, *Handyside v. UK*, application No. 5493/72, paras. 48-49. According to the opinions of some authors, the presence of a wide margin of appreciation of the Contracting States implies a kind of simple presumption of the reason of the restrictions provided for the rights protected by the ECHR, see Sébastien van Drooghenbroeck, *La proportionalité dans le droit de la Convention européenne des droits de l'homme – Prendre l'idée simple au sérieux* (Bruxelles: Bruylant, 2001), 232-235.

⁶⁶ See ECtHR, 09.06.2005, *Fadeyeva v. Russia*, application No. 55723/00, 5 June 2005, para. 128. See also Daniel Garcia San José, *Environmental Protection and the European Convention on Human Rights* (Strasbourg: Council of Europe, 2005), 50 ff.

⁶⁷ ETS No. 172, available at http://conventions.coe.int/Treaty/en/Treaties/Html/172.htm.

⁶⁸ See Jorge Luis Collantes, "The Convention on the Protection of the Environment through Criminal law: Legislative Obligations for the States", available at http://huespedes.cica.es/gimadus/collantes.html.

⁶⁹ See Collantes, "The Convention on the Protection of the Environment through Criminal law".

⁷⁰ See report Directive 2008/99/EC on Environmental Crime and Directive 2009/123/EC on Ship-source Pollution (in the following: Directive 2008/99/EC and Directive 2009/123/EC), 1.1. See also Collantes, "The Convention on the Protection of the Environment through Criminal law".

⁷¹ Frédéric Mégret, "The Problem of an International Criminal Law of the Environment", *Columbia Journal of Environmental Law* (2010): 200.

⁷² See report Directive 2008/99/EC and Directive 2009/123/EC, 1.1.

Moreover, the Convention had a seminal effect on the subsequent efforts of the EU towards the approximation of environmental criminal law.⁷³

In particular, it is worth to recall that the first initiative adopted in the perspective of the approximation of environmental criminal law of the European Community (EC) Member States was the Initiative of the Kingdom of Denmark with a view to adopting a Council Framework Decision on combating serious environmental crime.⁷⁴ This proposal for a third pillar framework decision to be adopted by Council on the basis of Art. 31 and 34(2) of the EU Treaty was drafted taking the main elements of the Council of Europe Convention on the Protection of the Environment through Criminal Law.

Therefore, although the Convention never entered into force - most likely because of the path towards approximation of criminal law of the EU Member States, to which as already mentioned it gave a decisive input⁷⁵ - the Convention represents a relevant act exactly in providing for the roots of the subsequent EU efforts towards approximation of environmental criminal law.⁷⁶

2.1.2 Instruments of direct relevance in the fight against environmental crime

Having regard to the importance of the environmental interests at the EU level, it is worth to mention that even before the entry into force of the Lisbon Treaty, the European institutions, in order to achieve a high level of protection of the environment, through the powers entrusted to those ends could in certain cases avail themselves of criminal actions.⁷⁷

As affirmed by Advocate General Ruiz-Jarabo Colomer, "Criminal penalties (...) represent an additional pressure, capable on a good number of occasions of inducing compliance with the requirements and a proliferation of statutory prohibitions on the carrying out of activities which are highly dangerous to the environment. The advent of ecology in criminal codes seeks also, in addition to enhancing the general deterrent effect, to raise public awareness of the social 'harmfulness' of offences against nature, reaffirming the recognition of environmental interests as autonomous rights ranking alongside the traditional values protected by the criminal law. The ethical dimension of criminal punishment must not be overlooked. When an act is sanctioned in criminal terms, it is held to merit the most severe reproach because it transgresses the fundamental tenets of the legal system".⁷⁸

In its judgment of 13 September 2005, the Grand Chamber of the Court of Justice affirmed that the Community legislator, when the application of effective, proportionate and dissuasive criminal penalties by the competent national authorities is an essential measure for combating serious environmental offences, can take measures which relate to the criminal law of the Member States which are considered necessary in order to ensure that the rules which it lays down on environmental protection are fully effective.⁷⁹

In the subsequent case on ship-source pollution,⁸⁰ the Court of Justice streamlined the scope of the competence of the Community when adopting measures related to criminal law to protect the environment; it established a clear restriction concerning the determination of the type and level of the criminal penalties to be applied, which according to the Court, did not fall within the Community sphere of competence.⁸¹

On these grounds, even before the entry into force of the Lisbon Treaty, the environmental sector had been subject of the first directive of harmonisation of criminal legislation of the Member States, namely Directive

⁷³ See report Directive 2008/99/EC and Directive 2009/123/EC, 1.

⁷⁴ *OJ C 039, 11/02/2000 p. 4-7.*

⁷⁵ See report Directive 2008/99/EC and Directive 2009/123/EC, 1.1.

⁷⁶ See report Directive 2008/99/EC and Directive 2009/123/EC, 1.1.

⁷⁷ See report Articles 82-86 TFEU, 2.1.2.

⁷⁸ Opinion of Advocate General Ruiz-Jarabo Colomer delivered on 26 May 2005, para. 74.

⁷⁹ ECJ (Grand Chamber), 13 september 2005, Case C-176/03, *Commission of the European Communities v Council of the European Union*, European Court Reports 2005 I-07879, para. 48.

⁸⁰ ECJ (Grand Chamber), 23 October 2007, Case C-440/05, *Commission of the European Communities v Council of the European Union*, European Court Reports 2007 I-09097.

⁸¹ ECJ (Grand Chamber), 23 October 2007, Case C-440/05, para. 70.

2008/99/EC on the protection of the environment through criminal law, based on Art. 175 TEC (now Art. 192 TFEU).⁸²

Directive 2008/99/EC establishes measures relating to criminal law in order to protect the environment more effectively (Art. 1). This instrument aims to harmonise the criminal laws of the Member States by which effect is given to the environmental protection requirements arising from Community law. Such harmonisation is considered to be necessary by the European institutions because of the rise in environmental offences and their effects, which increasingly extend beyond the borders of the States in which the offences are committed. Such offences pose a threat to the environment and therefore call for an appropriate response.⁸³ According to the Preamble of Directive 2008/99/EC, experience had shown that the existing systems of penalties had not been sufficient to achieve complete compliance with the laws for the protection of the environment: such compliance should therefore be strengthened by the availability of criminal penalties, which demonstrate a social disapproval of a qualitatively different nature compared to administrative penalties or a compensation mechanism under civil law.⁸⁴

Directive 2008/99/EC requires Member States to consider as a criminal offence the conduct specifically listed in Art. 3, when this conduct is unlawful and it is committed intentionally or with at least serious negligence. The conduct listed in Art. 3 concerns core elements of the concept of environment (air, soil, water, fauna, flora) and related industrial or economic activities, and mostly has a serious harmfulness against the environment as a protected interest, because of its nature and effects.⁸⁵ According to Art. 4, even inciting, aiding and abetting the intentional conduct referred to in Art. 3 shall be punishable as a criminal offence.

Having regard to penalties, following the judgement of the Court of Justice of 23 October 2007, Directive 2008/99/EC does not contain provisions on type or levels of criminal sanctions: Art. 5 establishes that Member States shall take the necessary measures to ensure that the offences referred to in Art. 3 and 4 are punishable by effective, proportionate and dissuasive criminal penalties.

Directive 2008/99/EC deals also with the fundamental issue of liability of legal persons for environmental crimes, requiring Member States to ensure that legal persons can be held liable for offences referred to in Art. 3 and 4 committed for their benefit and to ensure that legal persons are punishable by effective, proportionate and dissuasive sanctions (Art. 6 and 7).

It should be noted that Directive 2008/99/EC does not require the sanctions for legal persons to be criminal penalties. This approach, which is the general approach followed by all EU instruments imposing Member States to introduce forms of liability of legal entities, aims to facilitate the introduction of a form of corporate liability for environmental crime in those legal systems, like Italy, where the admissibility of criminal liability of legal entities is constitutionally controversial.⁸⁶

Art. 6 and 7 of Directive 2008/99/EC are probably the provisions which produced the most relevant impact at national level, as they have led to introduction of a regime of liability for listed environmental crimes in countries, like Italy, where no provisions on corporate environmental crime existed, or, in other cases like Spain, constituted a decisive input for the introduction of a regime of criminal liability of legal persons in the Criminal Code for listed crimes encompassing environmental crimes.⁸⁷

Also Directive 2009/123/EC on ship-source pollution and on the introduction of penalties for infringements, although having as a legal basis Art. 80 (2) of the EC Treaty (now Art. 100 TFEU) related to transport, has clear links with the protection of the environment.⁸⁸ This instrument requires Member States to ensure that are considered infringements and are regarded as criminal offences ship-source discharges of polluting substances if committed with intent, recklessly or with serious negligence, and to take the necessary measures to ensure that the natural or legal persons committing the offence can be held liable. Member States are required to take the necessary measures to ensure that infringements under the directive are

⁸² See report Directive 2008/99/EC and Directive 2009/123/EC, 1.2.

⁸³ Whereas 2 of Directive 2008/99/EC.

⁸⁴ See report Directive 2008/99/EC and Directive 2009/123/EC, 2.

⁸⁵ See Grazia Maria Vagliasindi, "The European harmonisation in the sector of protection of the environment through criminal law: the results achieved and further needs for intervention", *The New Journal of European Criminal Law* 3 (2012): 320-331.

⁸⁶ See report Directive 2008/99/EC and Directive 2009/123/EC, 4.

⁸⁷ See report Directive 2008/99/EC and Directive 2009/123/EC, 4; report Fighting Environmental Crime in Italy: A Country Report (in the following: Report on Italy), 9; report Fighting Environmental Crime in Spain: A Country Report (in the following: Report on Spain), 9.

⁸⁸ See report Directive 2008/99/EC and Directive 2009/123/EC, 3.

punishable by effective, proportionate and dissuasive criminal penalties⁸⁹ (Article 8): in line with the European Court of Justice judgment of October 2007, Directive 2009/123/EC does not set common levels of sanctions.⁹⁰

The adoption of the Lisbon Treaty, which came into force on 1 December 2009, has opened up new potential opportunities for increasing the effectiveness of EU measures against environmental crime by that explicitly introduced the competence of the EU in criminal matters,⁹¹ bearing in mind that it is an *indirect* criminal competence, which limits the discretion of the national legislator, but requires its intervention in order to introduce the criminal offences in the national criminal system.⁹²

The fundamental provision as far as the harmonisation of substantive criminal law is concerned is Art. 83 TFEU. This provision needs, however, to be read in the light of Chapter 1 of Title V TFEU, which sets out the general goals to be achieved in this area, and particularly with Art. 67 TFEU stipulating that the Union shall constitute an area of freedom, security and justice with respect for fundamental rights and the different legal systems and traditions of the Member States.⁹³

Art. 83 TFEU lists the areas in which the approximation of laws can be realised and it distinguishes between the cases of "*particularly serious crime with a cross-border dimension*" (para. 1) and the ones in which the approximation proves essential "to ensure the effective implementation of a Union policy in an area which has been subject to harmonization measures" (para. 2). Thanks to these provisions, the legitimacy of obligations of criminal harmonisation descending from the EU law has been recognised and an indirect or accessory criminal competence of the EU has been introduced.⁹⁴

The protection of environment seems undoubtedly one of the areas in which a harmonisation measure can be adopted, on the basis of Art. 83 TFEU.⁹⁵

In this regard, it is worth to recall that Directive 2008/99/EC and Directive 2009/123/EC impose on Members States an obligation to introduce criminal penalties for the conduct listed therein, but as far as the sanctions are concerned, the directives do not contain any binding indication concerning the type and level of the criminal sanctions to be introduced, providing only that Member States shall take the necessary measures to ensure that the offences are punishable by effective, proportionate and dissuasive criminal penalties.

An instrument aimed at harmonisation which is limited to point out the behaviours to be criminally punished, without giving binding indications on the type and level of the criminal sanctions, has been regarded as unsatisfactory by part of the legal scholars;⁹⁶ moreover, also different aims (e.g. the protection of competition) can be indirectly hindered by an excessive difference in the provided sanctions.⁹⁷

Art. 83 TFEU might therefore have an important impact on the protection of the environment at EU level.⁹⁸ In particular, harmonising measures dealing with the protection of the environment through criminal law could be adopted on the basis of Art. 83 (2): on the one hand, the environment is a legal interest of supranational importance, and, on the other hand, it has been subject to several interventions of

⁸⁹ Like Directive 2008/99/EC, also Directive 2009/123/EC does not require the sanctions for legal persons to be criminal penalties.

⁹⁰ See report Directive 2008/99/EC and Directive 2009/123/EC, 3.

⁹¹ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

⁹² See report Articles 82-86 TFEU, 2.1.2.

⁹³ Ester Herlin-Karnell, "EU Criminal Law Relocated. Recent Developments", Uppsala Faculty of Law Working paper (2011): 5, available at http://uu.diva-portal.org.

⁹⁴ See report Articles 82-86 TFEU, 2.

⁹⁵ See report Articles 82-86 TFEU, 2.2.3.

⁹⁶ See report Directive 2008/99/EC and Directive 2009/123/EC, 4; report Articles 82-86 TFEU, 2.6. See Giovanni Grasso, "Relazione Introduttiva", in *Per un rilancio del progetto europeo. Esigenze di tutela degli interessi comunitari e nuove strategie di integrazione penale*, ed. Giovanni Grasso and Rosaria Sicurella (Milan: Giuffrè, 2008), 22 ff.; Rosaria Sicurella, "Eppur si muove!': alla ricerca di un nuovo equilibrio nella dialettica tra legislatore comunitario e legislatore nazionale per la tutela degli interessi dell'Unione europea", in *Per un rilancio del progetto europeo. Esigenze di tutela degli interessi comunitari e nuove strategie di compose. Esigenze di tutela degli interessi comunitari e nuove strategie di integrazione penale*, ed. Giovanni Grasso and Rosaria Sicurella (Milan: Giuffrè, 2008), 263 ff.

⁹⁷ See report Directive 2008/99/EC and Directive 2009/123/EC, 4. See Grazia Maria Vagliasindi, "La direttiva 2008/99/CE e il Trattato di Lisbona: verso un nuovo volto del diritto penale ambientale italiano", *Diritto del Commercio internazionale* (2010): 464 ff.

⁹⁸ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

harmonisation.⁹⁹ Furthermore, Art. 83 (1) TFEU could permit the introduction of provisions in order to target environmental crimes committed by or with the involvement of criminal organisations¹⁰⁰ (see also below, 2.1.3).

Moreover, if, following an evaluation undertaken in conformity with the principles which should guide the choices of criminalisation¹⁰¹ (e.g. principle of proportion) a maximum of at least three years imprisonment will be foreseen for (at least certain) environmental crimes, mutual assistance instruments could be used, which might strengthen the tools against environmental crimes which are often transnational in nature.¹⁰² In addition, the provision of a maximum of at least four years imprisonment for the most serious environmental crimes would let these crimes to fall under the scope of the Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime¹⁰³ (as well as, at international level, within the concept of "serious crime" as it is spelled in the United Nations Convention Against Transnational Organized Crime; see below, 2.1.3).

However, it should not be underestimated that the enactment, on the basis of Article 83 TFEU, of a further approximation instrument concerning the type and level of the criminal penalties for the conduct listed by Directive 2008/99/EC and 2009/123/EC as well as the aggravating circumstances for environmental crimes committed within or with the involvement of criminal organisations, might incur in several obstacles.¹⁰⁴

First of all, criminal law is still perceived as a core element of national sovereignty; therefore, although the approximation of sanctions for environmental crime (e.g. establishing minimum level of maximum criminal penalties) would in any case be adopted in the form of a directive, as such needing the intervention of national legislator and not being of direct effect, a further EU intervention imposing Member States to limit their freedom in assessing the gravity of a criminal behaviour (also in comparison to the overall choices on penalties for crimes different from the ones considered by the eventual approximation instrument) might be perceived as a violation of the national prerogatives, and this particularly in those countries, like Germany, whose institutions clearly stressed that criminal law ultimately remains a core domain of the Member States¹⁰⁵ at the time of implementation of Directive 2008/99/EC.¹⁰⁶

Furthermore, the harmonisation of criminal sanctions for environmental crimes and the provision of aggravating circumstances for organised environmental crime might certainly produce a positive impact in countries, like Italy, where the characteristics of provisions on environmental crimes (e.g. being misdemeanours) often produce a negative effect on the judicial enforcement of those provisions in light of overall features of the criminal law system (e.g. short prescriptive periods),¹⁰⁷ causing a lack of effectiveness in environmental protection. However, in other countries, like Germany (where a well developed environmental culture together with a good level of enforcement of administrative environmental provisions¹⁰⁸ and an overall criminal justice system assuring the effectiveness of the application of criminal sanctions to the perpetrators of the offences lead to see as questionable the use of high criminal penalties for environmental crimes¹⁰⁹) might be perceived as lacking utility and therefore be difficult to agree.¹¹⁰

⁹⁹ See report Directive 2008/99/EC and Directive 2009/123/EC, 5; report Articles 82-86 TFEU, 2.2. See Grazia Maria Vagliasindi, "Obblighi di penalizzazione di fonte europea e principi di politica criminale: le indicazioni promananti dalla materia ambientale", in L'evoluzione del diritto penale nei settori d'interesse europeo alla luce del Trattato di Lisbona, ed. Giovanni Grasso, Lorenzo Picotti and Rosaria Sicurella (Milan: Giuffrè, 2011), 161 ff.

¹⁰⁰ See Ludwig Krämer, *EU Environmental Law* (London: Sweet and Maxwell, 2012), 413; Vagliasindi, "La direttiva 2008/99/CE", 474 ff.

¹⁰¹ On these principles see "The Manifesto on European Criminal Policy", *Zeitschrift Für Internationale Strafrechts Dogmatik* 12 (2009): 707-716.

¹⁰² See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

¹⁰³ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

¹⁰⁴ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

¹⁰⁵ See in particular the judgment of the Federal Constitutional Court of 30 June 2009, BVerfGE 123, 267.

¹⁰⁶ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

¹⁰⁷ See Report on Italy, 3.

¹⁰⁸ See Report on Germany, 13-14.

¹⁰⁹ See, with reference to the Scandinavian countries, Elina Pirjatanniemi, "Desperately Seeking Reason -New Directions for European Environmental Criminal Law", *Scandinavian Studies in Law* 54 (2009): 409 ff.

¹¹⁰ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

2.1.3 Instruments on organised crime in the perspective of fighting environmental crime

Particular attention has been devoted to international and European instruments on organised crime - binding as well as soft law instruments - that address organised environmental crime, conceived as a global problem that transcends the domestic borders and requires the setting of collaborative networks, connecting States, international organisations and NGOs.¹¹¹

There is indeed a wide array of environmental crimes that can be and are executed under the form of organised crime, such as illegal trafficking of flora and fauna, illegal waste disposal, illegal shipment of hazardous waste, oil pollution, illegal fishing, etc.¹¹²

In fact, a peculiar criminal phenomenon (in Italy known as "ecomafia") has progressively grown through the years: the organised criminality, for example, operates in the illicit trafficking in waste, in the illicit waste disposal and in the illicit trafficking in endangered species, usually with the support of companies (or company-like entities).¹¹³

EUROPOL presented in November 2013 its Threat Assessment 2013 on Environmental Crime in the EU as a response to conclusions of the *2013-2017 EU Policy Cycle for organised and serious international crime*¹¹⁴ and the *EU Organised and Serious Crime Threat Assessment 2013*¹¹⁵ that identified environmental crime as one of the emerging threats requiring intensified monitoring. In this report, Europol mentions that the most prominent environmental crimes featuring the involvement of organised crime in the EU are the trafficking in illicit waste and the trafficking in endangered species.¹¹⁶ The report states that waste traffickers exploit the absence of EU-wide standardised control regimes and use fraudulent documentation as key aspects of their *modus operandi*. The EU remains one of the most important markets for the trafficking in endangered species and it attracts highly specialised organised crime groups, which service a niche market.

At the international level, the main legal instrument is the United Nations Convention Against Transnational Organised Crime,¹¹⁷ also known as the Palermo Convention. It was approved by the UN Member States in 2000 and entered into force on 29 September 2003 and aims "to promote cooperation to prevent and combat transnational organised crime more effectively" (Art. 1). The Organised Crime Convention consists of 41 Articles that require States Parties to criminalise, *inter alia*, participation in an organised group (Art. 5), the laundering of the proceeds of crime (Art. 6), and corruption (Art. 8). States Parties are additionally obligated to adopt measures for the prosecution of offenders (Art. 10 and 11), and for the confiscation and seizure of, *inter alia*, the proceeds of such crimes (Art. 12 to 14). Each protocol sets out a number of obligations for each of the three specific sub-areas of transnational organised crime that are focused upon (Trafficking in Persons, Smuggling of Migrants, Illicit Manufacturing and Trafficking in Firearms).

The Organised Crime Convention does not contain any reference to the specific phenomenon of organised environmental crime.

However, it encompasses the fight against crimes like corruption which experience has shown are often connected to the commission of environmental crimes (see below, 2.2.2).

Moreover, the Convention provides for general concepts and definitions that can be applied to organised environmental crime.¹¹⁸ Among them, it is worth to mention Art. 2 (b), which gives an open definition of "serious crime" as a "conduct constituting an offence punishable by a maximum deprivation of liberty of at least four years or a more serious penalty". In addition, Art. 3 (b), defining the scope of application of the

¹¹² See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.9.

¹¹¹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 1.

¹¹³ See Vagliasindi, "La direttiva 2008/99/CE", 458 ff.; see the study "Organised Environmental Crime in the 15 EU Member States", 15 May 2003, available at http://ec.europa.eu/environment/legal/crime/pdf/organised_member_states.pdf.

¹¹⁴ Doc. 15358/11.

¹¹⁵ Doc. 7368/13 + COR 1.

 ¹¹⁶ Environmental crime is an emerging threat in the EU, available at https://www.europol.europa.eu/content/Newsletter-environmental-crime-emerging-threat-eu.
¹¹⁷ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.
¹¹⁸ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.

Convention, specifies that it applies to the prevention, investigation and prosecution of serious crime, as defined in Art. 2, "where the offence is transnational in nature and involves an organised criminal group". The notion of serious crime is also relevant in the establishment of the offence of participation in an organised criminal group, set forth in Art. 5 of the Organised Crime Convention, including organising, directing, aiding, abetting, facilitating or counselling the commission of serious crime involving an organised criminal group.¹¹⁹ In particular, Art. 5 requires States Parties to foresee the introduction into their criminal law systems of a number of offences relating to participation in an organised criminal group. that must be a common minimum standard for all States parties, without prejudice to the differences among their common law or continental law systems and the possibility of adopting stricter provisions.¹²⁰ Art. 2 (a) of the Convention defines "Organised criminal group" as a "structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit". In this regard, it is worth to note that this definition is open and focused on: the number of participants - at least three persons; the duration - a flexible requirement of existing for a period of time; the aim - to commit offences for the purpose of financial or other material benefits; the type of crime they commit - serious crime as defined by the Convention.¹²¹

This wide concept of "serious crime" may include new forms and dimensions of transnational organised crime, such as organised environmental crime¹²² which is often transnational by nature.

However, the reference to offences "punishable by a maximum deprivation of liberty of at least four years or a more serious penalty" may be an obstacle for the application to environmental crimes, since many States either do not foresee penalties of imprisonment for environmental offences¹²³ or they foresee maximum imprisonment penalties lower than 4 years.

The Convention has been criticised by some scholars because of the vagueness of the definition of organised crime.¹²⁴ In this regard, it is worth to note that this flexible approach results from preferences of the States Parties to the Convention that preferred it rather than a predetermined and rigid list of offences.¹²⁵

Regarding legal persons, Art. 10 of the Convention requires States to adopt measures to establish the liability of legal persons for participation in serious crimes involving an organised criminal group and for the offences defined in the Convention (para. 1). Although the Conventions does not deal directly with organised environmental crime, this provision is interesting with reference to the involvement of organised crime in the commission of environmental crimes; in fact, as stated above, experience has shown that this is most often carried out through corporations or corporate-like entities.

Art. 10 (2) states that "subject to the legal principles of the State Party, the liability of legal persons may be criminal, civil or administrative", leaving the States Parties the possibility of choosing among these three possible liability regimes. However, according to para. 4, States Parties "shall ensure that legal persons held liable in accordance with this Article are subject to effective, proportionate and dissuasive criminal or non-criminal sanctions, including monetary sanctions". It is worth to note that in general all EU instruments have followed a similar approach regarding the liability of legal persons, as in the case of the Directive 2008/99/EC on the protection of the environment through criminal law¹²⁶ (see also *supra*, 2.1.2).

Finally, the Organised Crime Convention provides flexible legal framework for cooperation on extradition, mutual legal assistance and international cooperation among States Parties with regard to all forms of

¹¹⁹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.1. ¹²⁰ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.3.

 ¹²¹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.2.
¹²² See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.1.

¹²³ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.1. ¹²⁴ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.

See for instance, Valsamis Mitsilegas "From National to global – from empirical to legal: the ambivalent concept of transnational organised crime", in *Critical Reflections on the Concept of Transnational Organised Crime*, ed. Margaret E. Beare (Toronto: University of Toronto Press, 2003), 55-87.

¹²⁵ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.

¹²⁶ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.4.

serious crime.¹²⁷ The Convention also provides for the promotion of training and technical assistance for the establishment and the improvement of the skills of national authorities against organised crime.¹²⁸

As a whole, one of the most important outcomes of the Palermo Convention is to have developed a criminal policy that has inspired the different practices of its Parties, among them being the European Union and its Member States.¹²⁹ Concerning the environment, the Convention is a very important instrument since it provides a legal framework for sanctioning organised environmental crime considered as a serious crime, offering the legal tools to criminalise as offences those activities related with the environmental crime under a rich variety of forms, to investigate and to bring to justice those criminals involved in different roles in criminal groups and criminal organisations.¹³⁰

It is worth to mention that the European Union and all its Member States are now parties to the United Nations Convention against Transnational Organised Crime 2000, which was concluded, on behalf of the European Community, by Council Decision 2004/579/EC.¹³¹ There are bilateral and multilateral treaties between the EU, its Member States and Third countries that deal with organised environmental crime aspects.¹³²

Moving indeed to the EU level, it should be noted that, despite the fact that the principal EU instruments dedicated to fighting organised crime do not address directly the *organised environmental crime* and that the adoption of a legal instruments specifically addressing organised environmental crime is not on the EU legislative agenda, it is worth to mention that the existing instruments have left some room for an extensive interpretation of the goals to be achieved and have detailed in annexes the "other serious crimes" that could be addressed when required.¹³³

The legal framework to fight against organised crime in the EU is mainly focused on the Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime.¹³⁴ According to its Preamble, this instrument builds on the important work done by international organisations, in particular the Palermo Convention.¹³⁵ The Framework Decision 2008/841/JHA repealed the Joint Action 98/733/JHA on making it a criminal offence to participate in a criminal organisation in the Member States of the European Union¹³⁶ which was the first European legal instrument aiming at approximating national legislations fighting against organised crime, adopted by the Council on the basis of Art. K.3 of the Treaty on European Union.¹³⁷

The aim of the Framework Decision 2008/841/JHA is to criminalising participation in a criminal organisation. According to this instrument, "criminal organisation" means a structured association, established over a period of time, of more than two persons acting in concert with a view to committing offences which are punishable by deprivation of liberty or a detention order of a maximum of at least four years or a more serious penalty, to obtain, directly or indirectly, a financial or other material benefit'; while "structured association" means an association that is not randomly formed for the immediate commission

¹²⁹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.

¹²⁷ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.

¹²⁸ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.

¹³⁰ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.

¹³¹ Council Decision 2004/579/EC of 29 April 2004 on the conclusion, on behalf of the European Community, of the United Nations Convention Against Transnational Organised Crime. *OJ L 261, 6.8.2004, p. 69.*

¹³² See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 6.

¹³³ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 1.

¹³⁴ Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime. OJ L 300, 11-11-2008, p. 42-45. For a comment see Valsamis Mitsilegas, "The Council Framework Decision on the Fight against Organised Crime: What can be done to strengthen EU legislation in the field? Note", 2011, available

http://www.europarl.europa.eu/document/activities/cont/201206/20120627ATT47779/20120627ATT 47779EN.pdf.

¹³⁵ Whereas 6 of the Framework Decision 2008/841/JHA.

¹³⁶ See Joint Action of 21 December 1998 adopted by the Council on the basis of Article K.3 of the Treaty on European Union, on making it a criminal offence to participate in a criminal organisation in the Member States of the European Union. *OJ L 351, 19.12.1998, p. 1.*

¹³⁷ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 2.2.

of an offence, nor does it need to have formally defined roles for its members, continuity of its membership, or a developed structure.¹³⁸

The definition of "criminal organisation" is very much in line with that of "organised criminal group" in the Palermo Convention, and the term is used as a basic component of the description of the offence of "participation in a criminal organisation" (Art. 2), which determines the scope of application of the special measures prescribed in the Framework Decision 2008/841/JHA.¹³⁹

The Framework Decision 2008/841/JHA requires Member States to take the necessary measures to ensure that one or both of the following types of conduct related to a criminal organisation are regarded as offences:

- (a) conduct by any person who, with intent and with knowledge of either the aim and general activity of the criminal organisation or its intention to commit the offences in question, actively takes part in the organisation's criminal activities, including the provision of information or material means, the recruitment of new members and all forms of financing of its activities, knowing that such participation will contribute to the achievement of the organisation's criminal activities;
- (b) conduct by any person consisting in an agreement with one or more persons that an activity should be pursued, which if carried out, would amount to the commission of offences referred to in Art. 1, even if that person does not take part in the actual execution of the activity.

Further elements of the Framework Decision 2008/841/JHA are the specific provisions on penalty levels, the introduction of the treatment of the commission of an offence within the framework of a criminal organisation as an aggravating circumstance, as well as standard provisions on liability of legal persons.¹⁴⁰

As with the 'Palermo Convention, the reference in the Framework Decision 2008/841/JHA to predicate offences which are punishable by deprivation of liberty or a detention order of a maximum of at least four years or a more serious penalty" might hinder the possibility to include environmental crimes within the relevant aims of the criminal organisation, since many Member States either do not foresee penalties of imprisonment for environmental offences or they foresee maximum imprisonment penalties lower than 4 years.

It is worth to recall that the provisions of the Lisbon Treaty, and particularly Art. 83 (1) TFEU, may serve as legal basis for the further development of specific criminal provisions in order to target environmental crimes committed by or with the involvement of criminal organisations, such as waste trafficking and trafficking in endangered species, usually with the support of companies (or company-like entities).

Therefore, it could be envisaged either to propose some aggravating circumstances linked with the involvement of the organised criminality in the commission of environmental crimes,¹⁴¹ or to introduce a rule which criminalises "organised trafficking in waste"; such a provision could then be implemented in all the national legal systems by the competent legislative authorities.¹⁴²

It should be noted that also soft law instruments are very helpful for fighting organised environmental crime because they may lead States to adapt the legal categories related with organised crime to environmental crimes and give them flexible models and standards that can facilitate establishing a common ground of understanding for the criminalisation of activities related with the environment.¹⁴³

At the international level, several soft law instruments play a role in the overall normative framework against organised crime. Among them, it is worth to mention:¹⁴⁴ Resolutions of the ECOSOC or the UN Secretary General which plays the role of Secretariat of the Palermo Convention;¹⁴⁵ Resolutions and Action Plans adopted by the Conference of Parties to the Organised Crime Convention which may help to fill in gaps and contribute to approximate criminal policies and practice; UNODC reports and recommendations which help to establish the common ground for the States Parties to enforce the Organised Crime Convention as well as other multilateral environmental agreements closely related with environmental

¹³⁸ Art. 1 of the Framework Decision 2008/841/JHA..

¹³⁹ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 2.3.

¹⁴⁰ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 2.3.3 and 2.3.4.

¹⁴¹ Vagliasindi, "La direttiva 2008/99/CE", 474 ff.

¹⁴² See report Articles 82-86 TFEU, 2.6.

¹⁴³ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 3.

¹⁴⁴ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 3.

¹⁴⁵ See, for instance, Economic and Social Council Resolution 2012/19 of 26 July 2012, entitled "Strengthening international cooperation in combating transnational organised crime in all its forms and manifestations".

crime and organised environmental crime such as CITES. In particular, the reports and strategies developed by UNODC contribute greatly to shape organised environmental crime as a criminal offence at the international and domestic level.¹⁴⁶

It is worth to underline that the UN Economic and Social Council, in its resolution 2011/36 of 28 July 2011, invited "Member States to consider making illicit trafficking in endangered species of wild fauna and flora a serious crime, in accordance with their national legislation and Art. 2 (b) of the United Nations Convention against Transnational Organised Crime, especially when organised criminal groups are involved".¹⁴⁷ In this resolution, the Council gave UNODC the mandate to fight against environmental crime; ¹⁴⁸ in 2012, UNODC launched a new campaign, entitled *Transnational Organised Crime: Let's put them out of business*, which specifically includes environmental crime.¹⁴⁹ The UN Economic and Social Council Resolution 2012/19, entitled "Strengthening international cooperation in combating transnational organised crime in all its forms and manifestations", urged its Member States "to consider, among other effective measures, in accordance with their national legal systems, addressing different forms and manifestations of transnational organised crime that have a significant impact on the environment, including illicit trafficking in endangered species of wild fauna and flora".¹⁵⁰

One of the most remarkable instruments is the Toolkit 2012 elaborated by the International Consortium Combating Wildlife Crime.¹⁵¹ It provides a conceptual map and the coordinates to deal with environmental crime, international and domestic laws and the problems related with their enforcement from the point of view of the practitioners.¹⁵² It was offered to assist government officials in wildlife and forestry administration, and customs and other relevant enforcement agencies to conduct a comprehensive analysis of possible means and measures related to the protection and monitoring of wildlife and forest products. It is an important reference to understand how organised environmental crime is comprehended in the wider concept of environmental crime.¹⁵³

Also the EU legal framework to fight organised crime and organised environmental crime is supported by non-binding instruments¹⁵⁴ such as Council Conclusions, Communications of the Commission, Resolutions of the European Parliament; Programmes such as the Stockholm Programme establishing the EU priorities for developing an Area of Freedom, Security and Justice during the period 2010-14 or the new 7EAP; Joint Strategies of the EU institutions.¹⁵⁵

The Action Plan Implementing the Stockholm Programme in order to protect against serious and organised crime provided for specific measures to fight crime, including legislative proposals.¹⁵⁶ Despite the fact that there is no specific reference to environmental crime or to environmental organised crime, there are measures that indirectly refer to them, such as in its fourth part where it is reaffirmed that "focus should not only be placed on combating terrorism and organised crime but also cross-border wide-spread crime that have a significant impact on the daily life of the citizens of the Union"; this statement allows crimes that are not expressively mentioned in the programme such as environmental crime to be covered.¹⁵⁷

The European Parliament has adopted several resolutions that envisage organised environmental crime under different perspectives; in these resolutions, organised crime is foreseen both as a crime in itself but also as a facilitating factor that must be taken into account when examining environmental crimes such as those related with wildlife trafficking.¹⁵⁸

In its most recent resolution, Resolution of 15 January 2014 on wildlife crime, the European Parliament proposes to the EU institutions an EU Action Plan against wildlife trafficking in accordance with the

¹⁴⁶ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 1.
¹⁴⁷ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 3.
¹⁴⁸ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 5.
¹⁴⁹ Organised Crime Fact Sheet, available at

¹⁵² See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 3.

http://www.unodc.org/documents/toc/factsheets/TOC12_fs_general_EN_HIRES.pdf; see report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 5.

¹⁵⁰ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 3.

¹⁵¹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 3.

¹⁵³ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 3.

¹⁵⁴ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 3.

¹⁵⁵ Strategy towards a European strategy to prevent organised crime Commission, Staff Working Paper, Joint report from Commission services and EUROPOL, *SEC (2001) 433*, Annex, 42.

¹⁵⁶ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 3.1.¹⁵⁷ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 3.1.

¹⁵⁸ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 3.2.

initiatives that are being adopted by the UN institutions and international *fora*; in its proposal, the European Parliament distinguishes two dimensions for action: the internal and the international dimensions, with a different consideration for organised crime.¹⁵⁹

These non-binding instruments have contributed to shape the *working definitions* of organised crime, criminal organisation and criminal groups as well as the priorities for the fight against serious organised crime.¹⁶⁰ A relevant contribution in this sense has been provided also by the EUROPOL EU Organised Crime Reports and EUROPOL Organised Crime Threat Assessment, the latter more recently renamed as Serious Organised Crime Threat Assessment (respectively, OCTA and SOCTA).¹⁶¹

2.1.4 Strenghts and shortcomings

administrative laws protecting the environment.¹⁶⁵

Shortcomings

International Conferences have so far never dealt specifically with the issue of environmental crime. BASEL and CITES are examples of the few environmental international agreements making reference to criminal obligations for the States.¹⁶² In this regard, it should be noted that these criminal provisions are "only a source of obligation, not a source of law" and have to be therefore implemented in domestic legislation to sanction environmentally harmful conduct.¹⁶³ These provisions constitute "an 'indirect' criminal law emanating from international mandates of criminal sanctions for the violation of certain environmental norms".¹⁶⁴ The international origin of these rules explains their difficulties in taking root in the domestic legal systems, where on most occasions criminal laws are just ancillary to relatively new

At the EU level, the 7EAP does not explicitly refer to environmental crime nor make any reference to the criminalisation of actions that can damage the environment.¹⁶⁶ The absence of environmental crime among EU priorities in the implementation of the Area of Freedom, Security and Justice is to be mentioned, and more recently the absence of environmental crime among EU priorities between 2014 and 2017 for the fight against serious and organised crime set up by the Council of the Justice and Home Affairs in its meeting in Luxembourg on 6 and 7 June 2013.¹⁶⁷ Here, although environmental crime was mentioned in the introduction to the conclusions of the Council, it was not set as a Council priority for the 2014 to 2017 policy cycle.¹⁶⁸ This shows an actual lack of political will not only at Member States level but also (probably as a consequence of that) at the EU institutions level.¹⁶⁹ One of the reasons probably lies on the dramatic economic crisis affecting Europe, when competent authorities' choices on allocation of resources are very much restricted by the limited budget at their disposal, so that they tend to use them in areas where they know such decisions will be more effective in terms of social/electoral consensus.¹⁷⁰

As it concerns organised environmental crime, a problematic aspect results from the fact that it is not yet decided, either at the international, regional or domestic level, whether organised environmental crime should be addressed as a specific criminal offence or just as an aggravating circumstance of other related environmental crimes.¹⁷¹ At the domestic level this question is dealt with in many different ways; at the international level there is no unanimous answer to this question.¹⁷²

¹⁵⁹ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 3.2.

¹⁶⁰ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 3.

¹⁶¹ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 3.

¹⁶² See report Analysis of International Legal Instruments, 6.8.

¹⁶³ See report Analysis of International Legal Instruments, 1.

¹⁶⁴ Mégret, "The Problem of an International Criminal Law of the Environment", 198.

¹⁶⁵ See report Analysis of International Legal Instruments, 1. See Mégret, "The Problem of an International Criminal Law of the Environment", 200.

¹⁶⁶ See report EU Environmental Law and Environmental Crime, 2.4.

¹⁶⁷ See report Articles 82 – 86 TFEU, 3.3.5.

¹⁶⁸ See report Articles 82 – 86 TFEU, 3.3.5.

¹⁶⁹ See report Articles 82 – 86 TFEU, 3.3.5.

¹⁷⁰ See report Articles 82–86 TFEU, 3.3.5.

¹⁷¹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 1.

¹⁷² See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 1.

As it concerns the UN Convention on organised crime, it omits all reference to the environment, but it provides for general concepts and definitions that could potentially be applied to organised environmental crime.¹⁷³ However, the reference to a maximum penalty of at least four years imprisonment may be an obstacle for the application to environmental crimes since many States either do not foresee penalties of imprisonment for environmental offences¹⁷⁴ or they foresee maximum imprisonment penalties lower than 4 years.

Another important issue is the lack of a definition of organised environmental crime that cannot be solved by invoking the Organised Crime Convention since this only indirectly might refer to organised environmental crime as one of those serious crimes that could be covered by the Convention.¹⁷⁵

Moreover, in the fight against organised environmental crime other problems are related to the lack of enforcement by States Parties due to the weakness of the State governance and the judicial systems as well as to the lack of resources.¹⁷⁶

Strengths

CITES, BASEL and MARPOL have had strong support from the European Union which has become a reference as an example of regional enforcement providing a wide range of tools: from infringement procedures against its Member States as well as criminal provisions that they must incorporate into their domestic legislation to protect the environment.¹⁷⁷

The EU has issued directives and regulations aimed at transposing into the EU legislation the international agreements with the goal of their implementation and enforcement by its Member States.¹⁷⁸

The EU legal instruments have on occasions raised the level of the protection foreseen in these international agreements.¹⁷⁹

The enactment of Directive 2008/99/EC on environmental crime and Directive 2009/123/EC on shipsource pollution produced a positive impact in some Member States as it concerns the introduction of liability of legal persons for environmental crimes, although the lack of approximation of criminal penalties reduced the impact of the directives in those Member States where environmental compliance requires to be further developed.

Art. 83 TFEU has the potentiality to allow approximation of criminal sanctions for environmental crimes, but the feasibility of a further approximation initiative should be carefully assessed.

Although a partial lack of political will not only at the EU Member States level, but also (probably as a consequence of that) at the EU institutions level, exists as it concerns giving priority to environmental crimes, such a situation does not overcome the fact that protection of environment is established as one of the main EU objectives in the Treaty of Lisbon, requiring a substantial change of attitude, first of all from EU actors and then from Member States authorities.¹⁸⁰ Since competences in environmental matters are clearly attributed to the EU, including the integration of environmental requirements into other policies, as required by the Lisbon Treaty, the EU has to engage all its means to seriously tackle the environmental challenges.¹⁸¹

2.2 Actors and institutions involved in combating environmental crime

2.2.1 Overview of actors and institutions

Various actors and institutions are involved at various stages and levels in combating environmental crime. They create instruments to combat environmental crime and are in charge of using these instruments, thus

¹⁷³ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.

¹⁷⁴ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.1.

¹⁷⁵ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 1.

¹⁷⁶ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 1. ¹⁷⁷ See report Analysis of International Legal Instruments, 1.

¹⁷⁸ See report Analysis of International Legal Instruments, 1.

¹⁷⁹ See report Analysis of International Legal Instruments, 1.

¹⁸⁰ See report Articles 82–86 TFEU, 3.3.5.

¹⁸¹ See report Articles 82–86 TFEU, 3.3.5.

being largely responsible for the enforcement of environmental criminal law. In most of the studies informing this report, the latter are dealt with together with the relevant instruments, e.g. in the country reports. Two reports, however, concern more or less exclusively actors and institutions, mainly at EU and international level¹⁸². The following table gives an overview over the main actors and institutions described and analysed in these reports.



Source: Ecologic Institute 2015

2.2.2 Tasks and activities of actors and institutions concerning environmental crime

As mentioned above, Member States still play the predominant role in the practical efforts to combat environmental crime within the EU. However, as also mentioned, EU and international level actors are relevant for fighting environmental crime by creating and developing the legislative framework on environmental crime and contributing to monitoring and ensuring States' compliance with such a legal framework. Finally, EU and international institutions support States in their fight against environmental crime in various ways.

EU level

At the EU level, the EU obviously provides a certain legislative framework, both relating to the criminal law of EU Member States, as well as to administrative environmental law. Moreover, various bodies of the EU are involved in ensuring compliance of Member States with the relevant legislative framework and providing further support to Member States in combating environmental crime; the latter two aspects –

¹⁸² Report Actors and Institutions Relevant to Fighting Environmental Crime (in the following: Actors and Institutions) and report Networks and NGOs Relevant to Fighting Environmental Crime (in the following: Networks and NGOs).

monitoring and ensuring compliance on the one hand and providing broader support on the other – can in reality not be strictly separated.

With regard to environmental criminal law, DG Justice is the leading Commission service concerning the implementation and further development of the Environmental Crime Directive, the core of the EU's legislative framework on environmental crime. DG Justice also works on many issues relating to the enforcement of criminal law more broadly, which are also relevant for environmental criminal law. Examples are support for judicial training and developing instruments and procedures for mutual cooperation in criminal matters. Moreover, DG Justice commissions studies to contribute to the better enforcement of environmental criminal law.¹⁸³

Other services of the Commission are also involved in contributing to the further development and better enforcement of criminal law at the national level. DG Home Affairs is an important player in this regard. It does not focus on environmental issues specifically; however, many of its activities are relevant to the prevention and enforcement of provisions against environmental crime as well. Notably, Europol is an agency within the responsibility of DG Home Affairs.¹⁸⁴ Europol assists Member States in their fight against serious international crime including environmental crime. It supports national law enforcement authorities by collecting, analysing and disseminating information, and coordinating operations.¹⁸⁵ In particular, it has developed an ever-growing role in the fight against organised crime and to some extent organised environmental crime as a serious manifestation of environmental crime.¹⁸⁶ For example, Europol issued a Threat Assessment on Environmental Crime in the EU in November 2013 in which it pointed out that "the most prominent environmental crimes featuring the involvement of organised crime in the EU are the trafficking in illicit waste and the trafficking in endangered species."¹⁸⁷ More generally, DG Home Affairs also oversees the functioning of the EU's Internal Security Strategy. The Strategy deals, among others, with fighting corruption and organised crime.¹⁸⁸ Both matters are also relevant with regard to environmental crime. DG Home Affairs also oversees the functioning of the Internal Security Fund (ISF) which supports the implementation of the EU's internal security strategy and provides funding e.g. for police training.

Other parts of the Commission also have an important role when it comes to fostering the better implementation and enforcement of the EU's broader environmental *acquis* by Member States. The main responsibility here is with DG Environment. DG Environment deals, among others, with improving inspections at Member States and is responsible for infringement proceedings when Member States do not properly implement EU legislative acts. It supports, among other, the work of the EU Forum of Judges for the Environment and IMPEL. Moreover, DG Environment is also responsible for further developing and fostering the implementation of specific EU legislation that aims at preventing activities that are considered environmental crimes, such as illegal wildlife trafficking or illegal logging. Yet other Commission services deal with illegal fisheries (DG Mare) or provide funding for combating environmental crime outside the EU (e.g. through providing funds for development cooperation).

The European Parliament and the Council are both obviously involved in the adoption and amendment of EU legislation relevant to EU crime.

The Council is also the EU institution that has created Eurojust.¹⁸⁹ In the field of judicial cooperation in criminal matters, Eurojust assumes a supporting and facilitating role with respect to the activities of the national competent authorities.¹⁹⁰ Its tasks are intrinsically linked with cooperation and coordination dealt with in the following section of this report. Moreover, the Council has a specific body, the Standing Committee on Operational Cooperation on Internal Security (COSI). According to Art. 71 TFEU, COSI has a mandate to facilitate, promote and strengthen the coordination of EU States' operational actions in the field of internal security. COSI is responsible, *inter alia*, for developing, monitoring and implementing the

¹⁸³ See for example, Addressing Environmental Crimes and Marine Pollution in the EU - Legal guidelines and case studies, 2013, http://www.csd.bg/artShow.php?id=16608.

¹⁸⁴ See DG Home Affairs, Organigram, http://ec.europa.eu/dgs/home-affairs/who-we-are/dg-home-affairschart/index_en.htm.

¹⁸⁵ See report Actors and Institutions, 2.1.

¹⁸⁶ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 4.1.

¹⁸⁷ Europol Threat Assessment 2013 on Environmental Crime, 25 November 2013, available at https://www.europol.europa.eu/content/threat-assessment-2013-environmental-crime-eu.

 ¹⁸⁸ Communication from the Commission to the European Parliament and the Council, The EU Internal Security Strategy in Action: Five steps towards a more secure Europe, Brussels, 22.11.2010, COM(2010)
673 final, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0673:FIN:EN:PDF#page=2.
¹⁸⁹ Eurojust, History of Eurojust, http://www.eurojust.europa.eu/about/background/Pages/history.aspx.
¹⁹⁰ See report Articles 82-86 TFEU, 3.3.5.

EU's Internal Security Strategy. As mentioned already, the Strategy also relates to, among others, fighting corruption and organised crime,¹⁹¹ both matters that are relevant with regard to environmental crime. The European Parliament has also taken some interest in the issues of environmental crime, adopting resolutions that call for EU action in specific areas in resolutions.¹⁹² For example, the Parliament has adopted a resolution calling for more several penalties for wildlife crime.¹⁹³

Both the Court of Justice of the European Union and the European Court of Human rights have decided some cases of relevance for efforts to combat environmental crime. Notably, the CJEU (formerly ECJ) in its 2005 landmark judgment clarified the competence of the EU to legislate on environmental crime in the pre-Lisbon era.¹⁹⁴ The CJEU is also an important actor when it comes to deciding whether or not Member States have fully implemented EU environmental legislation. For example, the CJEU has recently imposed significant fines on Italy and Greece for failure to comply with EU waste legislation and prior decision of the Court in this regard.¹⁹⁵ The ECtHR case-law influences the criminal law national systems of the ECHR Contracting States as it provides for positive obligations to adopt and enforce criminal provisions in the most serious cases of environmental damages. In particular, it may serve as point of reference for the application of the principles of necessity, proportionality and effectiveness regarding the intervention through criminal law, which is also relevant for the EU legislator when adopting criminal law provisions concerning environmental matters.¹⁹⁶

International level

Like at the EU level, the roles of international organizations in, on the one hand, monitoring compliance with international legal instruments, and supporting States in combating environmental crime overlap. At the international level, there is both "hard", binding law in the form of international conventions of relevance to environmental crime, and soft law instruments. The former comprises international conventions such as CITES or the United Nations Convention against Transnational Organised Crime; examples of soft law instruments are resolutions by the UN's Economic and Social Council.¹⁹⁷ These international legal instruments have been either created by States agreeing on international conventions or by international organizations.

A first relevant group of actors consists in the bodies of multilateral environmental agreements or conventions.¹⁹⁸ These include the secretariats of, for example, CITES that have a role in providing factual expertise, training and preparing meetings, among others. Bodies such as standing committees or compliance committees serve to verify compliance of States parties with their respective obligations. Conferences of the Parties take decisions on funding, priorities to be set in implementing the respective legal instrument, and the further development of international legal instruments.

Some international institutions provide support in implementing such environmental conventions. At the international level, UNEP, under whose auspices international multi-lateral environmental treaties such as CITES have been adopted, has issued guidelines and a manual on compliance and enforcement of such treaties. Other international institutions have a focus on combating transnational crime, rather than on environmental issues specifically. However, given that environmental crime is often transnational, such institutions have increasingly become involved in efforts to combat environmental crime. For example, the United Nations Office on Drugs and Crime (UNODC) assists UN Member States in combating transnational crime, and has only very recently become involved in efforts to combat environmental crime. In this regard, its task is to provide technical assistance to States, upon request, particularly as regards the

¹⁹¹ Communication from the Commission to the European Parliament and the Council, The EU Internal Security Strategy in Action: Five steps towards a more secure Europe, Brussels, 22.11.2010, COM(2010) 673 final, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0673:FIN:EN:PDF#page=2. ¹⁹² See report Actors and Institutions, 2.3.

¹⁹³ Wildlife crime: MEPs call for tougher penalties, 15 January 2014, http://www.europarl.europa.eu/news/en/news-room/content/20140110IPR32425/html/Wildlife-crime-MEPs-call-for-tougher-penalties.

¹⁹⁴ ECJ (Grand Chamber), 13 September 2005, C-176/03, Commission v Council.

¹⁹⁵ CJEU (Grand Chamber), 2 December 2014, C-378/13, *Commission v Greece*; CJEU (Grand Chamber), 2 December 2014, C-196/13, *Commission v Italy*.

¹⁹⁶ See report The European Court of Human Rights, 10.

¹⁹⁷ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 3.¹⁹⁸ See report Analysis of International Legal Instruments, 1.

prevention, investigation and prosecution of trafficking in endangered species of wild fauna and flora.¹⁹⁹ UNODC assists Member States in combating transnational crime through various means, such as with the ratification and implementation of international conventions, developing expertise tools and resources, strengthening the rule of law, technical assistance programmes and conducting research and analysis.²⁰⁰

A further example of how international organisations provide assistance to national authorities concerning environmental crime includes capacity building and training activities offered by the World Customs Organisation (WCO) to enhance the ability of custom officials and other law enforcement officers to detect and prevent illegal trade in environmentally sensitive goods.²⁰¹ Yet another example are environmental performance reviews conducted by the United Nations Economic Commission for Europe (UNECE) assessing efforts of individual countries in reconciling their environmental and economic targets and in meeting their international environmental commitments, and making recommendations to improve their performance.²⁰²

Even more concrete support to countries for enforcing environmental criminal law is provided by INTERPOL. INTERPOL supports law enforcement agencies in combating environmental crime through its operational tools and services, facilitating cross border police operations and training, intelligence gathering and analysis.²⁰³ In particular, it has a worldwide communication system and is this best placed to transmit information related to criminal investigations and prosecutions.²⁰⁴ Through its Environmental Crime Committee (ECC) and the Environmental Compliance and Enforcement Committee (ECC), INTERPOL has undertaken several global and regional operations, two of many examples being the Operation RAMP on illegal trade in endangered reptiles and amphibians, and the first international operation targeting large-scale illegal logging and forest crimes, which aimed at the development of practical cooperations.²⁰⁵ In close collaboration with UNEP, INTERPOL also organised the first international conference on environmental compliance and enforcement and initiated the Project LEAF (Law Enforcement Assistance for Forests) on illegal logging and other forest crime.²⁰⁶

Moreover, some international organizations are also heavily involved in conducting research and creating awareness on the importance of environmental crime and making suggestions on how to more effectively combat it. For example, the United Nations Interregional Crime and Justice Institute (UNICRI) has an important role in conducting research about environmental crime and related threats, with the aim of raising awareness and capacity building. UNICRI collects data and analyses international legislation, organised several international conferences and workshops and issued publications on environmental crime.²⁰⁷

In sum, the role of actors and institutions at the EU and international level can be considered as complementary to the predominant role of actors and institutions at the national level. Besides their tasks regarding regulation of environmental crime at the EU and international level that guide and complement regulation at national level, their main task consists in supporting national authorities in enforcing environmental criminal law. This supporting role overlaps to a large degree with the coordination and cooperation activities of these actors and institutions dealt with in section 3.2.3 below.

The particular role of NGOs

NGOs increasingly take on a combination of advocacy and enforcement roles in relation to environmental crime.²⁰⁸ They work variously at all levels of operation, community based, national or international and in some cases a combination of these different scales. Compared to governmental organizations, they usually have far fewer resources (manpower, funding) at their disposal, but also less constraints in some of their activities, e.g. concerning the dissemination of information.

¹⁹⁹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 5. See also report Actors and Institutions, 1.2.

²⁰⁰ See report Actors and Institutions, 1.2.1.

²⁰¹ See report Actors and Institutions, 1.3.2.

²⁰² See report Actors and Institutions, 1.5.2. See also http://www.unece.org/env/epr/eprdefintion.html.

²⁰³ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 5.2. See also report Actors and Institutions, 1.1.

²⁰⁴ See report Actors and Institutions, 1.1.1.

²⁰⁵ See report Actors and Institutions, 1.1.2.

²⁰⁶ See report Actors and Institutions, 1.4.3.

²⁰⁷ http://www.unicri.it/topics/environmental/

²⁰⁸ See report Networks and NGOs, 1.2.2.
NGOs conduct advocacy campaigns and raising awareness on a breath of environmental issues, some of which are related to environmental crime. As to enforcement activities, while few NGOs have a legal mandate to investigate and prosecute crimes against the environment, some of them contribute informally to criminal enforcement by gathering information and presenting it to State officials or to the broader public.²⁰⁹

Moreover, NGOs assume a considerable role in the success of MEAs such as CITES in gathering, compiling and disseminating relevant information to the secretariats of the MEAs, State authorities and the broader public, thus being an important source on State compliance.²¹⁰

2.2.3 Cooperation between actors and institutions in the area of environmental crime

Various actors and institutions are involved in combating environmental crime, at various stages, and the cooperation and coordination between them is an important point to investigate. The role of cooperation and networks in international politics more broadly, and on environmental matters and crime more specifically, has been researched from various angles. For example, Gehring and Oberthür examined how international institutions may exert causal influence on each other's development and effectiveness.²¹¹ Loewen also studied institutional interaction, but focused rather on the formation and maintenance of the institutions themselves, so he analyses variables that could be relevant for their formation and maintenance and identifies three perspectives, rather than effectiveness.²¹² Slaughter has worked on global government networks. These networks of government officials (police investigators, regulators, judges and legislators) exchange information and coordinate activity to combat global crime. ²¹³ Such networks can also be found in the area of environmental crime. Focusing on these networks, Pink has conducted a qualitative analysis of environmental enforcement networks.²¹⁴ He examined the role environmental enforcement networks. Generally, cooperation and coordination among actors and institutions is an important part of efforts to combat environmental crime.

On a conceptual level, two forms of coordination can be distinguished: hierarchical and cooperative governance²¹⁵. Both forms are present in the multilevel governance of environmental crime. The hierarchical form of environmental governance occurs when there is a specific matter that has to be regulated; the respective regulation is addressed to an abstract group of addressees, who are granted only relatively limited freedom of implementation. The specific policy or regulation adopted is limited to a specific spatial unit; for example, national regulations are bound to national borders. The advantage of this form of governance is the possibility of sanctions in the case of non-compliance. On the other hand, territorial limitations can lead to the shift of negative environmental effects from the regulated into an unregulated sphere or from one territory to another, for example the outsourcing of "dirty" production to countries with lower environmental standards. Hierarchical environmental regulation occurs on several levels. Member States of the European Union have transferred the competence for much environmental regulation to the European policy level, where most environmental regulation within the EU is shaped.

Because of the limitations of the hierarchical approach in regulating increasingly complex environmental problems which often cross territorial boundaries and jurisdictions, new forms of cooperative governance have emerged which can also be observed in the area of effort to prevent and combat environmental crime. Cooperative governance takes different forms, especially negotiations and networks. By including non-

²⁰⁹ See report Networks and NGOs, 1.2.2.

²¹⁰See report Analysis of International Legal Instruments, 4.13 and 6.10.

²¹¹ Thomas Gehring and Sebastian Oberthür, "The Causal Mechanisms of Interaction between International Institutions", *European Journal of International Relations* 15 (2009): 125–156.

²¹² Howard Loewen, "Towards a Dynamic Model of the Interplay Between International Institutions", *GIGA Working Papers* 17 (2006). Available at http://www.gigahamburg.de/de/system/files/publications/wp17_loewen.pdf.

²¹³ Anne-Marie Slaughter, "Disaggregated Sovereignty: Towards the Public Accountability of Global Government Networks", *Government and Opposition* (2004): 159–190.

²¹⁴ Grant William Pink, "Environmental Enforcement Networks: A Qualitative Analysis" (Australia: Charles Sturt University, 2010).

²¹⁵ Brigitte Biermann, "Umwelt," in *Handbuch Governance: Theoretische Grundlagen und empirische Anwendungsfelder*, ed. Arthur Benz et al. (Wiesbaden: Westdeutscher Verlag, 2007), 424–437.

State actors like corporations, NGOs and civil society into the governance process, States draw also on their resources for solving environmental problems. Yet, the participation of individuals and organizations in cooperative governance processes is selective and therefore can be criticized for lacking formal legitimacy. This form of governance, however, gains its legitimization through its output, being often more effective and less cost-intensive. The benefits of voluntary cooperation therefore lie in the pooling of resources and perspectives, and the process of negotiation and adaptation can lead to consensual and effective measures. The impact of this kind of governance form that arises from consensually negotiated measures is often underestimated.

Corresponding to the tasks and activities of relevant actors and institutions, cooperation and coordination may take place at different governance levels or across such levels. First, within a State's jurisdiction, national (enforcement) authorities cooperate with each other, either on a voluntary basis or to fulfil certain legal obligations. Second, national authorities of different countries have to cooperate in cases where environmental crime crosses borders, thus leaving the jurisdiction of a single State. Third, cooperation between actors and institutions from different countries may be required or otherwise take place to enforce international conventions or EU legislation. Fourth, cooperation between actors and institutions from different countries may take place to overall improve their capacity to combat environmental crime. Finally, networks have a particular role, since they exclusively deal with cooperation and coordination.

The institutional fragmentation of international and EU environmental governance can result in conflict or duplication of work. However, it can also provide a valuable asset for policy making. ²¹⁶ The distribution of competencies among various actors can create synergies at all levels - horizontal interaction between international institutions, mutual supportiveness between EU legal instruments and vertical interaction between international and EU instruments.

Cooperation and coordination within States

Within a State, various actors and institutions are involved in enforcement, from the detection of environmental crime to the imposition of sanctions. It is obvious that effective enforcement requires a certain degree of cooperation and coordination among relevant actors at the national level. In particular, the public (criminal) prosecutor has in many countries (still) a central role in enforcement whereas specialised environmental agencies have the prior expertise and technical knowledge to investigate environmental crime.²¹⁷ While in the United Kingdom this paradox has been solved by allowing administrative authorities to prosecute their own cases, other States use different models of cooperation: On the one hand there are countries where the (administrative) inspection authorities are rather seen as instruments in the judicial enforcement chain and have a duty to report to the public prosecutor (such as for example in France and in Sweden). On the other hand, there are countries where administrative authorities are not obliged to do so and may prefer to achieve compliance via a cooperative strategy that may include the imposition administrative fines as a last resort (like in Germany).²¹⁸

Cooperation and coordination related to transnational environmental crime

When environmental crime crosses borders, thus becoming transnational crime, dealing with it requires the cooperation of the affected countries' authorities, for example in order to decide on the prosecuting authority. In this respect, judicial cooperation has evolved at the EU level, based on the principle of mutual recognition in criminal matters according to Art. 82 ff. TFEU out of the traditional legal assistance based on treaties under the European Council.²¹⁹ Whereas judicial cooperation involves prosecutors and courts, police cooperation according to Art. 87 ff. TFEU involves police, customs and other criminal enforcement authorities.

The cross-border dimension is also inherent in the two institutions created for judicial and police cooperation respectively, Eurojust and Europol. This is evident from the relevant provisions in the Lisbon Treaty referring to "serious crime affecting two or more Member States or requiring a prosecution on common bases" (Art. 85. (1) TFEU concerning Eurojust) and "serious crime affecting two or more Member States (...) and forms of crime affecting a common interest covered by a Union policy" (Art. 88. (2) TFEU concerning Europol).²²⁰

²¹⁶ Gehring and Oberthür, "The Causal Mechanisms of Interaction", 125–156.

²¹⁷ See below 3.13.1.

²¹⁸ See below 3.9.2, and 3.13.2.

²¹⁹ Kai Ambos, Internationales Strafrecht (München: Verlag C.H. Beck, 2011), para. 12 annotation 3.

²²⁰ Concerning Eurojust, see report Articles 82-86 TFEU, 3.3.1.

Essentially, both Eurojust and Europol's tasks and activities aim at supporting and strengthening coordination and cooperation between national authorities.

Eurojust's coordination role becomes particularly apparent when it asks a Member State to investigate a case or institute a prosecution, to set up a joint investigation team with another Member State, or invites a Member State to leave the prosecution of the case to another. In doing so, however, Eurojust remains a mediator and facilitator without any decision-making powers with regards to national authorities. However, Eurojust's future role may extend beyond mere coordination in the future: Art. 85.1 TFEU appears to envisage decision making competences of Eurojust concerning the initiation of investigations, coordination of investigations, and resolution of conflicts of jurisprudence.²²¹

Europol, besides being a centre of information exchange, coordinate, organises, and conducts investigations together with national enforcement authorities or within joint investigation teams involving several Member States. However, Europol is not allowed to conduct operations independently of the Member States and has thus not been transformed into a kind of "European FBI" by the Lisbon Treaty.²²² Both institutions also cooperate closely with each another, transmitting information to the each other or cooperating on joint investigation teams.²²³

Cooperation and coordination to implement international conventions and EU legislation

The very nature of international conventions and EU legislation, which need to be implemented at the national level, requires coordination and cooperation between actors and institutions across the different governance levels. Concerning CITES, for example, the COP at its eleventh meeting directed the Secretariat to pursue closer international liaison between the Convention's institutions, regional and sub-regional wildlife enforcement networks and national enforcement agencies, and to work in close cooperation with INTERPOL, UNODC and the World Bank. In order to realize this cooperation the CITES Secretariat has entered into a number of Memoranda of Understanding with other institutions, for example the secretariats of other multilateral environmental agreements such as the Basel Convention, governments and NGOs. ²²⁴ Cooperation with the WCO and INTERPOL is regulated by memoranda of understanding providing for information exchange and strengthened cooperation, joint publication of information material to combat wildlife crime, and joint training for police, customs and other enforcement officers.²²⁵ Coordination and cooperation relating to EU legislation may be illustrated by the Enforcement Group established by Regulation 338/97 on the protection of species of wild fauna and flora by regulating trade therein, by which the EU unilaterally implemented the CITES provisions. It consists of representatives of each of the Member State's authorities that have responsibility for monitoring compliance with the Regulations, such as Customs, Police and Wildlife Inspectorates. The Group, chaired by the European Commission, monitors the enforcement policy and practice in the EU Member States and makes recommendations to improve the enforcement of wildlife trade legislation. It also catalyzes the exchange of information, experience and expertise on wildlife trade control related topics between the Member States (trends in illegal trade, significant seizures and investigations), including sharing of intelligence information and establishing and maintaining databases. 226

Cooperation and coordination to strengthen law enforcement authorities

The focus of some actors/institutions is coordination and cooperation in general, even if their activities are also linked to transnational crime and governed by international conventions.

For example, INTERPOL 's constitution aims at "the widest possible mutual assistance between all criminal police authorities and suppression of ordinary law crimes". Cooperation and coordination on environmental crime takes place in the specialised working groups that have been created under the Environmental Crime Programme. They bring together criminal investigators from all around the world

²²¹ See in detail report Articles 82-86 TFEU, 3.3.2.

²²² Ambos, *Internationales Strafrecht*, para. 12 annotation 6.

²²³ See report Actors and Institutions, 2.1.3.

²²⁴ See report Analysis of International Legal Instruments, 4.12.

²²⁵See report Analysis of International Legal Instruments, 4.12.1.

²²⁶ See report Analysis of International Legal Instruments, 4.14.1.

with the aim to share information and initiate targeted projects to tackle specific areas of environmental crime.²²⁷

UNODC cooperates with UN Member States by supporting their efforts to combat environmental crime through various means, such as technical assistance programmes and conducting research and analysis. Moreover, it works actively in promoting and facilitating cooperation between various authorities all over the world, acting as a liaison between States and international organisations and facilitating regional networks of cooperation against organised crime.²²⁸ UNOCD joined forces with the CITES Secretariat, INTERPOL, WCO and the World Bank to form the International Consortium on Combating Wildlife Crime (ICCWC) that aims at bringing coordinated support to governments, national wildlife and forest law enforcement agencies and sub-regional networks.²²⁹

The particular role of networks for cooperation and coordination

Strictly speaking, networks do not constitute actors. Social scientists would point out that networks lack actorness, as they lack the organizational capacity to act autonomously²³⁰; their very essence is cooperation and coordination. However, regular cooperation between different actors might shape the very identities and interests of the involved actors. It is therefore important to think of networks as more than just arenas, which suggests that they deserve special attention. Networks may comprise either public actors (e.g., public officials or sub-units of national governments of different countries) or private actors (e.g., non-governmental organizations) or both (e.g., public-private partnerships). Networks might stop at national borders (national networks) or cross them, connecting actors in different countries (transnational networks).

Environmental networks play an important role in the field of environmental crime, supporting institutions in implementing and enforcing environmental laws and regulations. The most important international network is the International Network for Environmental Compliance and Enforcement (INECE), with a broad range of members from governmental enforcement agencies to NGOs and business. On the level of the EU, the networks examined are more restrictive in their membership, each focusing on a different group of actors concerned with environmental crime, for example the European Network for the Implementation and Enforcement of Environmental Law (IMPEL) focused on officials from environmental ministries and agencies, the European Network for Environmental Crime (EnviCrimeNet) on members of investigation services, the European Network of Prosecutors for the Environment (ENPE) on prosecutors and the European Union Forum of Judges for the Environment (EUFJE) for judges. Eurojust also qualifies as network, established by a decision of the European Council.²³¹

The networks are important for the fight against environmental crime through their various activities. Especially valuable is the intensification of contacts between professionals and practitioners on the operational and strategic level, breaking down barriers that inhibit inter-agency cooperation and making the work more efficient. These contacts are also useful on the operational level, enhancing the cooperation on cross-jurisdictional investigations like in the case of illegal cross-border waste shipment. Some of the networks also influence policy decisions by providing information, comments and recommendations to policy-makers. One important task especially IMPEL has committed to is the development of best practices and the production of guidance to contribute to further improvements regarding inspection, permitting, monitoring, reporting and enforcement of environmental law. A goal of all the networks is sharing information and experiences, referring to the transnational nature of environmental crime and therefore the need to exchange information across borders.²³²

²²⁷ See report Actors and Institutions, 1.1.1.

²²⁸ See report Actors and Institutions, 1.2.1., 1.2.3.

²²⁹ See report Actors and Institutions, 1.2.3, report Analysis of International Legal Instruments, 4.12.2.

²³⁰ Sophie Mützel, "Networks as Culturally Constituted Processes: A Comparison of Relational Sociology and Actor-network Theory", *Current Sociology* 57(2009): 871-887.

²³¹ See report Networks and NGOs, 1.1.1.

²³² See report Networks and NGOs, 1.1.2, 1.1.3.

2.2.4 Strengths and shortcomings

National level

Strengths and shortcomings concerning actors and institutions at the national level will mainly be indicated in the aggregation of the country reports (see below, 3). Examples of successful performances of actors and institutions mentioned include the group of special environmental prosecutors in Sweden and the possibility in that country to have technical experts participating in the criminal court, and the UK model of allowing public authorities to directly bring criminal charges.²³³

It is worth mentioning that NGOs contribute to criminal law enforcement at the national level at least informally by gathering and disseminating information relevant to environmental crime.²³⁴ For example, the Italian environmental NGO Legambiente actively assisted in the prosecution of the mafia syndicate 'Ndrangheta in Calabria for charges of illegal radioactive waste dumping in the 1980s and 1990s. Given the complexity of involved actors, Legambiente took upon itself to independently collect evidence over the course of a decade and provided the public prosecutor's office with all data collected since 1994 concerning the disappearance and assumed sinking of some 40 ships in the Mediterranean. Such an example highlights the importance and authority an NGO can assume in a prosecution, but also illustrates how NGOs assume the tasks of governmental bodies when those formal authorities are corrupt, weak or not present.²³⁵

In a nutshell, shortcomings concern in the first place lacking resources, capacity and specialisation. The result of the evaluation of the country aggregation concludes that it seems as if "the regulatory instruments have expanded but that, at least so it is argued, institutions have not been given sufficient resources to translate the ambitions of the legislator at the regulatory level equally at the enforcement level."²³⁶

EU and international level

Strengths

Generally speaking, the various activities of the actors and institutions at the EU and international level in supporting national authorities in their fight against environmental crime, in particular through coordination and cooperation, may be considered beneficial overall, in particular when environmental crime crosses borders, thus leaving the jurisdiction of the individual States. Indeed, as has been indicated for the national level, environmental networking and an exchange of information may be relatively low-cost ways of exchanging best practice and thus to increase the effectiveness of enforcement efforts even in times of limited budgets and resources.²³⁷

With regard to particular actors and institutions, strengths and successes highlighted in the reports include the following:

Concerning coordination and cooperation at the EU level relating to organised crime, the UNODC Digest of Organised Crime Cases considers, as a model to follow, the cooperation systems of EUROPOL and EUROJUST, in particular the establishment of joint teams that expand and speed up the investigation.²³⁸ In a particular case, the "operational coordination enabled the execution of arrests and other actions on six "common action days". The presence of prosecutors helped to determine the direction of the investigations in the various countries as well as the distribution of prosecutions so as to avoid *ne bis in idem*. It also facilitated subsequent mutual legal assistance and made it quicker. All told, the coordination of multiple national activities fostered a genuine co-management of the case. The role of Eurojust in avoiding *ne bis in idem* problems is highlighted in other cases as well.²³⁹

On the international level, INTERPOL has achieved important results in its operations in the field, which also contribute to developing Interpol's projects and programmes. For example, Operation Wendi, targeting criminal organizations behind the illegal trafficking of ivory in West and Central Africa, carried out between January and May 2013, resulted in some 66 arrests and the seizure of nearly 4,000 ivory products and 50 elephant tusks – in addition to military grade weapons and cash. Likewise, Operation ENIGMA, targeting the illegal trade of electronic waste, saw the seizure of more than 240 tonnes of

²³³ See below, 4.3.3.

²³⁴ See report Networks and NGOs, 3.1.2.

²³⁵ See report Networks and NGOs, 3.1.2, box 3.

²³⁶ See below, 3.15.3.

²³⁷ See below, 3.15.4.

²³⁸ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 2.3.6.

²³⁹ See report Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, 2.3.7.

electronic equipment and electrical goods and the launch of criminal investigations against some 40 companies involved in all aspects of the illicit trade. Held in November and December 2012, it involved police, customs, port authorities and environmental and maritime law enforcement agencies in seven European and African countries.²⁴⁰

UNODC has managed to become a key actor in the architecture of networks coordinating actions and cooperation among international organizations, agencies and NGOs. Despite their lack of operative competence and jurisdiction, these networks offer their advice to States parties in order to raise awareness of the importance of environmental crime and organised environmental crime and on the different ways they can be stopped. UNODC's reports and strategies contribute greatly to establishing organised environmental crime as a criminal offence at the international and domestic level.²⁴¹ The already mentioned toolkit is another example of how international actors support efforts at the national level to combat environmental crime.

The main benefits of cooperation through environmental enforcement networks include the establishment and intensification of contacts between professionals and practitioners on the strategic, technical and operational level, operational aspects and the sharing of best practices.²⁴² Network members have expressed that personal relationships established at network events improved cooperation between agencies both nationally and internationally. Regarding operations, network contacts are regarded as highly valuable, enhancing the ability to work together on cross-jurisdictional investigations and enforcement matters. For example, in cases of illegal waste shipment there is always at least one other country involved, which requires liaising with witnesses and making inquiries in other countries. In networks where prosecutors or judges already have established personal relationships, these relationships become highly valuable and create the trust that is needed on the operational level to conduct transnational investigations and inquiries. Concerning the development of best practices and the production of guidance, IMPEL for example developed a practical guide on planning environmental inspections within the framework of the "Doing the Right Things" project, the main benefit of which is considered to be the exchange of ideas among inspectorates leading to joint solutions.²⁴³

In their advocacy role NGOs contribute to awareness-raising on environmental matters including environmental crime and putting pressure on governments to comply with established standards or to become active to improve these standards. On the international level, they contribute to ensure that States comply with multilateral environmental agreements such as CITES.²⁴⁴ Concerning training and capacity building, the International Fund for Animal Welfare (IFAW) has been cooperating with INTERPOL on issues related to the trafficking of endangered animals, inter alia by funding INTERPOL's Operation Worthy and training over 320 officers before the operation from a range of relevant agencies from 14 African countries.²⁴⁵

Shortcomings

Turning to weaknesses, the lack of resources and adequate training is an important concern for States implementing law adopted at the EU and international level and for the officials supporting these instruments. Concerning the enforcement of the CITES Convention, for example, officials are often underresourced and inadequately trained, and establishing and implementing appropriate control mechanisms is a problem for all Parties, especially developing countries.²⁴⁶ Generally, the resources of CITES to fight environmental crimes have decreased in the last years due to the economic crisis and the COP has urgently requested Parties, donors and organizations to provide financial and technical support²⁴⁷. Also in relation to organised environmental crime, the most important problems (besides the problems of definition of organised environmental crime, on which see *supra*, 2.1.4) shown by reports of UN institutions and international networks such as the International Consortium on Combating Wildlife Crime, are related to

 ²⁴⁰ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 5.2.
 ²⁴¹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 1.

²⁴² See report Networks and NGOs, 2.1.3.

²⁴³ See report Networks and NGOs, 2.1.2.

²⁴⁴ See report Analysis of International Legal Instruments, 4.13 and 6.10.

²⁴⁵ See report Networks and NGOs, 3.2.2. According to Interpol Operation Worthy brought forth the arrest of 214 individuals and seized 2 tons of contraband ivory, 20 kilos of horn and 30 illegal firearms.

²⁴⁶ See report Analysis of International Legal Instruments, 4.11.

²⁴⁷ See report Analysis of International Legal Instruments, 4.10.1.

the lack of enforcement by States Parties due to the weakness of governance mechanisms and judicial systems as well as the lack of resources. One common problem is the fact that most actors fighting organised environmental crime are under-resourced, in clear contrast with the criminal environment where the smugglers, poachers, criminal groups and organizations have more financial resources than most local and international authorities.²⁴⁸ The lack of adequate resources is also mentioned by the Executive Director of UNODC as one major factor leading to non-implementation of and non-compliance with the UN Convention against Transnational Organised Crime and the Environment and its protocols.²⁴⁹ Also INTERPOL recognises that police resources committed to investigating environmental crimes are significantly less than resources used to combat more traditional crimes.²⁵⁰

At the EU level, while Europol and Eurojust reportedly have sufficient resources at their disposal to perform their functions with respect to combatting environmental crime²⁵¹, they face the problem that Member States do not give environmental crimes priority as some struggle to allocate the relevant resources to deal with these environmental cases.²⁵² Some of the networks also suffer from a lack of resources, because not all of them receive direct financial support from their members. On the other hand, INECE for example is considered successful because there are a stable number of members financing the network.²⁵³

Eurojust and Europol also face the problem that they often do not get involved in cases to which they could contribute.

One reason appears to be the lack of an un-ambiguous definition of environmental crime at the European and the international level, e.g. whether it is fundamentally transnational, and in particular what kind of offences have to be considered environmental crimes. One of the reasons for the very low number of cases of environmental crime registered by Eurojust (3 in 2012 and 8 in 2013) is the limited ability of national law enforcement authorities to recognize what constitutes environmental crime and to report it as such, and also to properly address and deal with initiatives/requests for judicial cooperation in this field. The other reason, partly related to the lack of resources mentioned above, seems to be the lack the political will of national governments, but also to some extent of European Institutions, to give priority to the fight against environmental crime. Probably due to the economic crisis affecting Europe, competent authorities tend to use the limited budget at their disposal in areas where they know such decisions will be more effective in terms of social/electoral consensus, and rather attract the attention of the media.²⁵⁴ Concerning the international level, the Executive Director of UNODC addressed the weakening political will of governments as one major factor leading to problems of non-implementation and non-compliance of the UN Convention against Transnational Organised Crime and the Environment and its protocols.²⁵⁵

Concerning Europol's involvement in transnational crimes, a particular problem is that Europol needs to be called upon by the Member States first before it can act. However, Member States often use the infrastructure established by Europol to communicate amongst one another without directly contacting Europol. A difficulty with this arrangement is that by the time Member States identify the need to involve Europol, they would have been too far into their investigation to request financial or other assistance from Europol. This also means that it may be too late to set up Joint Investigation Teams, causing delays in investigations and disrupting the capacity to investigate.²⁵⁶

Weaknesses and threats concerning networks are reported both from members within the environmental enforcement networks, and from external observers concerning networks in general.²⁵⁷

The threats that are identified by its members include the inability to sustain internal capacity, the loss of key staff due to a high turnover in the representative roles, and inadequate or non-existent information dissemination within the member agencies. Suggestions for improvement include that the people who are sent to represent the members in the networks should be selected carefully to ensure they are appropriately matched to the position, that the benefits generated from the membership in the networks

²⁴⁸ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 1.

 ²⁴⁹ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.8.
 ²⁵⁰ See report Actors and Institutions, 1.1.2.

²⁵¹ See report Actors and Institutions, 2.1.2, 2.2.2.

²⁵² See report Actors and Institutions, 2.2.4.

²⁵³ With regard to Eurojust, see report Networks and NGOs, 2.1.3.

²⁵⁴ See report Articles 82-86 TFEU, 3.3.5.

²⁵⁵ See report Organised Crime and Environmental Crime: Analysis of International Legal Instruments, 2.8.

²⁵⁶ See report Actors and Institutions, 2.1.1.

²⁵⁷ See report Networks and NGOs, 2.1.3.

should be communicated and reported also within the member agencies, and that personal face-to-face contact as a strong enabler to start activities and network projects should be enhanced.²⁵⁸

While the direct contact between national officials and administrators as well as the informal and confidential nature of these contacts are valued by network participants, they are also a common point of criticism from external observers voiced against informal networks. The networks are accused of consisting of technocrats, lacking transparency and legitimacy and of bypassing the national political arenas and democratic institutions. Moreover, governmental networks are criticized for replicating existing power asymmetries and including only members of the most powerful and economically developed countries, excluding poorer and marginalized countries from participating.²⁵⁹

The increased presence of NGOs, both in roles of advocacy and operational enforcement activities, has elicited general questions about their legitimacy, accountability and transparency which are also relevant in the context of environmental crime. It is not uncommon that NGOs commit themselves to a cause on subjective, moral or ethical grounds, sometimes even engaging in illegal activities on behalf of the environment. This raises questions of their accountability and legitimacy, particularly in cases where they assists in prosecutions and generally, as they are influence public opinion. When NGOs are contracted for specific work, by for instance, governments, it is important to distinguish to whom they are accountable, since their actions and work might not always represent the grassroots groups they claim to represent.²⁶⁰

²⁵⁸ See report Networks and NGOs, 2.1.3.

²⁵⁹ See report Networks and NGOs, 2.1.3.
²⁶⁰ See report Networks and NGOs, 3.1.2.

3 Instruments, Actors and Institutions at national level

3.1 Introduction

After the aggregation on instruments, actors and institutions at different levels we will now attempt to provide some aggregation of the country reports in the light of the research and legal questions that have guided the entire work on this topic. This aggregation has various goals and constraints. The most important goal is to provide a comparative analysis. Information on instruments, actors and institutions dealing with environmental crime in seven Member States has been provided in the country reports. The following aggregation will try to provide a rough comparison, simply indicating where particular similarities can be found (convergence) and where there may be interesting differences (divergence).

To the extent possible this aggregation will, in addition to the mere comparative analysis, also attempt to assess strengths and weaknesses of particular instruments, actors and institutions in the way they function in particular Member States. However, the goal of this aggregation is not to compare "strengths and weaknesses" of the regulatory and enforcement regime in specific Member States and thus to come to farreaching conclusions on the effectiveness of the way in which instruments, actors and institutions function within particular Member States. Such a detailed effectiveness analysis would require not only an analysis of the formal structures at the regulatory level (which is, to a large extent, provided in the country reports), but also much more detailed insights on the way in which instruments, actors and institutions work in practice, which is outside the scope of this report.

However, to some extent an attempt will be done to put the comparative analysis in a broader analytical framework, for example by looking at criminal law or criminological literature with respect to the effectiveness of particular instruments, actors and institutions in the fight against environmental crime.²⁶¹ This literature has indicated, using particular benchmarks (such as efficiency or cost-effectiveness of compliance efforts)²⁶² how particular instruments, actors and institutions could be shaped in order to reach those goals.

As explained in the introduction, the goal of this comparative assessment is not to repeat everything that has been detailed in the country reports; this comparison will therefore necessarily focus on the main issues related to the functioning of instruments, actors and institutions at the regulatory as well as the enforcement level in the Member States. For the same reason, not all issues discussed in the country reports can be included in this comparative assessment. The main focus will for example be on the role of the criminal (and to some extent administrative) enforcement. Other (undoubtedly important) issues, such as for example the relationship between criminal law and civil enforcement (including the role of the Environmental Liability Directive), issues of cross-border environmental crime or the collaboration between various actors and institutions will not be discussed in detail here. However, the information provided in the country reports on those issues will be considered in future research. This comparative assessment will not attempt to provide strong normative conclusions, but will rather aim at identifying a few important points of convergence and divergence between Member States legal systems. It will also provide basic information on whether the concerned Member States implemented the Environmental Crime Directive and the Ship-Source Pollution Directive, based on the information available in the country reports.

²⁶¹ See for example Neil Gunningham and Peter Grabosky, *Smart regulation: designing environmental policy* (Oxford: Clarendon Press, 1998) and Jeremy Firestone, "Enforcement of pollution laws and regulations: an analysis of forum choice", *Harvard Environmental Law Review* 27 (2003): 105-132.

²⁶² See in that respect especially Anthony Ogus, *Costs and cautionary tales: economic insights for the law* (Oxford: Hart Publishing, 2006).

The different issues dealt with in the country reports will, to the extent possible, be analysed according to a similar structure. First, the importance of a particular issue will be briefly highlighted, in some cases by putting the issue in the context of the relevant academic literature; next, some highlights of tendencies in Member States will be discussed;²⁶³ and finally, to the extent possible, the results of the analysis will be provided, focusing on convergence or divergence and (where possible) on particular strengths or weaknesses.

This comparative assessment will follow the distinction between instruments, actors and institutions. The following four sections will deal with the instruments, more particularly with the question where instruments can be found (3.2), with the way in which criminal law protects the environment (3.3) and with the sanctions (3.4). Also the influence of the Environmental Crimes Directive and the Ship-Source Pollution Directive (in the following referred to as "Environmental Crime Directives") will be briefly mentioned (3.5). Sections 3.6-3.8 deal with the actors, focusing on corporate crime (3.6), organised crime (3.7) and the criminal liability of civil servants (3.8). Institutions are the focus of the next five sections (3.9-3.13), by focusing on the question who investigates environmental crimes (3.9) and the role of the public prosecutor (3.10), the court (3.11) and administrative authorities (3.12). The possibility to impose an administrative fine will be discussed in section 3.13. Section 3.14 provides some indications on the practice of enforcement of environmental criminal law, whereas section 3.15 provides an overview of the evaluations given in the country reports. Section 4.3 concludes.

In terms of terminology, it should be mentioned that the words 'crime' or 'criminal' are only used in the present report when referring to a conduct punished by criminal penalties. However, the scope of the analysis also included other environmental offences (in these cases, reference is made to the word 'offence', with a specification of the qualification of the offence, e.g. 'administrative offence'). As different legal systems provide for different categorisations of crimes (e.g. *delitti* and *contravvenzioni* in Italy), researchers working on country reports were asked to translate the category into the English term/category that best seemed to fit the category of crime under the national law (e.g. in the case of the Italian *delitti* and *contravvenzioni*, respectively 'felonies' and 'misdemeanours'). At the same time, the terminology in the language of the country at stake has been kept in order to enable cross-checking of the linguistic choices.

3.2 Instruments: place and structure

3.2.1 Importance of the issue

A first issue to be discussed is where the main instruments of environmental criminal law (and in this particular case the substantive provisions criminalising environmental harm) can be found. There exist roughly three different models that can be followed in this respect. A first one is the incorporation of the most important criminal provisions in a criminal/penal code. This means that environmental crime would be placed as a separate chapter in criminal codes. A second, and to some extent (comparable) model, is where environmental crimes can be found in an environmental code or specific environmental protection act that harmonises environmental law in a particular country. A third model is the one whereby most criminal provisions can be found in sectorial regulations, such as a water protection or waste statute. In the latter case, the criminal provisions would usually come at the end of a statute of largely administrative nature. Combinations between the three different models are obviously possible as well, e.g. an incorporation of criminal law in the criminal code where the main cases of serious environmental harm would be punished and in addition crimes in sectorial regulation.

At first blush one could think that it would not matter where criminal provisions are placed in the legislation since it is in the end the way in which the criminal behaviour and the sanctions are formulated that should determine the effectiveness of the particular provision. However, the place of environmental criminal law in the legislative framework is not totally value-free. The literature has argued that especially

²⁶³ Again, it should be stressed that not all Member States or country reports will for every particular issue be mentioned.

institutions within the criminal justice system may attach more importance to crimes that are incorporated within a criminal code (hence signalling an important moral contents of the crime) than to crimes that are "merely" incorporated in environmental statutes. Prosecutors and judges would hence pay less attention to criminal provisions in special statutes than to crimes in a criminal code. Moreover, a disadvantage of incorporating environmental criminal law in different sectorial regulations is that it may be difficult to find the particular provisions, there may be dangers of overlap and disharmonies and sanctions may not be correctly proportioned. From that perspective, there may hence be reasons to incorporate at least the most serious cases of environmental harm into a criminal code or at least into an environmental code or special environmental act.

3.2.2 Countries

Examples of the different models can all be found in the countries as follows from the table below:

	Criminal Code	Environmental Code	Environmental Statutes (crim.)	Environmental Statutes (adm.)
France	Х	Х		
Germany	X		Х	Х
Italy	X	Х	Х	
Poland	Х		Х	
Spain	Х			Х
Sweden		Х	Х	
UK			Х	Х

Table 1: Place of environmental criminal law

As the table shows, three countries (Germany, Poland and Spain) have incorporated criminal law into their criminal codes.²⁶⁴ For example, in Germany it is held that this incorporation into the primary criminal law (*Kernstrafrecht*) demonstrates that environmental crime is treated as serious criminal wrongdoing.²⁶⁵ Spain is an interesting case as in that jurisdiction criminal provisions can only be found in the criminal code.²⁶⁶

In most countries there are, in addition to environmental crimes in either the criminal code or an environmental code, still provisions in specific environmental statutes. Only France has incorporated environmental criminal law in an integrated way in its environmental code²⁶⁷ and, as mentioned above, in Spain the provisions outside the criminal code are all of administrative nature.

The other two countries that have incorporated environmental law into an environmental code (Italy and Sweden) have apparently not been able to do so (like France) in an integrated manner. Sweden still has

²⁶⁴ In Italy, only two misdemeanours have been incorporated into the Criminal Code following implementation of Directive 2008/99/EC, with the vast majority of provisions on environmental crime being incorporated in environmental statutes; see Report on Italy, 3.

²⁶⁵ Report on Germany, 3.

²⁶⁶ Report on Spain, 5.1.

²⁶⁷ Report Fighting Environmental Crime in France: A Country Report (in the following: Report on France),1.

many different sectorial regulations outside the environmental code²⁶⁸ and the same holds partially true for Italy.²⁶⁹

Some countries have an explicit administrative sanctioning system. It was already mentioned that Spain outside of its criminal code only has administrative sanctions. Germany has not only criminal sanctions in the criminal code and in environmental statutes, but also the well-known *Ordnungswidrigkeiten* (administrative violations) in administrative statutes. An outsider position is taken by the UK which traditionally is averse to codification and hence has neither a criminal code nor an environmental code. Criminal provisions in the UK are fragmented and spread throughout several statutes.²⁷⁰ Those statutes do not only allow for criminal sanctioning, but as a result of recent reforms, also for civil sanctions to be imposed by regulatory agencies. Those would, in the terminology of other legal traditions, most likely be referred to as administrative fines.

3.2.3 Results

On the basis of this brief comparison it is not possible to argue that the place of environmental criminal law would play a crucial role concerning the effectiveness of this particular instrument. Whether incorporation in a criminal code has a particular signalling effect (concerning the morally wrong character of the behaviour) may well depend on the culture of the particular Member State. Hence, one can certainly not argue that for example the UK system would be less effective for the mere fact of not having incorporated environmental crime in a criminal code. However, an issue to which country reporters do refer is the fragmented character of some of the legislation and the corresponding criminal provisions. If those are fragmented over a wide variety of different statutes it may obviously be more difficult both for the actors concerned (the regulatees) and the institutions that have to apply the provisions to locate them. Risks of disharmonies and overlaps may also increase.

3.3 Instruments: how does criminal law protect the environment?

3.3.1 Ways of protecting the environment through criminal law

Many country reports refer to the fact that within environmental criminal law the difficulty is that environmental pollution is as such not absolutely prohibited. There is a strong interweaving of administrative and criminal law since most environmental statutes reveal that authorities generally can only punish the lack of a permit, or a violation of environmental standards. This relationship between administrative and environmental criminal law is referred to as the administrative dependence of environmental criminal law. It follows the German concept of "Verwaltungsakzessorietät";²⁷¹ which means that the legal interest of the environment is in many legal systems not directly protected through the criminal law. Rather, the violation of administrative norms (for example a condition of a permit) will be sanctioned. In other cases polluting acts are criminalised, but only to the extent that they are "unlawful". The unlawfulness is then again interpreted as a violation of administrative regulations.

It has been argued in the literature that this administrative dependence of environmental criminal law is to some extent unavoidable for a number of reasons. ²⁷² First of all, it has the advantage that it respects the *lex*

²⁶⁸ Report Fighting Environmental Crime in Sweden: A Country Report (in the following: Report on Sweden), 1

²⁶⁹ Report on Italy, 1.

 ²⁷⁰ Report Fighting Environmental Crime in the UK: A Country Report (in the following: Report on UK), 11.
 ²⁷¹ See on this notion Report on Germany, 4.4.

²⁷² See Michael Faure, "Towards a New Model of Criminalization of Environmental Pollution: The case of Indonesia", in *Environmental Law in Development. Lessons from the Indonesian Experience*, ed. Michael Faure and Nicole Niessen (Cheltenham: Edward Elgar, 2006), 193-194 and Susan F. Mandiberg and Michael Faure, "A Graduated Punishment Approach to Environmental Crimes: Beyond vindication of

certa principle which follows from the principle of legality in criminal law. This holds that the legislator should prescribe the criminalised behaviour as precisely as possible. In case the legislator punishes violation of administrative norms (e.g. conditions in a permit) usually the criminalised behaviour will *ex ante* be relatively clear.²⁷³ However, one should also realise that referring to a permit may not always be the ideal way of criminalising pollution since permit conditions can be vague and ambiguous.

Secondly, one can hold that to some extent a link with administrative law is indispensable since the alternative of simply criminalising "pollution" would be too broad and vague. In this case (if such a broad definition would be used) it would no longer be clear *ex ante* which behaviour is criminalised and which is not. The example is given that it would not be useful to criminalise for instance "the one who would have contributed to climate change". The impossibility of proving a causal link between certain behaviour and the criminalised result would render such a provision inapplicable in practice.²⁷⁴

Moreover, the formulation of obligations in administrative law may also contribute to making more precise the concept of unlawfulness in environmental criminal law. Indeed, one can hope that it is probably the administrative authority who is best suited to determine whether a specific form of pollution is lawful or not. Indeed, administrative authorities may be far better qualified (given their expertise and thus their information advantage) than the judge in a criminal court to determine which type of pollution should be considered unlawful and which not. This information advantage is thus a strong argument in favour of some link between administrative and environmental criminal law.

Fourthly, one can hold that retaining some relationship between administrative law and environmental criminal law is indispensable because of the principle of the "unity of the legal order".²⁷⁵ Taken literally this would mean that a judge in a criminal court could only consider a behaviour as unlawful when that behaviour has also been considered as unlawful by administrative law. This may take the principle too far. However, there is some truth in the fact that a complete abandonment of the link between administrative and environmental criminal law would have as a consequence that in theory a certain form of pollution could be authorized under an administrative permit whereas the judge could later nevertheless punish an individual for the same type of pollution which was first allowed by administrative authorities. This would violate the idea of the unity of the legal order. It means, basically, that the legal order should show one face towards the citizens and the public at large. It cannot be that when a certain behaviour is allowed by administrative authorities, another branch of government (the judge in a criminal court) would nevertheless prohibit the same behaviour.

A consequence of the previous ideas is that probably some link between environmental criminal law and administrative law should be retained. The primary decision on the admissibility of certain polluting acts should remain with administrative authorities, of course within the limits set by law and respecting general principles of administrative law. There is, moreover, almost no legal system where the link between administrative law and environmental criminal law has been completely abandoned. From the citizen's perspective it would also be strange if the judge in a criminal court inflicted a sanction for a behaviour that was first allowed by administrative authorities. The consequence of these ideas is that the administrative dependence of environmental criminal law is apparently unavoidable.

One way of improving environmental criminal law would be to criminalise unlawful emissions instead of merely criminalising the non-respect of administrative obligations. This system has the advantage that when administrative obligations are lacking the emission remains unlawful and remedy by criminal law remains possible. However, this model does not necessarily work when environmental crime is concerned that does not consist in emissions, but, for example, illegal exports.

administrative authority in the United States and Europe", *Columbia Journal of Environmental Law* 34 (2009): 447-511.

²⁷³ See Alain De Nauw, Les métamorphoses administratives du droit pénal de l'entreprise (Ghent: Mys&Breesch, 1994), 85.

²⁷⁴ See in this respect more particularly the French scholar J.H. Robert, "Le problème de la responsabilité et des sanctions pénales en matière d'environnement", *Revue Internationale de Droit Pénal* 65 (1994): 954-955.

²⁷⁵ Günter Heine, "Allemagne. Crimes against the environment", *Revue Internationale de Droit Pénal* 65 (1994): 731-759.

Moreover, one could also consider abandoning completely the administrative dependence of environmental criminal law in serious cases, more particularly when pollution constitutes an endangerment of human life or health. In that case, one can hold that pollution should be criminalised even though it might be covered by a permit. The reason is that administrative law also holds that a permit is never a blank cheque allowing endangerments of human life or health. Hence, limiting administrative dependence to specific situations (where human life or health is not endangered) is in conformity with administrative law. Thus, this more limited form of administrative dependence of environmental criminal law would lead us towards a new model for protecting the environment through criminal law whereby a variety of provisions would be introduced which have to be combined in order to reach an optimal protection of the environment.

As a result, different types of criminal provisions seem necessary to protect the environment, each with different goals. An adequate protection of the environment through criminal law seems to require a combination of different types of provisions. This has been argued in German legal doctrine concerning environmental criminal law.²⁷⁶ According to this doctrine an effective environmental criminal law requires a combination of penalisation of the abstract endangerment of the environment, the concrete endangerment of the environment as well as an independent crime for when pollution has serious consequences.

In the following these notions will be briefly developed and the question will be asked to what extent some of these models can be found in the Member States examined in the country studies.²⁷⁷

3.3.2 Abstract endangerment

Importance

Abstract endangerment refers to provisions whereby environmental pollution is not directly punished, but where prior administrative decisions are backed up through the criminal law. In these types of situations criminal law typically applies as soon as an administrative provision has been violated, even if no actual harm or threat of harm to the environment occurs. Abstract endangerment crimes in environmental criminal law usually focus on vindicating administrative values, although punishing such an administrative violation indirectly protects ecological values as well. The reason is that an entity that violates administrative rules is likely to harm the environment; moreover, following administrative rules allows the agency to monitor the entities corporation to ensure that harm is less likely to occur. In some legal systems these abstract endangerments, for example violations of permit conditions, are not primarily punished under criminal law, but by means of fines under administrative law.

Countries

Examples of abstract endangerment provisions can be found in many country reports. A classic example is the operation without authorisation or licensing of particular works or facilities. It can be found, for example, in the French environmental code,²⁷⁸ but also in Sweden, where the environmental code refers to "unauthorised environmental activities" that are equally criminalised.²⁷⁹ In Italy most environmental crimes are abstract endangerment crimes, as it is the failure to comply with environmental administrative provisions (e.g. permits, thresholds, reporting requirements) that is criminalised.²⁸⁰ However, although the Italian reporters and doctrine recognise that abstract endangerment offences may be to some extent unavoidable, the former also underline that this model of environmental crime has equally been criticized.²⁸¹ Among others, one problem is that with the reference to administrative obligations, the

²⁷⁶ For an overview, see more particularly Heine, "Allemagne. Crimes against the environment", 731-759.

²⁷⁷ Again it should be stressed that the idea is more to provide a few examples from the country studies rather than to move to a comprehensive analysis of the structure of environmental criminal law in each specific country.

²⁷⁸ Report on France, 5.9.

²⁷⁹ Report on Sweden, 5.

 $^{^{\}rm 280}$ Report on Italy, 1.

²⁸¹ Report on Italy, 3.

offence might not always be clearly described. Another point is that it is often not the environment which is protected, but rather administrative interests.²⁸² Many of the substantive environmental criminal law provisions that can be found in Italy in the environmental code are hence described as abstract endangerment offences.²⁸³ The Spanish report refers to the new Art. 328.2 of the criminal code (punishing the operation of a plant in which the dangerous activity is carried out). Through the unlawfulness requirement this has equally become an abstract endangerment provision.²⁸⁴ A similar provision can be found in Art. 188 of the Polish penal code, punishing anyone who "in violation of the law" builds or extends a facility that poses a threat to the environment.²⁸⁵ In Germany, the operation of particular dangerous facilities is penalised under § 327 of the criminal code (StGB), but still requires the activity to be undertaken "in violation of duties under administrative law", thus making it an abstract endangerment offence.²⁸⁶ The German report mentions that in fact most of the provisions are designed as abstract endangerment crimes,²⁸⁷ thus leaving large room for administrative authorities in determining the contents and scope of the protection awarded by the criminal law.

Results

Abstract endangerment provisions are certainly a useful element in a model environmental criminal law for the simple reason that the non-respect of administrative obligations needs to be sanctioned. A legal remedy has to be available to guarantee compliance with important administrative obligations. After all, those administrative duties aim to avoid environmental harm. However, in this model the link between the particular provision and environmental harm is rather remote. This hence does not call for too high sanctions and, in some cases, administrative remedies suffice. To some extent these violations of administrative fines.²⁸⁸ A problem with the strict dependence of criminal law upon administrative law that is typical for abstract endangerment crimes is that merely punishing the non-respect of administrative obligations may not suffice to provide an adequate protection to the environment. That is why many legal systems also incorporate different provisions into their environmental criminal law system, often punishing the concrete endangerment of the environment.

3.3.3 Concrete endangerment

Importance

Concrete endangerment often refers to provisions that usually require both some form of unlawfulness (which is not always restricted to a violation of particular administrative acts) and an endangerment of the environment. The endangerment (which can be presumed or actual) can often consist of an emission of a substance into the environment. In those cases actual harm is usually not required, but merely a (presumed or actual) endangerment, e.g. through an emission. This model goes further than the abstract endangerment model since in this case also a threat of harm (through an emission) needs to be proven. The endangerment of the environment is in this case concrete, differently from when a mere administrative duty is breached (and thus only an abstract endangerment to the environment is caused). Again, it would be logic to impose higher penalties for those crimes than for the previous ones since in this case an endangerment to the environment is created. The administrative permit may still play an important role, but these provisions do not limit themselves to merely punishing pre-determined administrative duties.

²⁸² Ibidem.

²⁸³ For example air pollution (Report on Italy, 5.1) and water pollution (Report on Italy, 5.6).

²⁸⁴ Report on Spain, 5.2.5.

²⁸⁵ Report Fighting Environmental Crime in Poland: A Country Report (in the following: Report on Poland), 5.1.

²⁸⁶ Report on Germany, 5.1.6.

²⁸⁷ Report on Germany, 5.3.

²⁸⁸ See below 3.12 and 3.13.

Countries

Examples of such crimes can again be found in most of the Member States discussed in the country reports.

A typical example would be represented by provisions where unlawful emissions into the air, water or soil are criminalised when creating a threat to the environment.²⁸⁹ For example, in France unlawful emissions into the air are criminalised in Arts. 226-9 of the environmental code.²⁹⁰ In Germany, many provisions concerning unlawful emissions are incorporated into the chapter on environmental crimes of the criminal code. This is, for example, the case for water pollution, punished under §324, which punishes a person who unlawfully pollutes a body of water or detrimentally alters its qualities.²⁹¹ Although formally §324 requires a consequence (damage to a body of water), also endangerments are included: §324 is therefore considered a particularly efficient provision".²⁹² A similar structure is followed in Germany concerning soil pollution in §324(a)²⁹³ and for air pollution (§325 StGB).²⁹⁴ Spain has very interesting provisions aiming at punishing emissions through "breaches of law" in Art. 325 of the criminal code.²⁹⁵ In Sweden, after a legislative change in 2006 amending the environmental code, the burden of proof was lowered: unlawful discharges of substances that may be dangerous to human health are now equally penalised in section 29:1 of the environmental code.²⁹⁶ A similar formulation can be found in the United Kingdom, for example in the Environmental Protection Act in the prohibition on unauthorized or harmful deposits, treatments or disposals of waste.²⁹⁷ The deposit of controlled waste is criminalised unless an environmental permit authorising such deposit is in force. In Poland, Art. 182 of the penal code punishes anyone who pollutes the water, air or ground with a substance or radiation in such quantity or form that could pose a danger to the health or life of many people or cause significant destruction to plant and animal life.²⁹⁸ Just like in all other systems, in the Polish one, exceeding existing permits results also into administrative liability. The report does not mention the relationship to a permit, but one can presume that if the activity would be exercised in compliance with an administrative permit, criminal liability would fail. If that were not the case the particular provision would be an autonomous crime. Strikingly, only in the country report on Italy it is mentioned that the legislator in transposing Directive 2008/99/EC has not introduced felonies of concrete endangerment or substantial damage to the environment - as Directive 2008/99 seemed to require.²⁹⁹ Hence this poses interesting questions concerning the way in which Italy has implemented Directive 2008/99. However, it has to be mentioned that a draft bill has been approved by the Chamber of the Deputies and is currently under discussion in the Senate, aiming at introducing felonies of concrete endangerment or substantial damage to the environment into the Criminal Code³⁰⁰.

Results

Of course, the mere fact that examples of concrete endangerment provisions can be provided, does not mean that all provisions in the Member States discussed are effective formulations, nor that all environmental components are protected in an adequate manner. It is, however, generally important to keep in mind that the penalisation of an unlawful concrete endangerment of the environment (through emissions) has the major advantage that the legislator does not merely focus (like with abstract endangerment offences) on the breach of administrative obligations. The potential scope of the protection

²⁸⁹ This corresponds to Art. 3(a) of Directive 2008/99 which explicitly refers to the unlawful discharge, emission or introduction of a quantity of materials or ionizing 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.

²⁹⁰ Report on France, 5.1.

²⁹¹ Report on Germany, 5.1.1.

²⁹² Report on Germany, 5.1.1 in fine.

²⁹³ Although in that case the relevant action has to be undertaken in violation of duties under administrative law (Report on Germany, 5.1.2).

²⁹⁴ Although in that case the relevant action has to be undertaken in violation of duties under administrative law (Report on Germany, 5.1.3).

²⁹⁵ Report on Spain, 2 and 5.2.1.

²⁹⁶ Report on Sweden, 5.1.

²⁹⁷ Report on UK, 5.2.

²⁹⁸ Report on Poland, 5.1.

 $^{^{\}rm 299}$ Report on Italy, 3.

³⁰⁰ Report on Italy, 3.

awarded through the criminal law is hence larger under these provisions. Some provisions may, moreover, also focus on types of environmental harm not related to emissions, but for example to overusing resources or nonpoint source pollution.

3.3.4 Autonomous crime

Importance

A third type of criminal provision would punish some cases of very serious pollution directly. It usually consists of cases where pollution would have serious consequences for the health of persons and/or a significant risk of injuries to the population. What makes this an autonomous crime is that there is no linkage between criminal law and prior administrative decisions in this model. Under this type of provision, serious environmental pollution can be punished even if the defendant has complied with the conditions of the licence. The "permit shield" does no longer apply. The justification to break the administrative link in those cases is that the environmental harm at issue is of a magnitude beyond that contemplated by the administrative rules the entity complied with. Since there would be more extreme harm, more severe punishments would usually be indicated.

Countries

Some Member States do have examples of those autonomous crimes. A classic one, often mentioned in legal doctrine, is § 330(a) StGB related to the causing of a severe danger by releasing poison.³⁰¹ However, in this case it is the serious endangerment of the life or health of persons that is criminalised. The provision takes therefore an anthropocentric approach and is also not related to the Environmental Crime Directives. Many examples of autonomous crimes can be found in the Spanish criminal code, for example Art, 328.1 concerning deposits or landfills that are toxic or hazardous and may seriously damage the balance of natural systems or the health of individuals, Art. 328.3 (endangering the life, integrity or health of persons or the quality of the air, ground or water or animals or plants through waste), Art. 330 (seriously damaging any of the elements of a protected natural space) and Art. 343.1 (endangering the life, integrity, health or assets of one or several persons through emissions or releases).³⁰² France has an interesting provision regarding the endangerment of other persons in its criminal code which is autonomous from administrative law and which is applied to environmental cases, also by the Cour de Cassation.³⁰³ In Italy it is interesting to notice that some general provisions of the criminal code are applied to environmental matters precisely because many important cases cannot be sufficiently captured by the current environmental criminal regulations,³⁰⁴ For instance. Art, 434 of the criminal code concerning the crime of "unnamed disaster" would be applied to "environmental disaster" cases.305 The lack of specificity of "environmental disasters" is, however, criticised in the literature and by practitioners; the latter in particular stresses the role of this provision as a tool to overcome deficits of effectiveness in the environmental criminal legislation.³⁰⁶The Polish criminal code provides for general provisions on criminalisation of destructions of plants or animal life and pollution of water, air or soil in case of significant pollution. All other than those significant types of pollution are regulated by administrative acts. It may be observed that this classification may lead to questions of interpretation.

³⁰¹ Report on Germany, 5.1.10.

³⁰² See Report on Spain, 5.3.1 and 5.3.3.

³⁰³ Report on France, 5.8.

³⁰⁴ Report on Italy, 3.

³⁰⁵ Report on Italy, 5.9.

³⁰⁶ Ibidem.

Results

An autonomous crime for serious pollution is important. Such a provision can for example be found in the Council of Europe Convention for the protection of the environment through criminal law.³⁰⁷ The Environmental Crime Directives do, however, not contain autonomous crimes. It seems equally important to have provisions focusing on cases of serious pollution where a concrete danger to human health is created. The autonomous crime can signal to the business community that, in specific circumstances, the "permit shield" will not provide any protection; this would in turn represent strong incentives to avoid that kind of polluting acts.

3.4 Instruments: sanctions

The Environmental Crime Directives underline that penalties have to be "effective, proportional and dissuasive". This well-known notion comes from the case law of the Court of Justice of the EU.³⁰⁸ Of course, it is not feasible within the scope of this comparative assessment to even attempt to analyse whether the sanctions provided for in the Member States discussed in the country report are "effective, proportional and dissuasive". However, a few elements concerning the effectiveness, the proportionality and the dissuasive character of penalties can be highlighted. First, the main sanctions provided for at the regulatory level will be discussed (3.4.1). This mainly refers to the proportional and dissuasive character of the penalties. Second, the so-called complementary sanctions will be discussed since those can add in an important way to look at the effectiveness of the penalty regime (3.4.2).

3.4.1 Main sanctions

As far as the main sanctions in the formal legislation are concerned, there is some similarity (convergence) but also a certain degree of differences (divergence) between the countries studied. The convergence consists in the fact that for most of the environmental crimes (at least certainly for the more serious ones) discussed in the reports both monetary sanctions (fines) and custody (imprisonment) are available. The legislator usually allows the court to choose between applying either the fine and/or imprisonment. There is certainly also convergence, not only at the regulatory level, but, as will be indicated below,³⁰⁹ at the enforcement level as well: fines are in fact the most important sanctions that are applied in practice. That is, however, where the convergence ends. The regulatory frame for the main penalties is quite divergent between the Member States. To some extent, one could argue that this does not necessarily say anything about the real divergence of sanctions between Member States since the most interesting question is obviously the magnitude of the sanctions in practice. However, when in some Member States (like for example in Italy) already the penalties provided for in the regulatory framework are very low with respect to the most serious cases of pollution,³¹⁰ this equally limits the possibility to impose dissuasive sanctions in practice.

There are important differences between the Member States both as far as the maximum imprisonment sanction is concerned as well as related to the amount of the fines. Moreover, some Member States do distinguish between the *mens rea* of the actor involved (threatening with higher penalties in case of intent the negligence) whereas others do not, and hence leave it up to the court to make this distinction. Some Member States also seem to distinguish the nature of the protected interest and relate the statutory maximum penalties to those differences, whereas that is less clear in other legal systems. The requirement of proportionality would obviously imply that depending upon the protected interest (merely administrative interests or also environmental values or even human health) and the way in which these values are endangered, a differentiation would be made. One would, as was indicated above,³¹¹ expect the highest sanctions for environmental harm that endangers human health, lower sanctions for concrete

³⁰⁷ Art. 2(a) of the Council of Europe Convention on the protection of the environment through criminal law of 4 November 1998. This convention, however, never entered into force.

³⁰⁸*Inter alia* in the so-called Greek corn case (ECJ 21 September 1989, Case C-68/88).

³⁰⁹ See below 3.14.

³¹⁰ See in that respect in the Report on Italy, 3.

³¹¹ See above 3.3.

endangerment without harm to human health, and the lowest sanctions for a mere administrative violation. Again, such form of proportionality can be found in some Member States, but not in all.

As far as the requirement of dissuasiveness is concerned, one would expect statutory penalties to be linked to expected benefits to the perpetrator, but also to harm to society. Moreover, the deterrent effect, more particularly of monetary sanctions, will also depend upon the individual wealth of perpetrators. In that respect the literature has advocated for the use of day fines. Since day fines link the monetary penalty to the income of the perpetrator they would generate a higher deterrent effect. The day fines, being a Scandinavian invention, can be found for example in Sweden,³¹² but also in Germany³¹³ and in Spain, but not in the other Member States examined in the country reports³¹⁴. From a deterrence (and arguably proportionality) perspective, a day fine system is evaluated positively compared to the alternative of fixed fines, and would in that sense be considered as a "best practice".

Some of those issues can be illustrated by giving a few examples of the statutory penalties provided for in the Member States discussed in the country reports. For example, in France unlawful air pollution is punished according to Art. 226-9 of the environmental code with two years imprisonment and a fine of \notin 75,000,³¹⁵ and unlawful water pollution is punished in Art. 216-6 of the same code with two years imprisonment and a fine of \notin 75,000. This similarity in statutory punishment apparently reflects a similarity in the value of the protected interests (air versus water). Carrying out an activity without a licence according to Art. 173-1 of the environmental code is punished with six months imprisonment and \notin 75,000.³¹⁶

The German system distinguishes carefully between the situation of negligence and intent and has a higher statutory maximum in case of intent. Moreover, there seems, like in France, to be a parallel between the punishment of water pollution (§ 324), soil (§ 324(a)) and air pollution (§ 325 StGB). The German legislator has provided for a consistent protection of those different interests. Interestingly in some cases of more serious pollution (for example aggravated cases of environmental offences, § 330 StGB) much higher statutory penalties are provided.³¹⁷ Also when the sanction is not provided for in the criminal code, but in secondary criminal law, statutory penalties are substantial.³¹⁸

In Italy most environmental offences are considered abstract endangerment misdemeanours resulting in too low sanctions with regard to the most serious pollution cases, for example a maximum fine of €1,032 for exceeding air emission thresholds and an imprisonment up to one year³¹⁹, and imprisonment between six months and one year or a fine from €2,600 to €26,000 for lack of compliance with the restoration plan in case of soil pollution.³²⁰ Sanctions for discharging industrial waste water in violation of the limit values equally seem low (compared to statutory penalties in other European countries): imprisonment up to two years and a fine from €3,000 to $€30,000.^{321}$ Higher monetary sanctions are, however, provided when environmental crimes are committed by legal entities.³²²

Remarkable differences can also be noticed in the various statutes in the UK. Unlawful treatment of waste is, for example, punished by the Environmental Protection Act with a maximum imprisonment of twelve months or a fine not exceeding \notin 50,000 on summary conviction, or an imprisonment of maximum five

³¹² Report on Sweden, 20.

³¹³ Report on Germany. 22.

³¹⁴ It is worth to note that in Italy the sanctioning system for legal persons and collective entities is deemed to be similar (although not identical) to the German day fines system; see Report on Italy, 9.

³¹⁵Report on France, 13.

³¹⁶Report on France, 5.9.

³¹⁷Report on Germany, 5.1.9.

³¹⁸Report on Germany, 5.2.1.

³¹⁹ Report on Italy, 5.1; higher custodial sanctions (imprisonment between two months and two years and a fine up to \notin 1,058) are provided for operating a facility without a permit.

³²⁰ Report on Italy, 5.3; higher sanctions (imprisonment between one and two years and a fine between €5,200 and €52,000) are provided for those cases involving dangerous substances.

³²¹ Report on Italy, 5.6; higher sanctions (imprisonment between 6 months and three years and a fine between €6,000 and €120,000) are provided in case of particularly dangerous substances.

³²² Report on Italy, 9.

years or a fine in case of conviction on indictment.³²³ Water pollution on the other hand is punished through the Water Resources Act with a prison term of three months or a fine not exceeding \notin 20,000 on summary conviction, and a fine or a prison term not exceeding two years in case of conviction on indictment.

An interesting sanction can be found in Sweden concerning corporations, on which a corporate fine between \notin 550 and \notin 1,3 million can be imposed. The determination of those fines is, moreover, based on guidelines for public prosecutors, which are referred to as a "best practice" in Sweden.³²⁴

These (undoubtedly selective) examples make clear that in some Member States the legislator distinguishes between the various protected interests and adapts the statutory penalties accordingly (to comply with the proportionality requirement) whereas this is less clear in other Member States. Penalties between the Member States also seem to vary substantially. Sweden and Italy, in some cases, impose relatively high corporate fines.

3.4.2 Complementary sanctions

Importance

An important element of the effectiveness requirement of the sanctions for environmental crime is that they should not only aim at deterrence (dissuasion), but also at two other functions which may be less apparent with other types of crimes.³²⁵

The penalty should aim at the restoration of harm caused in the past. It is often held that merely sending a perpetrator to prison if the consequence is that e.g. waste that was deposited illegally is not removed, would not be very meaningful from an environmental perspective.³²⁶ The penalty should therefore lead to the consequences of the environmental crime being removed by the perpetrator.

In addition to the harm caused in the past being removed, the penalty should equally aim at the prevention of future harm. It may for example make little sense to impose a fine upon an entity knowing that the installation which caused the pollution will still be used by the firm that paid the fine. The penalty may hence also be aimed at preventing the pollution from continuing.

Countries

Complementary sanctions have been created in most of the legal systems. Moreover, in some legal systems in addition to the main sanctions (fine and imprisonment) discussed above, other sanctions have equally been introduced with the aim of providing additional deterrence. Examples of those functions that may be specific to penalties needed for environmental crime can be found in the legal systems of the Member States discussed in the country reports.

Referring first to the possibilities for the judge to order the restoration of harm done in the past, France mentions for example concerning water pollution the possibility for the court to oblige the convicted person to restore the aquatic environment.³²⁷ This obligation can, moreover, be enforced via a penalty payment of not more than \notin 3,000 per day of delay.³²⁸ In Spain, Art. 339 of the criminal code allows the judge to impose measures needed to restore the ecological balance that was disturbed.³²⁹

³²³ Report on UK, 5.2.

³²⁴ Report on Sweden, 45.

³²⁵ Michael Faure, "Effective proportional and dissuasive penalties in the implementation of the environmental crime and ship source pollution directives: questions and challenges", *European Energy and Environmental Law Review* (2010): 256-278

³²⁶ Faure, "Effective proportional and dissuasive penalties", 260.

³²⁷ Report on France, 5.2.

³²⁸ Report on France, 8.

³²⁹ Report on Spain, 5.3.2 in fine.

In some cases this restoration of harm in the past will not be achieved through a formal complementary sanction imposed by the criminal court, but through other means. Restoration could for example also be ordered through administrative sanctions.³³⁰ In other cases it could constitute a part of the bargaining between the public prosecutor and the defendant. The judge could for example require the restoration of harm done as a condition for dismissing the case. Moreover restoration is in some cases required or possible in Italy within the framework of probation ("sospensione condizionale della pena").³³¹ Likewise, in the United Kingdom such a restoration could be required via civil sanctions which are considered as an alternative to criminal prosecution. Regulators could for example impose a restoration notice, requiring the perpetrator to restore the damage caused.³³²

Many examples can also be found of measures and complementary sanctions that aim at preventing future harm, although they could equally provide for additional deterrence. For example in France, and in many other countries, specific penalties are directed against corporations - such as the prohibition to exercise particular professional activities, the dissolution of a legal person, the permanent or temporary closure of an establishment or the disqualification from public tenders.³³³ The right to hold public office can also be lost for a certain amount of time in Germany as consequence of a criminal conviction³³⁴, and Italy also provides for the possibility of imposing a variety of additional penalties, such as the disqualification from holding public office or from a profession, or disgualifications from the executive offices of collective entities and enterprises.³³⁵ Specifically addressed to corporations is the prohibition to carry out the activity at stake, the suspension or revocation of authorizations or permits connected to the perpetration of the crime; prohibition to make agreements with the public administration (with the exception of those aiming at obtaining a public service); barring from obtaining public subsidies and the eventual revocation of those already obtained; the prohibition of advertising goods and services.³³⁶ Spain, like France, has a variety of specific sanctions aimed at legal persons which can be seen as having the goal of preventing future harm, such as the dissolution of the legal person, the suspension of the activities, the closure of the premise, the prohibition to carry out particular activities and the barring from obtaining public subsidies as well as the temporary closure of particular premises or establishments.³³⁷ Again, in the UK this would typically be achieved via the so-called civil sanctions. One example would be the compliance notice, which requires compliance within a specified time limit, or the stop notice, which requires an immediate halt to activities causing serious harm.³³⁸ Finally, some sanctions should be mentioned which cannot arguably prevent future harm, but at least provide additional deterrence (and thus dissuasion) as well. This is surely the case for the forfeiture of assets and more particularly illegally obtained gain through the environmental crime which can for example be imposed in Germany³³⁹, but also in Italy³⁴⁰ and in Poland.³⁴¹

A sanction provided for in many legal systems is the publication of the decision of the criminal conviction.³⁴² This arguably may prevent future harm and inform the public at large of the environmental crime, but could also lead to reputational harm for the offender involved and thus provide additional deterrence.

Results

It should be repeated that all those complementary sanctions are an important part of an effective and dissuasive penalty system: allowing the judge to order reparation of environmental harm and prevention of future harm will certainly increase the effectiveness and (given that it may lead to high costs) provide additional dissuasion as well. The forms of those measures may differ. In some cases they could be

³³⁰ See also below 3.12.

³³¹ Report on Italy, 8, 5.3 and 5.2.

³³²Report on UK, 13.

³³³Report on France, 9.

³³⁴Report on Germany, 4.7.

³³⁵Report on Italy, 4.6 (in general).

³³⁶Report on Italy, 9.

³³⁷Report on Spain, 4.9 *in fine*.

³³⁸Report on UK, 13.

³³⁹Report on Germany, 4.7.

³⁴⁰Report on Italy, 4.6 (in general).

³⁴¹Report on Poland, 10.

³⁴² See for example Report on Italy, 4.6 (in general) and Report on Poland, 10.

imposed by the prosecutor as a condition for a dismissal, in others they could be an administrative (or civil) sanction, also when the criminal court would impose this penalty in some legal systems. The penalties discussed here would rather be considered as a measure than as a criminal sanction. The important issue is, hence, that environmental crime needs more than the traditional sanction, like e.g. the imposition of a fine if there should equally be a provision guaranteeing that harm caused in the past will be restored and that future harm can be prevented. That is precisely what these complementary sanctions aim at.

3.5 Instruments: the Environmental Crime Directive and the Ship-source Pollution Directive

An important issue concerning the EU and environmental crime is undoubtedly the implementation of the recent Environmental Crime Directives. The directives are of relatively recent date.³⁴³ Hence, all legal systems discussed in the country reports were confronted with the question of whether and, if so, how, to adapt their existing environmental criminal legal system in order to comply with the provisions of the directives. In the country reports a few issues are mentioned that came up during the implementation process which may also be of more general relevance for this study.

A first interesting point to mention is that some Member States argued that no adaptation of their legal system was necessary at all for the simple reason that they considered that the existing system already fully complied with the requirements of the directive. This was, for example, the case for Sweden;³⁴⁴ in other Member States the legislation basically remained unchanged, such as for example in Italy,³⁴⁵ although the "administrative liability" for legal persons was extended in order to comply with the provisions of the directive.³⁴⁶ The Spanish report provides a detailed analysis of the transposition of the environmental crimes directive. Most provisions were already included in the Spanish Criminal Code,³⁴⁷ but at least four new provisions were introduced in Spain as well.³⁴⁸

Some legal systems have been relatively critical of the directive and more particularly of its tendency towards further criminalisation. This has for example lead to interesting criticisms in Germany, where practitioners and researchers have argued that environmental criminal law already had a serious enforcement deficit which would only be increased as a result of the directive which creates a duty towards further criminalisation.³⁴⁹ The German legal doctrine, judiciary and advocacy are hence critical of the extension of the criminalisation³⁵⁰, and also raise doubts regarding the *lex certa* principle looking at the way by which the directive was transposed into German law.³⁵¹ In German legal doctrine also interesting debates took place with regard to the question of whether the unlawfulness requirement (of the EU Directive) would also apply when national legislation of another Member State implementing environmental directives would have been violated. In order to avoid any doubt on that point, the German legislator adapted additional definitions in § 330d StGB.³⁵²

In sum, the country reporters that discuss the impact of the environmental crimes directives do in some cases mention that there is limited impact (as their legal system already complied with the directive like in Sweden) or that there is an impact which is considered to be problematic (like in Germany). The latter is then more particularly related to the quality of substantive criminal law (more particularly the *lex certa*

³⁴³ 19 November 2008 for the Directive 2008/99/EC on the protection of the environment through criminal law and 21 October 2009 for Directive 2009/123/EC on ship-source pollution and on the introduction of penalties for infringements.

³⁴⁴ Report on Sweden, 39.

³⁴⁵ Report on Italy, 3.

³⁴⁶ Report on Italy, 9.

³⁴⁷ See report on Spain, 5.2.

³⁴⁸ Ibidem.

³⁴⁹ Report on Germany, 1 *in fine*.

³⁵⁰ Report on Germany, 5.3.

³⁵¹ Ibidem.

³⁵² Report on Germany, 5.1.13.

requirement) and the fear for an overcriminalisation. That comment should also be seen in the light of the fact that many argue that criminal law can certainly not be considered as the primary tool to enforce environmental law; this should, as argued in many country reports, rather be administrative law.

3.6 Actors: corporate crime

3.6.1 Importance

The most important perpetrator of environmental crime is undoubtedly the corporation. This raises the important question whether criminal prosecution or, more generally, the criminal enforcement system, can also address corporate actors. This is a question that has also received attention in the Environmental Crimes Directives: according to the Directives, also legal persons must be held liable in Member State law and punishable by effective, proportionate and dissuasive penalties (even though it is not mentioned that those should necessarily be of a criminal nature).

The importance of the possibility to address criminal enforcement also against corporations has been often stressed in the literature.³⁵³ If there is no corporate liability, prosecutors (and other enforcers) are either forced to look for the specific natural persons that committed the environmental crime (by the absence of which no prosecution would be possible), or would automatically charge individuals having a particular function (like a director or corporate officer, which may violate the principle of guilt in criminal law). For that reason it is important to have a system in place where criminal enforcement can also be applied against corporations. Member States' points of view differ, however, as to whether the nature of that corporate liability should be criminal or administrative. More particularly, as a result of strong opposition in German criminal legal theory, that country (and a few others under its influence) have always opposed criminal liability of legal entities.³⁵⁴ Although this distinction may dogmatically be very important, as a practical matter, the most important question is whether it is possible at all to address enforcement actions against the corporation, no matter what label one attaches to the particular penalty that may be imposed (criminal or administrative).

A second question of importance is whether there is an "automatic" liability of the corporation. That means that the corporate entity can be held liable in an autonomous way without the need to identify the natural persons through which corporations have acted. Under such an autonomous liability (which obviously substantially facilitates enforcement) actions against the corporate actor are possible even if no natural person can be identified through which the corporation acted.

The next question is whether the corporation can be held liable for all crimes or whether there is rather a *numerus clausus*, i.e. the legislation explicitly provides that the particular criminal provision can also be enforced against a corporation. Obviously systems where it is assumed that all crimes can be committed by corporations are easier to apply than systems with a *numerus clausus*.

The question also arises whether provisions on corporate liability extend to all corporations or whether particular legal entities will be excluded. That question especially arises as far as public authorities are concerned.

Finally it may be clear that corporate criminal liability should in principle not exclude liability of natural persons that have equally contributed to the committed environmental crime. In the absence of the possibility to still hold natural persons liable there would be a danger that individuals would create

³⁵³ See e.g. Günter Heine, Die strafrechtlichen Verantwordlichkeit von Unternehmen, von individuellen Fehlverhalten zu kollektiven Fehlentwicklungen, insbesonderem bei Großrisiken (Baden-Baden: Nomos, 1995) and Günter Heine, "Criminal Liability of Enterprises and new Risks. International developments national consequences", Maastricht Journal of European and Comparative Law (1995): 107-128.

³⁵⁴Although it is now reported that this issue may be under discussion. Report on Germany, 4.8 *in fine* and 9.

separate legal entities in which the environmental harmful activities would be placed in order to escape the clutches of the law. Ideally enforcement should hence be made possible against the corporation as well as against its officers (or other employees who have contributed to the crime according to the rules of attribution of criminal liability in national law).

3.6.2 Countries

As the table below shows, there is some divergence between the examined Member States, as some accept criminal liability of corporations, whereas others do not. However, such differences may not be that relevant in practice, since even countries that reject corporate criminal liability have other systems in place that effectively allow to impose similar penalties as under a criminal liability regime. As far as the other features of the corporate liability regime are concerned, the table shows that the differences may not be that substantial and hence show a large degree of convergence. This topic is of large importance for the enforcement of environmental crime, but obviously goes beyond the topic as well. Most legal systems have introduced (criminal) liability of legal entities irrespective of environmental crime although some have explicitly extended their legislation to be able to apply it to environmental crime as well.³⁵⁵

In the table below, information will be provided as far as this is available in the country reports. Where a particular point was not relevant a "-" will be put; if information was not available (or uncertain) the particular point will be left blank.

³⁵⁵ This was for example the case in Italy where the responsibility of corporations has been extended to environmental crimes in order to implement the Environmental Crime Directive and the Ship-Source Pollution Directive.

Table 2: corporate liability for environmental crime

	Criminal responsibilit y	Admin. Responsibili ty	Autonomous responsibility	All crimes?	All entities?	Cumul. With natural persons?
France	Yes	-	For offence committed on their account by their organs/representat ives	Yes	 No liability of State Local auth. When in course of activities 	yes
Germany	No	Yes	If leading representative commits a crime/administrati ve penal offence	Yes		Yes
Italy	No	Yes	Yes	Numerus clausus; in 2011 extended to several environment al crimes	No liability of: -State -local public authorities -other not economic public entities -entities carrying out functions of constitutional relevance	Yes
Poland	Yes	Yes	Liability for the actions of representatives	Yes	Yes	Yes
Spain	Yes	-	Yes	Numerus clausus	Not local and governt. auth.	Yes
Sweden	Yes, but debated	-	Yes		Yes, if entrepreneur	
UK	Yes		Yes	If provided in legislation		Personal liability possible, most prosecutio ns not against director

This table merits a few comments. As far as the first issue is concerned, namely whether the liability is of a criminal or an administrative nature, one can notice that France, Poland and Spain unequivocally answer

this in the affirmative, whereas it seems to be debated in Sweden. Germany and Italy³⁵⁶, on the other hand, deny the criminal liability, but accept an administrative responsibility of corporations.³⁵⁷ Germany still takes the formal "societas delinquere non potest" position,³⁵⁸ but there seems to be some movement in the sense that criminal liability of companies is at least debated. Germany has on the other hand a system of administrative liability in the *Ordnungswidrigkeitengesetz* which allows the imposition of substantial fines (up to \in 10 million).³⁵⁹ The Italian model is, like the German, one of an administrative liability of legal persons and collective entities.³⁶⁰

Countries differ as to whether corporate liability is truly autonomous or whether it is merely deduced from wrongful acts committed by natural persons working for the corporate entity. For example in France the criminal liability arises for offences "committed on their account by the organs or representatives".³⁶¹ Also administrative liability in Germany, under § 30 of the *Ordnungswidrigkeitengesetz*, is only possible "if a leading representative of the organisation commits a crime or an administrative penal offence", either in violation of a duty imposed on this organisation, or by which the organisation has been or should have been enriched.³⁶² Something similar can be noticed in Italy where administrative liability of legal entities is only accepted when an offence was committed "by an individual acting in a management position or by a person subject to the direction or supervision of the latter within the corporate body".³⁶³ Polish law refers to the fact that legal persons are "held liable for the actions of their representatives".³⁶⁴ The only truly autonomous criminal liability of the legal entity is clearly stipulated in Spain.³⁶⁵

The systems also differ with respect to the question for which crimes corporate liability is possible. In Italy criminal liability only arises for the specifically listed offences;³⁶⁶ the same is true in Spain where a system of *numerus clausus* applies.³⁶⁷ The Spanish report mentions that particular wildlife crimes are not included in the list and that hence for those no corporate liability is possible.³⁶⁸ Also in the United Kingdom the legislation has to refer explicitly to the possibility of holding the corporation liable.

Many countries exclude particular public authorities from the liability of legal entities. This is for example the case for the State in France, and also for local authorities if they did not commit the offences in the course of their activities.³⁶⁹ A similar exclusion also applies in Spain. However, in that case particular measures could still be pronounced against the particular public authority.³⁷⁰ Only the report on Sweden mentions that to the extent that public authorities also act as entrepreneurs,³⁷¹ criminal liability (for the corporate fine) would also extend to them.³⁷²

Usually accumulation with the liability of natural persons is possible. This is explicitly the case in France³⁷³ and in Germany. The German system even features controversial jurisprudence establishing criminal

³⁶¹ Report on France, 4.7 and 9.

³⁶³ Report on Italy, 4.7 and 9.

³⁶⁹ Report on France, 4.7 and 9.

³⁵⁶Case law and the majority of the doctrine consider this liability to be formally administrative but substantially criminal (Report on Italy, 9).

³⁵⁷ Obviously in legal systems where corporations can be held criminally liable, there may be administrative liability as well. The point we want to discuss here is whether the principle liability of the corporation is of an administrative or a criminal nature.

³⁵⁸Report on Germany, 4.8.

³⁵⁹Report on Germany, 9.

³⁶⁰ Report on Italy, 4.7 and 9.

³⁶²Report on Germany, 9.

³⁶⁴ Report on Poland, 4.9.

³⁶⁵ Report on Spain, 4.9.

³⁶⁶ Report on Italy, 4.7 and 9.

³⁶⁷ Report on Spain, 4.9.

³⁶⁸ Report on Spain, 9.

³⁷⁰ Report on Spain, 4.9 and 9.

³⁷¹This refers to the situation where an agency does not act in its capacity as public authority but rather undertakes activities that a commercial enterprise could undertake as well. An example could be a local community exploiting a waste deposit site.

³⁷² Report on Sweden, 16.

³⁷³ Report on France, 9.

liability for directors and managers as indirect perpetrators due to their authority over the whole organisation.³⁷⁴ It is striking that in the United Kingdom prosecutions in practice are brought against the company, rather than against the directors. However, environmental statutes allow directors and managers to be prosecuted individually in certain circumstances, for example is the offence is committed with their consent or is attributable to their neglect.³⁷⁵

3.6.3 Results

This brief overview shows that by and large the systems analysed in the country reports have ample possibilities to hold corporate actors liable. Although this seems dogmatically of large importance, in practice the question whether this liability is constructed as criminal or administrative does not seem to matter that much. Some legal systems only deduce the corporate responsibility from actions of (senior) individuals within the corporation. In that sense in those legal systems the corporate liability is not "autonomous". An autonomous liability, whereby there is no need to deduce the corporate liability from actions of individuals within the corporation is clearly to be preferred. The same is true for legal systems where criminal responsibility can in principle apply to all crimes, rather than systems where a *numerus clausus* applies, thus excluding particular corporations from liability.

³⁷⁴ Report on Germany, 4.8.

³⁷⁵ Report on UK, 9.

3.7 Actors: organised crime³⁷⁶

3.7.1 Importance

Increasing interest in organised crime has recently arisen. Within the discussion of the actors involved in environmental crime, the question could equally be asked to what extent organised crime is involved in environmental crime. Moreover, to the extent that this is the case, the question could equally be asked whether it is necessary to take this into account at the legislative level.

3.7.2 Countries

Again, like was the case with corporate liability, questions concerning the regulation of organised crime are obviously not limited to environmental crime, but have a more general character. From the country reports it appears that organised crime does, at least at a regulatory level, not play a major role in most of the legal systems as far as environmental crime is concerned (with the noticeable exception of Italy). Countries do not provide specific definitions, although some countries (such as Germany and the UK) provide particular working definitions i.e. a definition of organised crime in a statute.³⁷⁷ There are, however, in many (if not most) legal systems particular legal rules concerning the participation in a criminal organisation. Participation in such an organisation is explicitly criminalised more particularly in France,³⁷⁸ in Germany,³⁷⁹ Poland,³⁸⁰Italy³⁸¹ and Spain.³⁸² However, in most of those countries the participation in a criminal organisation is generally criminalised and not specifically for environmental crime. One implication of the fact that particular environmental crimes could also be considered as organised crime (in the sense that they would fall under the specific provisions criminalising the participation in a criminal organisation) is that in that particular case different procedures would apply, for example allowing telephone tapping and undercover agents (see the particular case of Spain).³⁸³

The only country where a clear link between organised crime and environmental crime is explicitly made is Italy, where this type of crime is referred to as eco-mafia. This is particularly relevant for organised activities concerning the illegal trafficking of waste which are criminalised in Art. 260 of the Environmental Code, and which will lead to a specific procedure dealt with by the districts' anti-mafia bureau.³⁸⁴ However, according to part of the practitioners, environmental crime does not seem to play a key role among the provisions on organised crime yet.³⁸⁵ It could also be mentioned that in France particular offences are provided concerning protected species and waste when committed by organised groups.³⁸⁶ This concerns the so-called "bandes organisées" which would deal with illegal waste trafficking, equally leading to a special regime of investigation.

³⁷⁶ This section has largely benefited from a presentation by Stephan Sina on environmental crime and organised crime, Catania, 24 June 2014.

³⁷⁷ See Report on Germany, 7 and Report on UK, 7.

³⁷⁸ Report on France, 7.

³⁷⁹ Report on Germany, 7.

³⁸⁰ See report on Poland, 7 with the description of Art. 258 of the penal code on organised criminal groups.

³⁸¹ Report on Italy, 7.

³⁸² Report on Spain, 7.

³⁸³ Report on Spain, 7.

³⁸⁴ Report on Italy, 7.

³⁸⁵ Report on Italy, 7 *in fine*.

³⁸⁶ Report on France, 7.

3.7.3 Result

It can be concluded that there are only a few explicit references to organised crime in the legislation concerning environmental crime. However, the substantive laws dealing with organised crime (more particularly participation in a criminal organisation) can in some circumstances also be applied to organisations engaging in environmental crime. In that case the specific procedures that could be applied to investigate organised crime could be applied to environmental crime as well. It is, however, clear that the literature and legislation concerning organised crime primarily envisages types of crimes other than environmental crime. But the mere fact that the legislation on organised crime has usually not been drafted taking into account environmental crime does not seem to be a major obstacle to an effective enforcement of provision against organised environmental crime. There have at least not been reports from practitioners on substantial regulatory deficits in that respect.³⁸⁷

3.8 Actors: Amtsträgerstrafbarkeit

3.8.1 Importance

With respect to the potential criminal liability of public authorities involved in the enforcement of environmental crime, it is almost unavoidable to use the German word *Amtsträgerstrafbarkeit*, since this is a topic that has received large attention in German legal doctrine and as a result of that in the legal doctrine of other legal systems as well. However, the importance of that topic in practice does not seem to be proportionate to the attention it has received in legal doctrine.

As such, the interest in this topic, given its importance in the environmental enforcement framework, can be understood. As was made clear when discussing substantive environmental criminal law³⁸⁸ the possibilities to apply criminal law to environmental harm are to a large extent related to administrative law. This is the well-known administrative dependence of environmental criminal law (*Verwaltungsakzessorietät*). Administrative law creates criminal liability (by providing administrative conditions in permits that could be violated and then give rise to criminal liability), but can equally limit criminal liability (for example when permits are provided for discharges that are hence no longer unlawful, thus excluding the application of the criminal law). It could thus be argued that civil servants (the so-called *Amtsträger*) could contribute, through their actions, to environmental pollution. If, for example, a civil servant were to give a lenient permit to a corporation, this would *de facto* contribute to the pollution caused by the latter. The same would be the case if civil servants, as a result of their indulgence, would not adequately enforce environmental crime committed by corporations. In that case their omissions (lack of action after established violation) could contribute to environmental harm by allowing the corporation to continue pollution.

With these examples in mind there could hence be reasons to think about specific provisions aiming at *Amtsträgerstrafbarkeit*. However, there are also substantial arguments in favour of applying some caution. First of all, in the most flagrant cases (for example where a civil servant accepts a bribe in return for a lenient permit that clearly violates statutory conditions) general criminal provisions prohibiting bribery by civil servants could already be applied. In the more debated cases, for example where a civil servant decides not to use formal enforcement actions because he judges that he can induce a corporate actor towards compliance via cooperation, the added value of criminal liability is doubtful. In the latter cases civil servants often dispose of a large discretionary power and using that discretion is also in the public interest. In cases where civil servants would not take a deterrent approach but would rather cooperate with corporate actors, criminal liability could lead to the perverse result that civil servants would formally submit all cases for prosecution, also where compliance could be achieved with less drastic actions. In that

³⁸⁷ Report on Italy, 7.

³⁸⁸ See *supra* 3.3.1.

case the threat of criminal liability would hence lead to so-called chilling effects, referring to a behaviour whereby civil servants merely act to avoid their own liability rather than looking for an optimal enforcement strategy. Under those circumstances criminal liability of civil servants could hence do more bad than good.

3.8.2 Countries

There is therefore no surprise that only with one exception (Spain) none of the countries discussed in the reports have specific provisions on *Amtsträgerstrafbarkeit* for environmental crime. All report that general rules exist, for example related to bribery or passive corruption. This is for example the case in France,³⁸⁹ Germany,³⁹⁰ Italy,³⁹¹ Poland³⁹² and Sweden.³⁹³ Recall that in Sweden the corporate fine can also be applied to public authorities to the extent that they equally act as entrepreneur.³⁹⁴ The United Kingdom also has rules on misconduct in public office, but these are of a rather general nature and not specific for environmental crime.³⁹⁵ The only exception constitutes Spain where in addition to the above mentioned general rules that also exist in other legal systems there are specific provisions aimed at the *Amtsträger*. Art. 329 of the Criminal Code explicitly punishes any authority or public officer who knowingly has reported favourably on granting manifestly unlawful permits that authorise the operation of polluting industries. In that case, in addition to fines and imprisonment the particular officer could be barred from public employment.³⁹⁶ However, if the literature is critical of this provision and holds that it should in fact only apply when pollution actually does not occur; in case of actual environmental harm the other environmental crimes in the criminal code could be applied.³⁹⁷

3.8.3 Results

In sum, only one Member State examined in the country reports showed an explicit provision for *Amtsträgerstrafbarkeit*. In all other countries unlawful behaviour of civil servants can be constrained through other crimes, punishing misconduct in public office, or by applying general rules. It seems therefore that these types of criminal provisions largely have a symbolic value, but add little as far as practical enforcement of environmental crime is concerned. Moreover, as indicated above, they may lead to substantial chilling effects. This is hence probably not an issue that should be further pursued.

³⁸⁹ Report on France, 6.

³⁹⁰ Report on Germany, 6.

³⁹¹ Report on Italy, 6.

³⁹² Report on Poland, 6.

³⁹³ Report on Sweden, 6.

³⁹⁴ Ibidem.

³⁹⁵Report on UK, 6.

³⁹⁶ See Report on Spain, 5.3.1 and 6.1.

³⁹⁷Ibidem.

3.9 Institutions: who investigates?

3.9.1 Importance

Whereas there was probably still a fair amount of convergence as far as the instruments and actors were concerned, this is definitely less the case when addressing the institutions that are competent to investigate environmental crime. The question who acts to start enforcement actions and how enforcement actions are initiated are obviously crucial to determine the overall effectiveness of an environmental enforcement regime. One important element to be taken into account is that environmental crime is not always easy to detect. In some instances detection may be possible at low costs, for example when a small enterprise burns waste, causing fumes to neighbours. In that simple example, neighbours will directly suffer disturbance from the (presumed) violation and will hence have incentives to either take action themselves³⁹⁸ or they can report to the competent authorities. With this type of easily visible and detectable environmental crime a reactive approach, i.e. reacting to the crime after its occurrence, may suffice. In this particular example there may be incentives with the victims that directly suffer harm to report the crime or officials could themselves *ex post* discover the crime and take enforcement actions.

However, an important feature of environmental crime is that to a large extent environmental crime is "a victimless crime". This means that there is often not one identifiable individual victim that would suffer a direct harm (like in the case of smoke causing a nuisance), but it may rather be an entire community that suffers harm, for example when a large factory emits noxious gases containing substances that potentially endanger human health. The crime in that particular case is in fact not "victimless" but the number of victims is potentially that large that no individual victim may have sufficient incentives to start enforcement action. It is known as the rational apathy or rational disinterest-problem.³⁹⁹ A first problem is hence that environmental crime may have such a wide-spread character that a reactive approach may not suffice since individuals will lack sufficient incentives to report violations to the authorities. A second problem resulting from this example is that it may often require high information costs to detect environmental crime in the first place. Detecting smoke causing a nuisance may be relatively easy; detecting that emissions from a factory in an industrial zone exceed the standards in a permit is likely to require a detailed analysis and highly technical skills. Discovering environmental crime may hence be highly costly and complicated, certainly for the public at large, but even for average law enforcers.

Those examples lead to two important conclusions as far as the effectiveness of a monitoring system for environmental crime is concerned: 1) given the often hidden nature of environmental crime a mere reactive approach to environmental crime may not suffice. Environmental crime needs a proactive monitoring, since otherwise insufficient detection will take place; 2) detecting environmental crime requires highly technical skills. That implies that capacity building is of utmost importance and that specialisation will be required in order to detect environmental crime. For that reason one can, generally, expect better detection when environmental monitoring is given in the hands of specialised environmental agencies that are totally specialised in and devoted to detecting environmental crime. The likelihood that police forces with a general task would have sufficient technical knowledge and capacity to adequately detect environmental crime is substantially lower.

³⁹⁸ In some legal systems victims can act as private enforcers and hence bring the case themselves to the criminal court or join proceedings in the criminal court.

³⁹⁹ For details see Hans-Bernd Schäfer, "The bundling of similar interests in litigation. The incentives for class actions and legal actions taken by associations", *European Journal of Law and Economics* 9 (2000): 183-213.

3.9.2 Countries

A first point to examine is therefore whether the countries examined do have specialised forces in place (either within the administration or police force) with technical skills to detect environmental crime via proactive monitoring.

As already mentioned, the countries show quite some divergence as far as the monitoring powers are concerned. Most countries have both specialised inspectors (of administrative authorities) and the (regular) police, but there are quite some differences regarding the question which of them plays the most important role. France has a mixed system where the police, environmental inspectors and other agents all play a role.⁴⁰⁰ An important point is that environmental inspectors in France who detect an environmental crime must report this to the public prosecutor. An official crime report has to be sent within five days after being filed to the prosecutor. The Environmental Code gives special powers to the authorities to allow *ex ante* monitoring, also before any suspicion of a crime. However, when the inspectors carry out powers of "judicial police" in the framework of an investigation (after a crime has been detected) they do so formally under the directions of the district prosecutor.⁴⁰¹

In Germany the crucial role in investigating environmental crime is again played by the public prosecutor.⁴⁰² The prosecutor can obtain information on committed crimes via two routes: 1) individuals could file a report or 2) environmental authorities could do so. Environmental (administrative) authorities have, moreover, detailed proactive monitoring instruments at their disposition.⁴⁰³ The problem is, however, as mentioned in the German report, that both the public and environmental authorities are reluctant to report environmental crime. Individuals underreport due to the rational disinterest problem, mentioned above. It is striking that for a number of reasons also administrative authorities are reluctant to report, primarily because they prefer to use administrative enforcement and fear that reporting a violation to the prosecutor may jeopardize the cooperation strategy they follow towards compliance.⁴⁰⁴ Differently than in France in Germany administrative authorities have no formal duty to report environmental crime to the prosecutor. Most information on committed crimes is provided to the prosecutor by individuals via the police. The latter has a duty to report⁴⁰⁵ and, moreover, in some states (like Berlin) the state criminal police office (*Landeskriminalamt*) has special divisions dealing with environmental crimes.

Also Italy relies largely on the police that drafts most of the notices of violation. There is a specialised division of the *carabinieri* for the protection of the environment.⁴⁰⁶ In Poland, environmental crime is detected by members of local communities or by the officials from the directorate/inspectorate for environmental protection.⁴⁰⁷ Spain relies largely on specialised police services (in some cases of the autonomous communities) to investigate environmental crime. For example the nature protection service (SEPRONA) of the civil guard does both proactive and *ex post* monitoring.⁴⁰⁸ Sweden relies both on the (local or regional) police, but mostly on environmental inspection authorities. 80 per cent of environmental crime in Sweden is reported to the prosecutors by these supervisory administrative agencies.⁴⁰⁹ The inspection authorities are (like in the French model) obliged to report suspected violations to the police or to the public prosecutor.⁴¹⁰ A special feature of the Swedish model is a large reliance on self-responsibility of operators to report. Industry formally is obliged to self-report violations.⁴¹¹ As will, however, be highlighted below, there is increasing criticism on this self-reporting model as practitioners fear that agencies are rather controlling the adequacy of the self-reporting than that they control whether

⁴⁰⁵ Report on Germany, 12.1.

- ⁴⁰⁸ Report on Spain, 12.1.1.
- ⁴⁰⁹ Report on Sweden, 12.2 and 12.4.

⁴⁰⁰ Report on France, 11 and 12.

⁴⁰¹ Report on France, 12.

⁴⁰² Report on Germany, 11.2.1.

⁴⁰³ Report on Germany, 14.2.

⁴⁰⁴ Report on Germany, 11.2.1.

⁴⁰⁶ Report on Italy, 12.

⁴⁰⁷ Report on Poland, 12.

 $^{^{\}rm 410}$ Report on Sweden, 14 and 16.2.4.

⁴¹¹ Report on Sweden, 12.4.

violations have actually taken place.⁴¹² The United Kingdom again shows a mixed model with large investigative powers to the administrative authorities within the Environment Agency for England and Wales and the Scottish Environment Protection Agency (SEPA) for Scotland.⁴¹³ Those administrative authorities largely engage in pro-active monitoring. However, also the police are engaged in investigations, but rather reactive. For example, as far as wildlife crime is concerned the National Wildlife Crime Unit (NWCU) investigates.⁴¹⁴

This overview of monitoring powers in the various countries shows quite a bit of divergence, which is obviously to a large degree due to cultural differences and "path dependency", referring to the fact that there may already have been established traditions concerning e.g. the division of labour between the police/judicial authorities on the one hand and the inspection/environmental authorities on the other. One difficulty is that, as was clearly shown in the German case, administrative inspection authorities often engage in monitoring, not primarily with a view on engaging in judicial investigations, but rather with a view on achieving compliance via administrative enforcement. In other countries (such as for example in France and in Sweden) the administrative authorities of the environmental inspectorate are rather seen as instruments in the judicial enforcement chain. This is for example clear from the fact that in France and Sweden (administrative) inspection authorities have a duty to report violations to the public prosecutor, whereas this is not the case in Germany. That also explains the reluctance in Germany of administrative authorities to report to the prosecutor, since they primarily want to achieve compliance via a cooperative strategy and hence wish to avoid repression via the public prosecutor. France and Sweden apparently see a crucial role for the prosecutor who should be involved in the decision on "the next steps", i.e. what to do after a crime has been detected. This relates to the question whether countries give discretionary power to administrative authorities to deal themselves with (some) environmental crimes (like in Germany) or whether every crime has to be reported to the public prosecutor who takes decisions on the route to follow (like in France and Sweden).

3.9.3 Results

It is also striking that, although most countries engage both the police and special inspection forces in monitoring environmental crime, the emphasis may differ from country to country. Italy and Spain rely more strongly on the police, whereas France and Sweden rely more strongly on specialised administrative authorities for the detection of environmental crime. Poland shows a mixed picture. It is obviously not possible to argue that either one of the systems (largely relying on the police/supervisory inspection authorities) is better than the other, also since this is strongly related to particular traditions in a country. As was mentioned in the introduction to this section, given the complex and highly technical nature of environmental crime, one would assume a preference for specialised administrative authorities who may have higher capacity and knowledge of the technical features of environmental crime. The general police is unlikely to be equipped for adequately detecting environmental crime via proactive monitoring. However, the countries that largely rely on the police for proactive monitoring (Italy and Spain) have solved this by allocating monitoring of environmental crime to specialised police forces which arguably remedies the capacity issue. One potential problem with inspection authorities is that, especially in case they have a large amount of post-detection discretion (whether or not to initiate enforcement action) is that this discretion could be abused (more particularly in situations of a collusive relationship with industry). That is why some countries (like France and Sweden) have introduced the obligation to report crime to the public prosecutor. The role of the public prosecutor in reviewing the decisions of the authority could increase accountability and guarantee that post-detection discretion is exercised in the public interest. Given the central role of this public prosecutor in the post-detection process we will now turn to the various decisions that the prosecutor in theory could take.

⁴¹²See further below 3.14.
⁴¹³Report on UK, 12.2.
⁴¹⁴Ibidem.

3.10 Institutions: the public prosecutor

3.10.1 Importance

As was mentioned before, most of the cases of environmental crime discovered will, through the judicial route, end up with the prosecutor. However, some cases may, at least in some jurisdictions, also be handled in different ways. In some countries inspection authorities can deal with violations themselves via administrative sanctions⁴¹⁵ or via administrative fines.⁴¹⁶ But, as will be illustrated below,⁴¹⁷ also in that case many legal systems require an intervention of the public prosecutor in verifying the imposition of an administrative fine. In other systems, where the violations have been decriminalised (or were never criminalised in the first place), authorities are allowed to deal with administrative penal offences themselves. In many cases after the detection of a crime the case will be reported to the prosecutor. This leads to the question whether the prosecutor should in theory prosecute all crime (often referred to as the legality principle) or whether an amount of discretion on the side of the prosecutor is allowed to decide whether to prosecute or not (often referred to as the opportunity principle). This question does not only arise for the prosecutor, but equally when administrative agencies have to take the decision on whether to impose administrative sanctions or not. This question of discretion is strongly linked to a debate in the enforcement literature between advocates of the deterrence model (who would limit any discretion) and advocates of a cooperative enforcement style (which relies on negotiations between the agency and the regulated and for which, therefore, discretion is important). Many scholars point to the risk of capture and collusion arising from a cooperation strategy,⁴¹⁸ but a pure deterrence approach, which eliminates all discretion, would not be cost effective.⁴¹⁹ The main reason to allow discretion (for both agencies and prosecutors) is related to the high costs in bringing a case to the court.⁴²⁰ The importance of allowing discretion (and hence not forcing enforcement action for every violation) is that there may be trivial contraventions for which enforcement is simply not cost effective. The literature has indicated that taking formal enforcement actions, also in trivial cases, may motivate operators to initiate appeals against decisions given the "indignation costs" of formal enforcement for trivial violations.⁴²¹ Moreover, dismissing a case can often generate significant benefits in terms of educating operators and could thus indirectly improve further compliance.

Criminological research has shown that many violations of environmental regulation do not take place wilfully, but rather as a result of a lack of information or knowledge.⁴²² Also other research shows that environmental violations are often the results of lack of information and ignorance, rather than of a rationally calculating and deliberate decision to violate the law.⁴²³ Discretion on whether to enforce or not could then lead to learning and to increased compliance and would avoid the high costs of the formal enforcement action (especially through criminal prosecution). From this it follows that it would be important to allow sufficient discretion to prosecutors (or agencies in the framework of administrative

⁴¹⁵ See below 3.12.

 $^{^{\}rm 416}$ See below 3.13.

⁴¹⁷Ibidem.

⁴¹⁸ See for example Peter J. May and Søren Winter, "Regulatory enforcement and compliance: examining the Danish Agro-Environmental Policy", *Journal of Policy Analysis and Management* 18 (1999): 625-651.

⁴¹⁹ See Hawkins Keith, *Environment and enforcement. Regulation and the social definition of pollution* (Oxford: Clarendon Press, 1984).

⁴²⁰ See Antony Ogus and Carolyn Abbot, "Sanctions for pollution: do we have the right regime?", *Journal of Environmental Law* 13 (2002): 293.

⁴²¹ See Eugène Bardach and Robert A. Kagan, *Going by the book: the problem of regulatory unreasonableness* (Philadelphia: Temple University Press, 1982).

⁴²² See generally Wim Huisman, *Tussen winst en moraal. Achtergronden van regelnaleving en regelovertreding door ondernemingen* (Den Haag: Boom Juridische Uitgevers, 2001) and Wim Huisman and Henk G. van de Bunt, "Sancties, organisatie criminaliteit en milieudelicten", *Ars Aequi* (1997): 684-697.

⁴²³ For a summary see Michael Faure, "Effectivenness of Environmental Law: What does the evidence tell us?", *William & Mary Environmental Law & Policy Review* 36(2012): 327-328.

enforcement) to decide whether an enforcement action is cost effective in the particular case. Prosecutors may dispose of a wide range of other alternatives that could lead firms to compliance in a cost effective manner.

A second general point related to this is that prosecutors of course need to be adequately equipped in order to have the possibility and capacity to make those cost effective decisions. As was already repeatedly mentioned, environmental cases may be quite complex and technical and may therefore also require specialised knowledge from prosecutors. In case of a lack of specialisation there is a substantial danger that sufficient priority will not be given to environmental cases. In that situation, dismissals could be the result of a lack of capacity and technical knowledge rather than of a well-reasoned decision concerning the cost effectiveness of formal enforcement actions.

In sum, one can expect the functioning of the prosecutorial service to be more effective when 1) there is some degree of specialisation on environmental issues and 2) there is an amount of discretion awarded to the prosecutor to decide on the cost effectiveness of formal enforcement action (like prosecution) in the light of available alternatives.

3.10.2 Countries

Legality versus opportunity principle

Most of the legal systems discussed in the country reports seem by and large to correspond to those starting points. On paper there are large differences between the legal systems. Five legal systems (Germany, Italy, Poland, Spain and Sweden) formally follow the legality principle, implying that there is a duty for the prosecutor to prosecute every case. Only two of the examined countries (France and the UK) follow the opportunity principle and hence allow discretion of the prosecutor in bringing formal enforcement actions. However, although the starting points are different, the practical results do not necessarily largely differ. The main reason is that also in the legal systems where there is formally an obligation to prosecute, *de facto* a large number of exceptions exist that equally provide room for prosecutorial discretion.

Turning first to the legal systems that follow the opportunity principle (France and the UK) it is clear that they sketch a wide variety of post-detection options for the prosecutor. For example in France the prosecutor has the following options:⁴²⁴

- To initiate a prosecution;
- To implement alternative proceedings to a prosecution;
- To dismiss the case;
- To engage in mediation securing reparation for the damage;
- To apply plea bargaining;⁴²⁵
- A transaction.⁴²⁶

Also in the UK, prosecution is at the discretion of the various prosecutors. A typical feature of the UK system is that prosecution cannot only be brought by the Crown Prosecution Service (CPS),⁴²⁷ but also by various regional authorities, local authorities and various public authorities.⁴²⁸ However, in practice 90% of all non-local authority prosecutions for environmental crime are brought by Environment Agency.⁴²⁹ In addition in the UK private prosecution is possible, but it is not very important in practice.⁴³⁰ Criteria have

⁴²⁴ Report on France, 10 and 11.

⁴²⁵ Plea bargaining runs into separate phases and involves the homologation of the penalty by the court.

⁴²⁶ To be further discussed below in 3.13.

⁴²⁷ Report on UK, 10.

⁴²⁸ See Report on UK, 12.3 and 12.4.

⁴²⁹ Report on UK, 12.2.1.

⁴³⁰ Report on UK, 12.5.

been developed for prosecution. There should be sufficient evidence and a public interest in prosecution.⁴³¹ The test and criteria to determine whether prosecution is indicated have been set out in the Code for Crown Prosecutors.⁴³² Agencies follow a compliance strategy rather than a deterrence strategy. For example the Environment Agency seeks a cooperative approach of educating the business community in order to enable compliance and considers prosecution rather as a last resort.⁴³³

But also legal systems that formally adhere to the legality principle have, either at the regulatory level or in practice many opportunities for using discretion. For example, in Germany there is a formal duty to prosecute, but there are a variety of ways to avoid formal enforcement action, *inter alia*⁴³⁴.

- Insufficient grounds to proceed with public charges;
- Minor guilt;
- Provisional suspension of public charges and imposition of conditions and instructions;
- Plea bargaining.

Especially the termination of the prosecution for minor guilt or under particular conditions and instructions is often used in environmental cases.⁴³⁵

Likewise Italy has a formal duty to prosecute, but at the same time knows a variety of ways to terminate a procedure without formal enforcement action:⁴³⁶

- plea bargaining (which is possible except for the case of organised crime);
- the payment of an amount of money (*oblazione*);
- proceeding by decree.

In Poland there is a formal duty to prosecute, but it is reported that in some cases the opportunity principle is applied.⁴³⁷

Spain formally has the legality principle, but there are different forms of prosecuting offenders, such as for example:⁴³⁸

- summary proceedings;
- rapid proceedings;

- in practice, offenders can accept an agreement with the Prosecutor's Office after accepting criminal responsibility (this is not plea bargaining and it is not established in law as binding).

However, a consequence of the principle of legality of prosecutions is that an agreement to avoid prosecution for example by paying an administrative fine is in theory not possible in Spain.⁴³⁹ However, the agreement between Prosecutor and Offender is according to the Spanish report such a widespread practice that it has a similar effect to plea bargain.

Also Sweden has a formal obligation to prosecute, but a waiver of prosecution is widely possible "on grounds of efficiency" and minor offences could end under summary punishment via a fine.⁴⁴⁰

Specialisation?

As to the second important aspect, the degree of specialisation of the prosecutors, many reports point at a specialisation and equally at the importance of it. For example in Germany, special environmental

⁴³³Ibidem.

⁴³¹ Report on UK, 10.

⁴³² See Report on UK, 12.3.(i).

⁴³⁴ See Report on Germany, 11.2.2 and 11.2.3.

⁴³⁵ Report on Germany, 11.2.3.

⁴³⁶Report on Italy, 11.

⁴³⁷Report on Poland, 10.

⁴³⁸Report on Spain, 11.

⁴³⁹Ibidem.

⁴⁴⁰Report on Sweden, 10.
departments have been set up in the prosecutor offices of the larger metropolitan areas.⁴⁴¹ The same is the case (to some extent) in Spain where a specialist prosecutors' office exists against corruption and organised crime within the Supreme Court.⁴⁴² It is, however, not clear whether this office also deals with environmental crime. Sweden has a particularly interesting national environmental crimes unit (REMA), consisting of 20 prosecutors and additional administrative staff dealing with environmental crimes.⁴⁴³ This specialisation of prosecutors within REMA is also positively evaluated by practitioners in Sweden.⁴⁴⁴ The highest degree of specialisation of prosecutors can probably be found in the United Kingdom for the simple reason that it is the only legal system that allows basically all public authorities to directly prosecute cases. As a result local authorities, but especially the Environment Agency, prosecute most of the environmental cases themselves.

In other countries the situation is less clear. For example, Poland does not report on any specialisation.⁴⁴⁵ As far as Italy is concerned it is even held that no specialisation on environmental matters exists yet within the public prosecutor's office, although it is recommended to create a pool of experts on environmental crime.⁴⁴⁶

3.10.3 Results

This overview of the role and functioning of the public prosecutors hence provides a somewhat mixed picture. The theoretical starting points are different, as five countries have a formal obligation to prosecute and two of the examined countries do not. However, also in the countries with an obligation to prosecute (based on the principle of legality), the factual possibilities to deal with cases in other ways than through formal enforcement actions are *de facto* as large as in countries relying on the opportunity principle. It seems hence that in all systems examined prosecutors have the possibility to make wise use of their discretion. This means, taking into account the points mentioned in the introduction to this section, that when for example a first-time offender committed a violation out of ignorance, a cooperative strategy could be followed, providing education and thus leading the operator to compliance. Formal enforcement actions (via prosecutions before the court) can thus in most systems be reserved for the cases of serious environmental harm, often intentionally committed by second-time offenders where a criminal prosecution would thus be indicated.⁴⁴⁷

The need for specialisation of prosecutors shows, however, a much more diverse picture. Such specialisation seems absent (and the absence is criticised) in some countries (like Italy) and exists available for example in Germany, but merely in the larger metropolitan areas. Of all countries examined, a full-fledged specialisation of the prosecution service exists in fact only in Sweden, where specialised environmental prosecutors are brought together in one service unit which subsequently serves the entire country. Moreover, specialised knowledge is equally available in the United Kingdom by allowing all public authorities, including environmental authorities, to prosecute environmental cases. That may be the best option, but would obviously require revolutionary and radical changes in the criminal procedure of most Member States. A second best and easier to implement solution would hence be to follow the Swedish model of a specialised unit of environmental prosecutors entirely dedicated to the prosecution of environmental crime.

This necessity of specialisation in the prosecution should once more be underlined. In the absence of specialisation there is always a danger that prosecutors have to deal with environmental crime in addition to many other (also common) crimes. This will not allow them to develop the specialised knowledge required to deal with environmental crime and may, moreover, lead to the situation that environmental crime does not get a high priority. That could lead to dismissals, not because cases do not deserve a formal

⁴⁴¹Report on Germany, 12.1.

⁴⁴²Report on Spain, 12.1.4.

⁴⁴³Report on Sweden, 12.

⁴⁴⁴Report on Sweden, 16.2.1.

⁴⁴⁵Report on Poland, 10 and 12.

⁴⁴⁶Report on Italy, 12.

⁴⁴⁷ See Roger Bowles, Michael Faure & Nuno Garoupa, "The scope of criminal law and criminal sanctions: an economic view and policy implications", *Journal of Law and Society* 35 (2008): 389-416.

enforcement remedy, but rather because of lacking priority and capacity. The latter could seriously jeopardise the entire enforcement system and also lead to frustration with environmental agencies especially in those countries where agencies do not have the possibility to either deal with cases themselves via the imposition of environmental sanctions/fines (like in Germany) or to bring prosecution actions themselves (like in the Scotland and Northern Ireland). Especially systems where agencies are forced to report every violation to the prosecutor could, if prosecution would subsequently not take place (*inter alia* due to a lack of capacity or specialisation), lead to frustration among environmental agencies. That could in turn lead to less monitoring, lower detection and thus lower deterrence of environmental criminal law.

3.11 Institutions: the courts

3.11.1 Importance

When the prosecutor decides to bring the case to the criminal court, the question again arises as to what can be expected from the court. In this respect we can be short: similarly to the case of the prosecutor, specialisation is important. Environmental law is a technical field of law, largely different from the common crimes that criminal judges would otherwise deal with. If judges with no prior knowledge of environmental law have to deal with environmental cases, there is a large likelihood of erroneous decisions. This is a strong argument for some kind of specialisation. Specialisation can of course take different forms. One could either look for a specialised environmental court or for special environmental chambers within a general criminal court.

3.11.2 Countries

Looking at the country reports the results are rather disappointing. Most countries report that they have no special environmental courts dealing with environmental crime. This is for example the case for Germany,⁴⁴⁸ and the United Kingdom.⁴⁴⁹ However, in the United Kingdom the lack of specialisation of the court may be not such a large problem for the reason that in that country specialised environmental agencies (like the Environment Agency) are allowed to bring prosecutions directly to the criminal court. Moreover, there is equally a specialisation in the Planning and Environmental Bar Association (PEBA), consisting of barristers who do environmental and planning law cases.⁴⁵⁰ This means that both the prosecutor (like the Environment Agency) and the defendant can provide the judge or the jury with the necessary information in order to be able to decide the case in an adequate manner.

Again, an interesting example comes from Sweden. Sweden has a system of environmental courts, but they typically try administrative enforcement and not environmental crime cases.⁴⁵¹ One particular interesting aspect of the Swedish system is that environmental technicians (not necessarily lawyers) are used as judges in the court.⁴⁵²

3.11.3 Result

Summarising, there is undoubtedly room for improvement as far as this aspect is concerned. One could either consider the Spanish model of a specialised bench (but then obviously equipped with sufficient resources) or the Swedish model where technicians (with specialised knowledge on environmental issues) are added to the criminal court in order to inform the judges.

⁴⁴⁸Report on Germany, 12.1.

⁴⁴⁹ Report on UK, 11.

⁴⁵⁰ Report on UK, 12.3.

⁴⁵¹ Report on Sweden, 12.3.

⁴⁵² Report on Sweden, 16.1.4.

3.12 Institutions: administrative authorities

3.12.1 Importance

It was already mentioned, when discussing who investigates environmental crime,⁴⁵³ that administrative authorities play an important role in the proactive monitoring of environmental crime. Given their specialised knowledge and focus on environmental crime, they may be in the best position to detect (via proactive monitoring) that violations have taken place. It was already indicated that in that sense administrative (inspection) authorities play an important role in the judicial chain since often it is through their actions that environmental crime is discovered and brought to the public prosecutor. However, in many legal systems administrative authorities also have the possibility to impose particular remedies (measures or sanctions) after they have discovered environmental crime. Many of those measures and sanctions aim at restoration of environmental harm or prevention of future harm.⁴⁵⁴ This shows that there may be overlaps between the procedure followed in the criminal justice system and the administrative sanctioning system. That risk of overlap may especially occur when administrative authorities do not only have the possibility to impose measures aiming at restoration or prevention of future harm, but outright penalties (more particularly administrative fines) for (usually minor) environmental crimes. As we will argue below, the use of those administrative penalties (more particularly fines) may well make sense and be justified from a cost-effectiveness perspective. However, this system of course requires a clear delineation between the administrative and criminal sanctioning procedure. In addition there are some legal systems (like for example Germany) where administrative authorities can impose penalties for administrative violations through what is often referred to as administrative penal law (Ordnungswidrigkeitenrecht). To the extent that those only are reactions to behaviour that is not formally criminalised, it will be disregarded at this point for the reason that we focus on environmental crime. However, one complication is that in some cases (like for example in Germany with respect to corporations) administrative penal law can also be applied to behaviour that is formally considered environmental crime.

The function of administrative authorities is, as already mentioned, of utmost importance, not only because of their higher technical skills and capacity, but also because they may proceed to a speedy reaction, more particularly in cases where speed is of utmost importance. When, for example, waste has been illegally deposited or a dangerous installation is continued to be used in an unlawful manner, it may be clear that it would be unacceptable to wait for the outcome of a criminal trial that could last for many years until a particular reaction is taken. Administrative authorities may then (through administrative measures and sanctions) have the possibility of reacting rapidly in order to force the perpetrator to restore harm done or prevent future harm. As a note on terminology, in some legal systems those administrative remedies would primarily be referred to as "measures" for the reason that their primary goal is restoration or prevention of future harm and not inflicting intentional pain on a perpetrator with a view on deterrence. For the latter category usually the terms sanction or penalty would be reserved. However, we will disregard that distinction. It should also be kept in mind that a remedy which is formally (only) considered a measure (for example an order to remove waste that has been illegally deposited) can *de facto* lead to very high costs (in some cases substantially higher than the fine that would be imposed through the criminal justice system). In that case such a "measure" could equally have a dissuasive effect, even though deterrence may not be its primary aim.

3.12.2 Countries

The country reports clearly indicate that many of the legal systems discussed do have a variety of measures and sanctions that can be imposed by the environmental authorities. France refers to a variety of

⁴⁵³ See supra 3.9.

⁴⁵⁴ The importance of which was already discussed when referring to the necessity of complementary sanctions in 3.4.2 above.

"administrative controls and administrative police measures" allowing the authority to issue particular rulings and oblige operators to exercise particular duties or to execute *ex officio* measures themselves, but at the expense of the operator.⁴⁵⁵ The authorities can, moreover, order the payment of a fine of not more than €15,000 and a daily fine of not more than €1,500 which is due until the conditions imposed have been fulfilled.⁴⁵⁶ Special measures can be imposed by the authorities concerning unlawful handling of waste.⁴⁵⁷ For Germany, especially the imposition of administrative fines⁴⁵⁸ is important to mention.⁴⁵⁹ In Italy, the administrative authorities can issue an injunction ordering the payment of the administrative fine or imposing another administrative sanction. However, it is generally mentioned that in Italy administrative agencies very rarely deal with the case themselves e.g. through an ad hoc remedy or administrative fine.⁴⁶⁰ For Poland it is mentioned that in case of minor offences procedures of conduct from the Code of Conduct in petty offences and the Code of Administrative Procedure are applied.⁴⁶¹ It is held that in Poland it is not always clear whether an environmental offence can be qualified as administrative or not since violations can in some cases result in both administrative and criminal sanctions.⁴⁶² Administrative sanctions, such as for example the cancellation of a permit, would, however, be very commonly applied.⁴⁶³ Also in Spain the co-existence of administrative and criminal sanctions is considered to be problematic,⁴⁶⁴ especially since administrative authorities following a cooperative strategy might engage in "active toleration" which could jeopardize criminal enforcement.⁴⁶⁵ Spain has, however, a wide variety of administrative sanctions, varying from temporary or permanent closure of particular facilities to temporary professional disgualifications and seizure of benefits.⁴⁶⁶ In Sweden administrative enforcement is generally considered more important than criminal enforcement.⁴⁶⁷ This is especially the case since chapter 30 of the Swedish Environmental Code allows the imposition of a special environmental charge (to be discussed in detail below) which effectively replaces the criminal law system with a system of administrative fees.⁴⁶⁸ The environmental legislation in the United Kingdom also contains an impressive variety of administrative remedies. The 2010 Environmental Permitting Regulations for example provide the possibility of a suspension notice or the revocation of an environmental permit.⁴⁶⁹ Those administrative enforcement mechanisms can, moreover, be imposed whether or not a crime has been committed. These sanctions are, however, not frequently imposed as enforcement in the United Kingdom is still very much based on criminal law.⁴⁷⁰ There is, however, an interesting tendency since the United Kingdom government adopted in 2008 the Regulatory Enforcement and Sanctions Act (RES) which introduces civil sanctions as an alternative to criminal prosecutions. Regulators such as the Environment Agency can for example impose a compliance notice (requiring compliance within a specified limit), a restoration notice (requiring measures to restore the damage caused) or an enforcement undertaking (whereby the offender offers to undertake specific steps to amend non-compliance).⁴⁷¹ Interestingly, administrative authorities in the United Kingdom follow an enforcement strategy on the basis of the Regulator's Compliance Code which follows a particular enforcement pyramid⁴⁷² whereby regulators in principle primarily aim to change the behaviour of the offender, eliminate financial gain, seek proportionality to the nature of the offence and the harm caused. aim to repair harm done and to deter non-compliance in the future.⁴⁷³ This is also characterised by a cooperative approach followed between the regulator and the regulatee whereby first an enforcement

⁴⁵⁵Report on France, 13. ⁴⁵⁶Ibidem. ⁴⁵⁷Ibidem. ⁴⁵⁸ To be discussed below in 3.13. ⁴⁵⁹ Report on Germany, 13. ⁴⁶⁰ Report on Italy, 14. ⁴⁶¹ Report on Poland, 12. ⁴⁶²Report on Poland, 13. ⁴⁶³Report on Poland, 32. ⁴⁶⁴Report on Spain, 4.4. ⁴⁶⁵Ibidem. ⁴⁶⁶ See the overview of the types of administrative sanctions in Report on Spain, 13.1. ⁴⁶⁷ Report on Sweden, 1. ⁴⁶⁸ Report on Sweden, 13.2 and 14. ⁴⁶⁹ Report on UK, 13. ⁴⁷⁰Ibidem. ⁴⁷¹Ibidem. ⁴⁷² Obviously inspired on the well-known work of Ian Ayres and John Braithwaite, *Responsive regulation:* transcending the regulation debate (New York: Oxford University Press, 1992).

⁴⁷³Report on UK, 14.

notice would be issued (specifying what to do), then a suspension notice (suspending operations in case of a risk of serious pollution) and only finally prosecution according to the Code for Crown Prosecutors.

3.12.3 Result

This brief summary shows that many of the legal systems provide possibilities to administrative authorities to impose measures aiming at a speedy remediation of the particular environmental problem, which would be cumbersome for the criminal justice system. However, in some legal systems those powers seem either to be missing or (like Italy) to be rarely applied, whereas in others (more particularly Poland and Spain) the lack of a clear delineation between the administrative and criminal sanction is considered problematic. One particular attractive feature can be found (*inter alia*) in France, where authorities have the possibility to impose a day fine which is due, as long as there is no compliance, with the measures that were issued. That may give a particularly strong incentive for compliance to perpetrators.

3.13 Institutions: administrative fines⁴⁷⁴

3.13.1 Importance

As was already made clear above, enforcement of environmental law has in many jurisdictions traditionally relied strongly on the use of the criminal law. That also explains the (still) central role of the public prosecutor in enforcement in many legal systems⁴⁷⁵; this contrasts to some extent with the fact that it is not the public prosecutor, but rather specialised environmental agencies, that have the expertise and technical knowledge to investigate environmental crime.⁴⁷⁶ Only in the United Kingdom this paradox has been solved by allowing administrative authorities to prosecute their own cases. One possibility to involve administrative authorities more directly, also in sanctioning environmental crime (and hence not only in imposing urgent measures and remedies, previously discussed) is to allow administrative authorities to impose financial penalties.⁴⁷⁷

A problem with a model that only allows criminal enforcement is that the criminal process usually requires a high threshold of evidence to secure a conviction and leads to relatively high costs. For that reason there may be reluctance among prosecutors to prosecute all crimes, leading to high dismissal rates. There is overwhelming evidence, also for the countries discussed, that substantial parts of the environmental criminal cases have a relatively low probability of being prosecuted.⁴⁷⁸ To compensate for a lower probability of a sanction being imposed courts might impose a relatively large penalty. In practice, again, also in the countries under examination, courts are reluctant to do so, especially for minor offences. In consequence, in such systems where only criminal enforcement were possible, a low probability of prosecution is likely to lead to a problem of insufficient deterrence.

One means of addressing this problem may be the use of administrative fines. The main advantage of the administrative enforcement system (and hence administrative fines) is that, compared to the criminal procedure, the threshold of proof and thus the cost of imposing the sanction is lower. Since these fines are readily imposed the probability of imposition is relatively high, thus requiring a relatively modest penalty for the compliance condition to be met. Given that the costs of the imposition of an administrative fine can

⁴⁷⁴ I do realise that the fines are rather an instrument than an institution. However, since the fines are so closely linked to the competences of the 'institution' administrative agencies, it was still preferred to discuss it here in connection to the institution.

⁴⁷⁵ See *supra* 3.10.

⁴⁷⁶ See *supra* 3.9.

⁴⁷⁷ See on this debate in the UK extensively Richard B. Macrory, *Regulatory justice: making sanctions effective. Final report*, London, Cabinet Office, Better Regulation Executive, 2006, especially Chapter 3.
⁴⁷⁸ See 3.10 above where it was indicated that prosecutors have a wide range of possibilities to deal with cases differently than through prosecution.

be lower than the costs of a criminal trial the imposition of an administrative fine may also save administrative costs. Especially given the relatively low probability of prosecution in most environmental cases the advantage of the imposition of an administrative fine is that it leads to some remedy in cases that would otherwise be dismissed without formal remedy. In that sense the administrative fine can be considered as a relatively low cost instrument, allowing additional deterrence, especially for minor environmental offences.⁴⁷⁹ The availability of the alternative of an administrative fining system would, moreover, have the advantage that the criminal justice system could focus the (costly) prosecution on those cases of serious environmental harm that really merit to be prosecuted.

3.13.2 Countries

It is interesting to notice that in this domain there seems to be a large convergence among the Member States studied in the country reports, in the sense that one can find an increasing use of administrative fines, also in environmental cases. The classic example of such a fining system could be found in the well-known German *Ordnungswidrigkeitengesetz*, an administrative penal fine applicable to administrative penal offences (*Ordnungswidrigkeiten)*.⁴⁸⁰ In this case, differently than with the criminal justice system, the opportunity principle is applied and the imposition of a fine is hence considered as a last resort. Some conduct may be punishable both as a criminal offence and as an administrative penal offence. In that case the criminal sanction has priority. However, if the criminal sanction is not imposed an administrative fine can still be applied.⁴⁸¹ Empirical evidence in Germany shows that administrative fines are in practice more often used for environmental offences than criminal law.⁴⁸²

It was already mentioned that Sweden applies a comparable model of an environmental charge, which can be directly imposed by the supervisory authorities.⁴⁸³ Those administrative fees (for example water pollution fees charged by the Swedish coast guard) apply to less serious violations of environmental law.484 Also the United Kingdom has, as a result of recent regulatory reforms, moved away from a system that traditionally largely relied on criminal enforcement to a system of administrative fines (in the UK context referred to as a civil sanction). It is more particularly through the already mentioned Regulatory Enforcement and Sanctions Act (RES) that inter alia a Fixed Monetary Penalty (FMP) can be issued for minor offences and a Variable Monetary Penalty (VMP) for the more serious offences.⁴⁸⁵ Generally legal doctrine in the United Kingdom holds that those civil penalties are easier to administer, more flexible and more appropriate.⁴⁸⁶ There are only some questions as to whether the civil sanctions may not confer too much power on the regulatory agencies at the expenses of the courts. France has since 2012 the possibility to impose an administrative fine as a "transaction". It is the administrative authority that proposes the transaction, but it must be accepted by the perpetrator and must be approved by the public prosecutor.⁴⁸⁷ Different from the situation in Germany, Sweden and the United Kingdom, the administrative authority in France hence has a possibility to propose an (administrative) fine. But given the fact that it is proposed for an environmental crime the approval of the public prosecutor is necessary. In Italy there is a formal possibility of imposing administrative fines. Also in Italy, administrative fines can only be imposed by an administrative authority in case of an environmental administrative offence.⁴⁸⁸ However, these

⁴⁷⁹ In the terminology used above they would be especially suited for the so-called abstract endangerment offences. See *supra* 3.3.2.

⁴⁸⁰ Report on Germany, 13.

⁴⁸¹ Ibidem.

⁴⁸² See in that respect especially Volker Meinberg, "Empirische ErkenntnissezumVollzug des Umweltstrafrechts", *Zeitschriftfür die gesamte Strafrechtswissenschaften* 100 (1988): 112-157.

⁴⁸³ Report on Sweden, 13.

⁴⁸⁴ Report on Sweden, 14.

⁴⁸⁵ Report on UK, 13.

⁴⁸⁶ Report on UK, 13 *in fine*.

⁴⁸⁷Report on France, 9, 11 and 14.

⁴⁸⁸Report on Italy, 13.

administrative fines are not considered really effective by practitioners.⁴⁸⁹ Spain radically rejects administrative fines since this would violate the principle of legality in prosecutions.⁴⁹⁰

3.13.3 Results

Summarising, one can notice that Germany already has a long tradition of administrative fines. The United Kingdom has, after initially largely relying on criminal law, also moved towards a system of fines (referred to as civil sanctions) to be imposed by administrative authorities, and administrative fees can equally be imposed in Sweden. The same exists in France, although the French public prosecutor still plays a role in having to approve the fine that was proposed by the administration (and accepted by the perpetrator). Only in Italy and Spain administrative fines play a lesser role.

Financial penalties can undoubtedly be regarded as cost-effective reactions for minor offences and are therefore welcomed in the jurisdictions that do have and apply the fines. Of course, if deterrence is to be achieved, fines should be of a substantial nature and not to be too low to constitute a serious deterrent (like in Italy). One point of concern (equally related to post-detection discretion) could relate to situations where there would be a danger that the fining system would be abused. Transparency and accountability of officials suggesting the fines (for example an obligation to publish the fines imposed in an annual report by the agency) may prevent this. However, if it is feared that an administrative fining system could lead to a collusive relationship between the agency and the operator a control mechanism could be built in whereby (like in France) the proposal of an administrative fine would have to be approved by the public prosecutor.

3.14 Enforcement practice

3.14.1 Lacking data

As was indicated in the introduction, the effectiveness of an environmental criminal law system on the one hand depends on the way in which instruments, actors and institutions are regulated in formal legislation, but obviously the most important question is how environmental law is actually enforced in practice. A first finding that is striking (and that has already been criticised in the literature) is that in Member States, also those discussed in the country studies, relatively little information is available on the practical enforcement of environmental law. Some countries provide some data on the numbers of environmental crimes prosecuted, but these data rarely provide any information on the true effectiveness of the system. Moreover, there does not seem to be any harmonised or structural system of data collection, for example concerning the number of environmental crimes detected, the number of cases prosecuted, administrative fines imposed or sanctions imposed by the courts. It seems crucial that data collection in this respect in the EU improves in order to provide an "evidence based" enforcement policy. In order to be able to answer the question whether sanctions are "dissuasive, proportional and effective", some basic data that are currently largely lacking should become available.

In order to provide some indication on the effectiveness of sanctions, if a deterrence approach were taken, one would have to look on the one hand at the benefits generated to the perpetrator as a result of the environmental crime, and on the other hand at the harm that the environmental crime caused to society. These elements could then be compared to the expected costs of the perpetrator, which would consist of the probability of detection, prosecution and sanctioning, multiplied with the magnitude of the sanction that would ultimately be imposed. Data on the probability of detection are not available and also difficult to obtain given the fact that there may be substantial underreporting. Some Member States have data on the probability of prosecution of detected crime and, as will be indicated below, it is not surprising to find that, in line with previous literature, probabilities of prosecution and sanctioning are generally low. Moreover,

⁴⁸⁹ Ibidem.

⁴⁹⁰ Report on Spain, 11. Note, however, that Spain does allow a system of plea bargaining, which is, moreover, meanwhile widespread.

some countries also provide a more subjective evaluation (often based on opinions of experts) accessing the overall effectiveness of criminal law.

3.14.2 Enforcement deficit?

Looking at the scarce available the following can be mentioned. In Germany of all reported environmental crimes the clearance rate in 2012 amounted to 68,7%.⁴⁹¹ The study on Germany also notices that since 1999 the number of detected environmental crimes has gone down. Only as far as waste is concerned the number had increased. This would, so it is indicated, point to an enforcement deficit.⁴⁹² Moreover, of all detected environmental crime that was handled by the public prosecutor's office only 4.8% resulted in suspects being charged, compared to 15.2% in total crime. The fact that in only 4.8% of cases a criminal charge is brought does not mean that in the other 95.2% of cases nothing happens. As indicated above⁴⁹³ prosecutors⁴⁹⁴ have possibilities to deal with cases in other ways. However, it is striking that the number of charges in environmental criminal proceedings in Germany are terminated for insufficient grounds to proceed with public charges.

A similar story comes from Italy where it is held that "the numbers of environmental criminal acts being reported, investigated, brought to trial and sanctioned is very small".⁴⁹⁵ Also Spain reports "that the conviction rate is very low in strictly environmental crime".⁴⁹⁶ It is held that larger numbers of trials and convictions only were obtained for problems related to urban planning. However, lack of inspectors and adequate controls (equally linked to a lack of economic resources) and insufficient technical personnel would lead to low conviction rates in Spain.⁴⁹⁷ Many environmental cases end either with an acceptance of guilt with a reduction in sanction (in some cases in as many cases as 85%)⁴⁹⁸ and "most environmental cases" would be dismissed by courts for lack of evidence.⁴⁹⁹ In Sweden, it is estimated that around 20% of the reported environmental cases are eventually sanctioned.⁵⁰⁰ Similar estimates come from the United Kingdom where it is held that only 10% of environmental crimes end up in court.⁵⁰¹ However, also as far as the UK is concerned it is concluded that "the exact number of environmental criminal acts being reported, investigated, brought to trial and sanctioned for environmental crimes, also compared to other categories of crimes is not fully known".⁵⁰²

Apparently most countries can only provide impressions and subjective estimates, but no hard data concerning the number of cases reported, investigated, brought to trial and sanctioned. The estimates, moreover, indicate that not many cases would be detected and when they are detected only relatively low numbers are brought to trial and sanctioned.

3.14.3 Sanctions

Estimates as far as the sanctions are concerned are in some cases also provided. For the countries where information was available, it has been reported that the most widely used sanction is the fine and that prison sanctions would be rather exceptional. When amounts are provided the fines imposed do, on average, not seem to be very substantial.

⁴⁹¹ Report on Germany, 1.

⁴⁹² Report on Germany, 1 *in fine*.

⁴⁹³ See *supra* 3.10.

⁴⁹⁴ Report on Germany, p. 106.

⁴⁹⁵Report on Italy, 1.

⁴⁹⁶Report on Spain, 12.5. ⁴⁹⁷Ibidem.

⁴⁹⁸Report on Spain, 11. ⁴⁹⁹ Report on Spain, 12.2.

⁵⁰⁰ Report on Sweden, 10.

⁵⁰¹Report on UK, 1.

⁵⁰² Report on UK, p. 91.

For example, as far as Germany is concerned it is held that the normal form of punishment is the imposition of a fine without imprisonment.⁵⁰³ Imprisonment would only be imposed in 4% of environmental cases (in 2012) compared to 17.9% of all convicted.⁵⁰⁴ Also the levels of fines are reported to be low: in 2012 only 5.3% of all convicted for an environmental crime had to pay a severe fine which established officially a criminal record.⁵⁰⁵ Also the case study on Poland reports that the most important sanction is the fine.⁵⁰⁶ Sweden largely uses corporate fines, as it is reported that "usually the only sanction is the corporate (criminal) fine". Imprisonment will only be imposed in case of intent and if there is an aggravating nature causing substantial harm to the environment.⁵⁰⁷ The usually imposed corporate fine lies between \notin 550 and \notin 5,500.⁵⁰⁸ The sanctions for environmental crime are hence by practitioners considered to be not very serious when compared to sanctions for other types of crimes when the sanctions actually imposed in practice are considered.⁵⁰⁹

Similar opinions are reported in the United Kingdom: the vast majority of environmental offences that are taken to court are dealt with at a low level and are punished with relatively small fines (ranging from £ 1,979 to £2,730), which is far lower than the minimum fines generally applied by these courts (of $\pounds 5,000$).⁵¹⁰ 67% of all offenders would receive a fine; 18% a conditional discharge, 7% a community order, 3% a suspended sentence order and just over 2% an immediate custody.⁵¹¹ Prison sanctions would *de facto* only be applied in relation to waste management offences.⁵¹²

3.14.4 Effectiveness?

The little data available hence seem to indicate relatively low probabilities of detection, prosecution and sanctioning and, moreover, relatively low levels of penalties actually imposed. Given the relatively high gains that can be obtained through environmental violations one would hence expect that overall effectiveness of the criminal enforcement approach would be judged to be low. However, opinions rather differ on that point. For example in Germany some effectively cast doubt on the effectiveness of the criminal law approach.⁵¹³ Although there is equally empirical literature in Germany showing that criminal law does generate a deterrent effect.⁵¹⁴ The same feeling is expressed in the report on Poland: although the criminal law is rarely used, it is still considered to have a positive deterrent effect.⁵¹⁵

This finding corresponds with a general point, often made in the literature, being that it would be wrong to determine the effectiveness of the environmental enforcement approach, merely on the basis of data on low expected sanctions.⁵¹⁶ Given low expected sanctions the question could be asked why firms comply at all with environmental regulations, as at first sight a violation seems always profitable. This phenomenon has been referred to in the literature as the Harrington-paradox, following research by Winston Harrington, who established that given low expected sanctions one would expect more environmental criminality than can be observed in practice.⁵¹⁷ There are indeed many reasons why firms comply with

⁵⁰⁴Ibidem.

- ⁵⁰⁶Report on Poland, 8.
- ⁵⁰⁷Report on Sweden, 4 *in fine*.
- ⁵⁰⁸ Report on Sweden, 9 *in fine*.
- ⁵⁰⁹ Report on Sweden, 16.1.2.
- ⁵¹⁰ See report on UK, 8.1.

⁵¹³ Report on Germany, 8.

- ⁵¹⁵Report on Poland, 3.5.
- ⁵¹⁶ The low expected sanctions refer to the multiplier of a low probability of detection, prosecution and sanctioning and the magnitude of the sanction imposed.
- ⁵¹⁷ Jon D. Harford and Winston Harrington, "A reconsideration of enforcement leverage when penalties are restricted", *Journal of Public Economics* 45 (1991): 391 and see generally Winston Harrington, "Enforcement leverage when penalties are restricted: a reconsideration under asymmetric information", *Journal of Public Economics* 37 (1988): 289-290.

⁵⁰³Report on Germany, 8.

⁵⁰⁵Ibidem.

⁵¹¹ Report on UK, 8.5 *in fine*.

⁵¹² Report on UK, 8.3.

⁵¹⁴ See Report on Germany, 8, referring to the studies by Almer and Goeschl.

environmental regulation, notwithstanding the Harrington-paradox. One reason is that, as has also been indicated above,⁵¹⁸ there are many other possible remedies than merely prosecution before the court. In this respect the possibility for environmental agencies to impose administrative fines⁵¹⁹ has to be recalled. Second, there may be other costs beyond the mere sanctions imposed by the courts that could deter potential violators. In this respect one could for example refer to the mere fact that in cases of environmental prosecution, the captains of industry may be confronted with the unpleasant experience of having to appear in court for several days, which can constitute a real cost (loss of time and opportunity cost to them). Moreover, the mere fact of having to appear in court, and especially a criminal conviction, could lead to a "shaming" and thus to a loss of reputation for entrepreneurs.⁵²⁰ Third, it was already indicated that many violations are not committed by a rational, calculating offender who could be deterred with high environmental sanctions, but rather out of ignorance. Hence, this explains why, as has been indicated above, regulatory agencies sometimes opt for a cooperative approach, thus aiming to lead firms towards compliance. Fourth, firms may often not be aware of the low expected sanctions in reality. Rousseau found strong empirical backing for this phenomenon: when firms had to pay a monetary sanction during the two previous years they were on average more in violation in a second period than firms that did not have to pay a fine in the first period.⁵²¹ Rousseau notes that firms that are aware of the monetary restrictions are generally more likely to violate, implying that fears of sanctions may actually be more powerful than the sanction itself. The firms that did not have to pay a fine before, overestimated the expected fine and complied. Firms that were recently fined had a more accurate impression of true expected sanctions and, being aware that they were low, were not deterred any longer.

In sum, the mere fact of low expected sanctions should thus not necessarily lead to the conclusion that the environmental enforcement system is ineffective. However, the low probability of being prosecuted and sanctioned via the formal criminal enforcement system once more underscores the importance of having alternative systems in place, like the possibility to impose administrative fines in cases where environmental crime is not prosecuted through the courts.

3.15 Evaluation

The evaluation of the effectiveness of instruments, actors and institutions for preventing and addressing environmental crime in the countries studied has to an important extent already been provided when discussing the separate aspects in more detail. Moreover, when comparing the enforcement in practice to the regulatory level some shortcomings have already been indicated. Country reporters have moreover provided an assessment of the overall effectiveness of the environmental enforcement system in the country examined, often based on interviews with stakeholders. It is interesting to summarize some of the points mentioned in the country reports in that respect since, although there are differences between the countries, there seems again to be some convergence as well.

A difference can again be made, as indicated in the introduction, between the evaluation of the role of instruments, actors and institutions at the regulatory level on the one hand and at the practical enforcement level on the other.

3.15.1 Regulatory level

When first addressing the regulatory level there is, not surprisingly, large divergence between the countries. The satisfaction of respondents (and the corresponding suggestions for reform) of course relates very much to the legislative framework in the particular legal system. Overall there is less dissatisfaction with the regulatory level than, as will be indicated below, the enforcement level. Nevertheless, some legal

⁵¹⁸ See *supra* 3.10.

⁵¹⁹ See *supra* 3.13.

⁵²⁰ See generally John Braithwaite, *Crime, shame and reintegration* (Cambridge: Cambridge University Press, 1989).

⁵²¹ Sandra Rousseau, "The impact of sanctions and inspections on firms'environmental compliance decisions", Katholieke Universiteit Leuven, Centre for Economic Studies, working paper No. 2007-04.

systems report on shortcomings and corresponding desiderata for reform in the particular legal system. Examples constitute:

- Germany may consider introducing the criminal liability of legal entities.⁵²²

- German judges asked for a fundamental reform of German criminal law on the occasion of transposing the Environmental Crime Directive.⁵²³

- In the report on Poland, the fact that environmental crimes can be found in different acts is criticized; in the report on Italy criticisms are formulated on the stratification of and continuous changes in administrative environmental laws which leads to a lack of cohesion in light of the administrative dependence of most environmental crimes.⁵²⁴

- The report on Poland negatively assesses the fact that environmental crimes are spread in different sectorial acts.⁵²⁵ This corresponds to a criticism formulated in Spain in the hyper-typification of crimes in the Criminal Code which can lead to overlaps and problems of diverging terminology.⁵²⁶

- The report on Poland also refers to problems related to the concurrence of administrative and criminal liability,⁵²⁷ a problem that is equally mentioned in Spain.⁵²⁸

This brief overview hence shows that the comments with respect to the regulatory level are relatively limited. Most comments refer to cohesion in the legislation and simplification.⁵²⁹ Other problems such as for example the complaint concerning short statutes of limitations for environmental crime in Italy, refer to one particular legal system, but not to others.⁵³⁰

3.15.2 Enforcement level

As far as the enforcement level is concerned, many more concerns are formulated which moreover tend to all go in the same direction. Key elements for most reporters seem to be sufficient funding and specialisation. Many country reports indicate that too few resources are allocated to the monitoring and investigation of environmental crime, showing that apparently environmental crime gets low priority in the criminal enforcement chain. This problem of a lack of resources and funding is mentioned in almost all reports as a serious issue, whereby some add that especially given the recent financial crisis there have been more serious cutbacks and reduced support. The Spanish report repeatedly mentions a lack of investment in technical resources, administrative support and capacity building.

The issue of funding is related to the need of having both specialised prosecutors and specialised judges, which is equally mentioned in many reports. These two points (sufficient resources and specialisation) are crucially related to the dissuasiveness and effectiveness of the environmental enforcement system. This can easily be understood. If insufficient capacity is made available for e.g. pro-active monitoring detection rates are likely to fall, and if no specialised prosecutors or judges are available, there is a higher likelihood of dismissals or (wrongful) acquittals. Both phenomena lead to lower probabilities of prosecution and sanctioning and (in case of lacking capacity building of the judiciary) to low imposed fines. Specialisation, so it is often repeated, is necessary at all levels of the enforcement chain (pro-active monitoring by either police or administrative authorities, prosecutor and the judiciary) and will increase the effectiveness of the environmental enforcement system. For example, in the Spanish report it is clearly indicated that with the increasing specialisation of the police and the prosecution also the prosecution of environmental crime has increased.⁵³¹

⁵²²Report on Germany, 4 *in fine*.

⁵²³Report on Germany, 1.

⁵²⁴Report on Italy, 1.

⁵²⁵Report on Poland, 17.

⁵²⁶Report on Spain, 5.3.4.

⁵²⁷Report on Poland, 16 in fine.

⁵²⁸Report on Spain, 5.3.4.

⁵²⁹ Also in the Report on UK the comment was made that a simplification and review of relevant legislation would be in place.

⁵³⁰Report on Italy, 8.

⁵³¹ Report on Spain, p. 10.

Some other issues are mentioned that can increase effectiveness. The UK report refers to the importance of sentencing guidelines which could obviously inform both prosecutors and judges. The UK report also mentions the importance of the establishment of prosecutors' networks and the information exchange, especially concerning best practices.⁵³²

3.15.3 Results

Concluding, one can notice that there are far more complaints as far as the enforcement level are concerned than relating to the regulatory level. The complaints regarding lacking resources, capacity and specialisation are, as mentioned, to some extent causal to the low expected sanctions mentioned previously.⁵³³ In that sense there seems to be a lack of correlation between on the one hand the regulatory level where the legislator has created adequate instruments, actors and institutions (notwithstanding the possibility to also improve at that level), and the lack of implementation at the practical level. Translating the concerns of practitioners it hence seems as if the regulatory instruments have expanded but that, at least so it is argued, institutions have not been given sufficient resources to translate the ambitions of the legislator at the regulatory level equally at the enforcement level.

3.15.4 Towards smart enforcement

Data collection

To some extent, undoubtedly practitioners active in the enforcement chain may tend to complain about inadequate funding and the need for more resources and investments in capacity building. It is also not easy to, in the abstract, argue which amount of funding or resources would be considered adequate. The 'optimal' amount devoted to environmental crime enforcement (if it were at all possible to identify this) may well depend upon a lot of different criteria such as the industrialisation in a country, the 'compliance culture', etc. However, it may be important to indicate that first of all, also at this point, data collection can be of importance. Information for example on how much capacity (measured in full time equivalents) can be actually devoted to enforcement actions by police services, environmental inspectorates and prosecutors may provide information (also to the European level) about the adequacy of enforcement efforts. This type of data on input (in the enforcement chain) could be related for example to the number of installations that a particular agency would have to inspect (via proactive monitoring) and to the number of inspection activities that have taken place.⁵³⁴ Collecting this type of data could have several advantages. It would allow to evaluate the complaints from practitioners that investments in enforcement efforts are not adequately related to evolutions at the regulatory level. This data would also allow a (modest) inputoutput analysis by providing information on the inspection activities that have taken place given a particular input in capacity. Moreover, for the European level this data would have the advantage of comparability between the Member States and would allow the European level much better to adequately evaluate the efforts of the Member States with respect to the effective implementation of European environmental law. Such a data collection effort is obviously not easy, but some agencies have done so in the past, showing that this is not impossible.535

Information exchange

In addition, there may be several suggestions that could be formulated on increasing the effectiveness of enforcement efforts, even in times of limited budgets and resources. For example environmental networking and an exchange of information may be relatively low-cost ways of exchanging best practices.

⁵³² Report on UK, p. 92.

⁵³³ See *supra* 3.14.

⁵³⁴ Of course this would have to be related to the quality and importance of inspection activities. It may for example require two weeks to do an in-depth inspection of a large (Seveso classified) petrochemical plant, whereas an inspection of a medium-size printing company could be done in a few hours.

⁵³⁵ See in this respect more particularly the yearly environmental enforcement reports published by the Flemish High Council for Environmental Enforcement available at: www.vhrm.be.

The same is the case for the creation of guidelines, which could lead to more adequate (and at least harmonised) sanctioning and may also partially remedy information problems with (non-specialised) prosecutors or judges.

Targeting

Finally, the literature also pointed at the importance of efficient "targeting". Given the high costs of criminal prosecutions (and limited capacity), systems have been developed whereby environmental agencies and prosecutors focus their efforts on specific categories of polluters or violators to achieve better results.⁵³⁶ Arlen and Kraakman (1997) have suggested an enforcement strategy whereby firms are required to self-report a violation of pollution standards.⁵³⁷ Voluntary reporting would be rewarded with lenient treatment, whereas prosecutors would focus enforcement efforts on violations which are not self-reported.⁵³⁸ Given limited resources, an enforcement agency may hence engage in "regulatory dealing", using tolerance in some contexts and increasing compliance for other types of violations.⁵³⁹ Empirical evidence has also demonstrated the effectiveness of such a "smart" targeting strategy.⁵⁴⁰

This shows that it is hence important not only to plead for more resources and funding. Even though those calls may be completely justified there is, especially in times of crisis, the danger that they may simply not be effective. It is therefore equally important to examine "smart" enforcement strategies that allow (for example via targeting) a better use of smart resources, especially when funding is lacking.

4 Conclusions

In the present chapter, we present preliminary conclusions and recommendations; further research will build on these. This chapter is structured as follows: first, conclusions on the results of the "vertical" aggregation on instruments (4.1), actors and institutions (4.2) at international, European and national level will be provided; then, specific conclusions on the results of the aggregation of the country reports will be formulated (4.3).

In light of the key role played by national actors and institutions in the fight against environmental crime (see 4.1 and 4.2), the aggregation of the country reports provides the core conclusions of the research and will proceed as follows: first, a few limits of the approach will be repeated (4.3.1); then, a summary of the main conclusions will be provided (4.3.2) and attention will be given to the main points of divergence or convergence (4.3.3). The question will be asked which remaining aspects from the country reports could still be further analysed at a later stage (4.3.4) and what a possible way forward is based on the conclusions reached in the preliminary phase (4.3.5).

⁵³⁶ See for example Michael M. Stahl, "Doing what's important: setting priorities for environmental compliance and enforcement programmes", in *Compliance and enforcement in environmental law: towards more effective implementation*, ed. LeRoy Poddock et al. (Cheltenham: Edward Elgar, 2011), 159-166.

⁵³⁷ Jennifer Arlen and Reinier Kraakman, "Controlling corporate misconducts: an analysis of corporate liability regimes", *New York University Law Review* 72 (1997): 687-753.

⁵³⁸ However, self-reporting alone may not always guarantee effective compliance either. Recall the criticism by Swedish practitioners of a too light reliance on self-monitoring, which was insufficiently accompanied by monitoring by agencies. Self-reporting can hence never totally replace independent monitoring by public authorities.

⁵³⁹See Anthony Hayes and Neil Rickman, "Regulatory dealing –revisiting the Harrington Paradox", *Journal of Public Economics* 72 (1999): 361-366.

⁵⁴⁰ See Lana Friesen, "Targeting enforcement to improve compliance with environmental regulations", *Journal of Environmental Economics & Management* 46 (2003): 72-83 and Sandra Rousseau, "Timing of environmental inspections: survival of the compliant", *Journal of Regulatory Economics* 32 (2007): 17-31.

4.1 Instruments at EU and international levels

At international level, international Conferences never dealt specifically with the issue of environmental crime, but their aim to strengthen the compliance with environmental legislation is of indirect influence in the fight against environmental crime. "Soft law" instruments like the Guidelines on compliance with and enforcement of multilateral environmental agreements are interesting tools. The influence of such instruments depends of course on the voluntary adherence of States and international organisations such as the European Union and its Member States.⁵⁴¹ This responds to the logic that State Parties to international agreements are best situated to choose and determine useful approaches in the context of specific obligations contained in such agreements, since concrete policies and legal rules must be developed at the domestic level.⁵⁴²

MEAs rarely make reference to criminal obligations for the States. The BASEL and CITES Conventions are one of the few examples; however, their "criminal provisions" are "only a source of obligation, not a source of law" and have to be therefore implemented in domestic legislation to sanction environmentally harmful conduct.⁵⁴³ The international origin of these rules explains their difficulties in taking root in the domestic legal systems, where on most occasions criminal laws are dependent on relatively new administrative laws protecting the environment.⁵⁴⁴

Overall, efforts at international level to fight environmental crime "remain episodic and quite limited in scope", with initiatives aiming "to target particular forms of harm to the environment that often have a transnational element, without an overarching design";⁵⁴⁵ as it was stressed by the literature, this "paucity of international criminal environmental legislation" might be due, among other reasons, to the fact that in domestic legal systems "offenses against the environment are typically dealt with as regulatory violations that are included as discrete parts of environmental statutes rather than as central pieces of criminal codes. Even in relation to very specific and spectacular forms of pollution, criminal provisions tend to emerge retrospectively or ancillary to broader environmental legislation. Laws addressing environmental crimes are traditionally seen as an extension of public and administrative laws protecting the environment, rather than as a fully developed separate branch of criminal law".⁵⁴⁶

However, the research showed that at the international level and European level, both "hard law" and "soft law" instruments are of direct or indirect relevance in the fight against environmental crime.

The binding nature of hard law instruments might lead to identify them as the most effective instruments to assure environmental protection; nevertheless, the propulsive role of international soft law instruments should not be neglected in a double and complementary sense. These instruments have often given a decisive input to the development of international hard law instruments which have been either signed by the EU or, depending on cases, pushed the EU to enact normative instruments on the topics covered by the international agreements. At the same time, international soft law instruments have played a relevant role in raising awareness of the EU on the importance of environmental protection; therefore they have played a role in the creation of a European environmental policy and consequently, together with the international hard law instruments, on the enactment of EU legislation aimed at protecting the environment. Through this articulated path, the legal systems of the Member States have been impacted as well.

From a perspective *de iure condendo*, the role of soft law instruments should not therefore be underestimated.

It is also worth to underline the fact that the first initiative on approximation of environmental criminal law at the EU level finds its roots in the content of the Council of Europe Convention on the Protection of the Environment through Criminal Law; the similarity of the two sets of provisions should be also highlighted.

⁵⁴¹ See report International Environmental Law and Environmental Crime, 2.

⁵⁴² See report International Environmental Law and Environmental Crime, 2.

⁵⁴³ See report Analysis of International Legal Instruments, 1.

⁵⁴⁴ See report Analysis of International Legal Instruments, 1.

⁵⁴⁵ Mégret, "The Problem of an International Criminal Law of the Environment", 200.

⁵⁴⁶ Mégret, "The Problem of an International Criminal Law of the Environment", 200.

This shows a substantial convergence at the (international) regional level and EU level on the opportunity of introducing obligations of criminalisation in environmental matters, as well as concerning the content of such obligations.⁵⁴⁷

These considerations might be relevant, as the "need to protect the environment more effectively through a transversal and holistic approach" has been underlined by legal scholars and practitioners, who however do not disregard the importance to ensure that the existing monitoring and implementation mechanisms of existing European conventions receive sufficient funding.⁵⁴⁸ Furthermore, the adoption of Directive 2008/99/EC and Directive 2009/123/EC might give new input to the international community for the future development of international instruments on environmental crime.⁵⁴⁹

As it concerns organised environmental crime, environmental criminal law is only integrated to a very small extent into organised crime legislation at international, European and national level (with the exception, to some extent, of Italy). The Palermo Convention on Organised crime and the Council Framework Decision 2008/841/JHA on the fight against organised crime do not deal directly with the phenomenon of organised environmental crime. The possibility of according relevance to the latter in light of the concept of serious crime used in both instruments might be hampered by the fact that most States Parties of the Convention and EU Member States do not provide maximum penalties of at least 4 years imprisonment for environmental crimes as on the contrary is required by both instruments for the crime to be "serious".

The solution to the lack of consideration of the phenomenon of organised environmental crime by the above mentioned instruments might lay in the approximation of sanctions at the EU level (see below).

The protection of the environment is one of the areas in which approximation measures can be adopted, on the basis of Art. 83 TFEU.550 Directive 2008/99/EC and Directive 2009/123/EC did not include any indication concerning the type and the measure of the sanctions to be introduced, providing only that Member States shall take the necessary measures to ensure that the offences are punishable "by effective, proportionate and dissuasive criminal penalties". The approximation of the type and level of the criminal sanctions is now permitted on the basis of Art. 83 (2) TFEU: on the one hand, the environment is a legal interest of supranational importance, and, on the other hand, it has been subject to several interventions of harmonisation.⁵⁵¹ Furthermore, Art. 83 (1) TFEU could permit the introduction of specific criminal provisions in order to target environmental crimes committed by or with the involvement of criminal organisations.⁵⁵² Art. 83 TFEU might therefore have an important impact on the protection of the environment at EU level.⁵⁵³ Moreover, if, following an evaluation undertaken in conformity with the principles which should guide the choices of criminalisation⁵⁵⁴ (e.g. proportion) a maximum of at least three years imprisonment will be foreseen for (at least certain) environmental crimes, mutual assistance instruments could be used, which might strengthen the tools against environmental crimes which are often transnational in nature.⁵⁵⁵ In addition the provision of a maximum of at least four years imprisonment for the most serious environmental crimes would let these crimes to fall under the scope of the Council Framework Decision 2008/841/JHA of 24 October 2008 on the fight against organised crime⁵⁵⁶ (as well as, at international level, within the concept of "serious crime" as it is spelled in the United Nations Convention Against Transnational Organised crime).

However, it should not be underestimated that the enactment, on the basis of Article 83 TFEU, of a further approximation instrument concerning the type and level of the criminal penalties for the conduct listed by

⁵⁴⁷ See report Directive 2008/99/EC and Directive 2009/123/EC, 4.

⁵⁴⁸ Marquet, Speaking notes at the UNICRI-UNEP Conference on Environmental Crime - Current and Emerging Threats held in Rome on 29-30 October 2012.

⁵⁴⁹ See report Directive 2008/99/EC and Directive 2009/123/EC, 4. See Marquet, Speaking notes at the UNICRI-UNEP Conference on Environmental Crime - Current and Emerging Threats held in Rome on 29-30 October 2012.

⁵⁵⁰ See report Articles 82-86 TFEU, 2.2.3.

⁵⁵¹ See report Directive 2008/99/EC and Directive 2009/123/EC, 5; report Articles 82-86 TFEU, 2.2.

⁵⁵² See Krämer, *EU Environmental Law*, 413; Vagliasindi, "La direttiva 2008/99/CE", 474 ff.

⁵⁵³ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

⁵⁵⁴ On these principles see "The Manifesto on European Criminal Policy", 707 ff..

⁵⁵⁵ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

⁵⁵⁶ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

Directive 2008/99/EC as well as aggravating circumstances for environmental crimes committed within or with the involvement of criminal organisations, might incur in several obstacles.⁵⁵⁷

First of all, criminal law is still perceived as a core element of national sovereignty. In fact, the approximation of sanctions for environmental crime (e.g. establishing minimum level of maximum criminal penalties) would in any case be adopted in the form of a directive, as such needing the intervention of national legislator and not being of direct effect. Nonetheless a further EU intervention imposing member States to limit their freedom in assessing the gravity of a criminal behaviour (also in comparison to the overall choices on penalties for crimes different from the ones considered by the eventual approximation instrument) might be perceived as a violation of the national prerogatives; this particularly in those country, like Germany, whose institutions clearly stressed that criminal law ultimately remains a core domain of the Member States⁵⁵⁸ at the time of implementation of Directive 2008/99/EC.⁵⁵⁹

Furthermore, the harmonisation of criminal sanctions for environmental crimes might certainly produce a positive impact in countries, like Italy, where the characteristics of provisions on environmental crimes (e.g. being misdemeanours) often produce a negative effect on the judicial enforcement of those provisions in light of overall feature of the criminal law system (e.g. short prescriptive periods),⁵⁶⁰ causing lack of effectiveness in environmental protection. However, in other countries, like Germany - where a well developed environmental culture together with a good level of enforcement of administrative environmental provisions⁵⁶¹ and an overall criminal justice system assuring the effectiveness of the application of criminal sanctions to the perpetrators of the offences lead to see as questionable the use of high criminal penalties for environmental crimes⁵⁶² - might be perceived as lacking of utility and therefore difficultly agreed upon.⁵⁶³

Further interventions at the EU level might be needed, although it is still questionable, also in light of the overall characteristics of each Member States legal system, whether this would be the most advisable solution or, on the contrary, whether is through a better structuring of environmental criminal provisions, the enhancement of enforcement tools and a better coordination with administrative and civil sanctions that the fight against environmental crime would become more effective.

4.2 Actors and institutions at EU and international levels

In combating environmental crime, various actors and institutions are involved at various stages and levels. They create instruments to combat environmental crime and are in charge of using these instruments.

Actors and institutions at national level play a key role in combatting environmental crime. In particular, they are mainly responsible for the implementation and enforcement of rules against environmental crime created at the national, EU and international level. In this respect, they are supported by actors and institutions at the EU and international level which thus assume a complementary role. NGOs and networks also contribute to combating environmental criminal law, albeit at all governance levels (national, EU and international) and, in the case of networks, also across these levels.

The variety of actors and institutions involved in combating environmental crime at the different levels renders the value of cooperation and coordination quite obvious. It is not only necessary in cases when environmental crime crosses borders, leaving a single country's jurisdiction, but also essential within a country, especially if different authorities have the central competence on the one hand and the expertise and technical knowledge on the other hand to investigate environmental crime. Of particular importance are networks, the very essence of which is cooperation and coordination. The main benefits of cooperation through environmental enforcement networks include the establishment and intensification of contacts between professionals and practitioners on the strategic, technical and operational level, operational aspects and the sharing of best practices. Cooperation is also crucial in order to reach a level playing field with organised crime.

⁵⁵⁷ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

⁵⁵⁸ See in particular the judgment of the Federal Constitutional Court of 30 June 2009, BVerfGE 123, 267. ⁵⁵⁹ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

⁵⁶⁰ See Report on Italy, 3.

⁵⁶¹ See Report on Germany, 13-14.

⁵⁶² With regard to the Scandinavian countries see Pirjatanniemi, "Desperately Seeking Reason", 409 ff.

⁵⁶² See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

⁵⁶³ See report Directive 2008/99/EC and Directive 2009/123/EC, 5.

There are various examples of successful performances of actors and institutions including networks in combating environmental crime, reaching from examples of using specialised knowledge with the prosecuting agency and the courts at the national level to the performance of UNODC at the international level that has managed to become a key actor in the architecture of networks coordinating actions and cooperation among international organizations, agencies and NGOs. However, there is a general concern that resources and adequate training is lacking. Partly related to the lack of resources is the lack of political will of national governments, but also to some extent of European institutions, to give priority to the fight against environmental crime. Judicial and police cooperation also appears to be hampered by the limited ability of national law enforcement authorities to recognize what constitutes environmental crime at the European and international level, due not only to a lack of adequate training but also to the lack of unambiguous definitions at these levels.

Finally, the role and the capacity of a certain actor or institution to efficiently contribute to fighting environmental crime largely depend on its mandate. This may evolve, as in the case of Eurojust. While the cooperation structures that Eurojust and Europol developed have been taken as an example to follow world-wide by the Digest of Organised Crime of UNODC, both are still dependent on the good will of the competent national authorities. However, the Lisbon Treaty has improved the competences of Eurojust by envisaging its competence to initiate investigations and to coordinate investigations and prosecutions, both competences that could be interpreted as implying that Eurojust can take binding decisions to be respected by national competent authorities. Such binding powers would allow Eurojust to evolve "from a player at horizontal cooperation level to a player at vertical integration level".⁵⁶⁴ This potential evolution of Eurojust's mandate gives an example how the EU may enhance the capacity of European actors and institutions including networks to efficiently contribute to fighting environmental law.

4.3 Instruments, actors and institutions at national level

The above summary of studies on seven different Member States of the EU has yielded the following tentative results, taking due account of the limits of the research that have been specified above in section 3.1.

It should be noted that some other factors influencing the effectiveness of an environmental enforcement system have equally been discussed in some of the country reports but are not analyzed in depth in this report; they are issues for further research. They include *inter alia*:

- The role of environmental liability in relation to environmental crime;
- The possibility for third parties (more particularly NGOs and victims) to either bring criminal charges themselves or to join the prosecution by the prosecutor;
- The question whether cross-border environmental crime leads to particular questions;
- The cooperation/networking and generally division of labour between the various institutions involved in the environmental enforcement chain.⁵⁶⁵

4.3.1 Instruments

- The mere fact that different countries have chosen different ways of regulating environmental crimes (Criminal Code, Environmental Code, sectorial laws) does not necessarily matter for the quality of environmental legislation, since those differences may be attributed to differing legal cultures.

⁵⁶⁴ Report Articles 82-86 TFEU, 3.3.2.

⁵⁶⁵ Some of those aspects have been briefly touched upon when discussing interrelationships between administrative and criminal enforcement *supra* in 3.9, 3.10, 3.12 and 3.13, but more generally the question could be asked whether either horizontal or vertical networks have been created and how they contribute to the effectiveness of the enforcement system.

- However, to the extent that incorporation of environmental crimes in different laws leads to fragmentation, uncertainty and overlap there is a problem that may need to be cured by further streamlining of the legislation in the particular country.

- Many countries punish, in different ways, the abstract and concrete endangerment of the environment; only truly autonomous crimes are missing in some countries. Their incorporation could be considered.

- The proportionality of maximum sanctions in legislation (in relation to the protected interest) has to be carefully considered. Divergences may exist within particular countries, but especially between the different countries examined. The main sanctions imposed seem to be generally low and diverging both within and between countries. Providing (non-binding) guidelines to inform prosecutors and judges may be considered. The introduction of complementary sanctions (aiming at restoration of harm done in the past or prevention of future harm) could be considered in those legal systems which would still lack those sanctions. The same is the case for sanctions aiming at additional deterrence (publication of the judgment and forfeiture of illegal gains). However, these should not necessarily be imposed as formal sanctions through the criminal court, but may be imposed via other mechanisms (conditions for dismissal by the prosecutor, plea bargaining, administrative measures) as well.

4.3.2 Actors

- There should be a corporate liability for environmental crime, but for its effectiveness it may not matter that much which precise form (criminal or administrative liability) is chosen. It is preferable to introduce corporate liability for all crimes (instead of only for a *numerus clausus*) in order to avoid that particular environmental crimes would not lead to corporate liability. There should be the possibility to cumulate corporate liability with the liability of natural persons to whom the environmental crime can equally be attributed.

- There is no clear link in most legislative systems (except Italy) between legislation on organised crime and environmental crime.

- Most legal systems (with the exception of Spain) do not have specific rules concerning the involvement of public servants in environmental crime. There may also not be any reason for further legislative action in this domain, given the relatively small relevance of this issue in practice (and the potential danger) of so-called chilling effects.

4.3.3 Institutions

- It is important to provide possibilities of proactive monitoring of environmental crime. Given the technical capacity required to detect environmental crime, specialisation in environmental matters is required. This can either take place at the police force or via specialised administrative inspection authorities.

- It is recommendable to grant post-detection discretion to either administrative agencies or the public prosecutor in order to avoid the necessity to bring formal enforcement actions for every violation that has been detected.

- A specialisation of both prosecutors and courts (in different possible forms) is also recommendable. Interesting examples in that respect constitute the group of special environmental prosecutors in Sweden and the possibility (equally in Sweden) to have technical experts participating in the (criminal) court.

- The UK model of allowing public authorities to directly bring criminal charges has the advantage that specialised knowledge with the prosecuting agency is available; it may, however, be difficult to implement such a radical reform among all EU Member States since this would deviate from the practice is most Member States where the right to bring criminal charges is awarded to the public prosecutor.

- It is important to provide for remedies that can be imposed rapidly aiming at restoration of harm done or prevention of future harm, including via administrative measures or sanctions. Those measures could be effectively enforced through a day fine or penalty payment-system, forcing the perpetrator to pay a specified amount during the time that the imposed obligations have not been fulfilled.⁵⁶⁶ It is, however,

⁵⁶⁶Such a model can be found in various legal systems, inter alia in France.

important to clearly distinguish the administrative from the criminal sanctioning system in order to avoid uncertainties or confusion resulting from potential overlaps.

- It is desirable, as is equally the trend in many of the legal systems examined recently, to provide a possibility to administrative agencies to impose financial penalties (fines) for minor environmental offences. This sanction can create additional deterrence and the value and importance of this sanction could equally be recognised in the European legislation. If it may be necessary (more particularly if other mechanisms guaranteeing accountability and transparency of agency decisions would be lacking) to have the imposition of the administrative fine verified by the public prosecutor (like in France).

General

- It may in some instances be desirable to formulate guidelines either to prosecutors and/or to the judiciary indicating appropriate sanction levels for particular crimes. Similar guidelines could be developed for administrative authorities imposing administrative fines as well.

- It may be recommendable to develop a data collection system providing information on the input of efforts in monitoring by the enforcement chain. Data to be collected could refer to the number of inspections, number of offences detected, number of administrative fines imposed, cases prosecuted (or otherwise handled by the public prosecutors), decisions taken by criminal courts and sanctions imposed. It may be indicated to examine whether it is possible at EU level to develop a common regime with harmonised parameters (definitions) aiming at such a data collection.

4.3.4 Convergence or divergence?

The discussion of the various issues related to instruments, actors and institutions made clear that in particular domains similarities between the legal systems could be discovered, whereas in others more differences could be established.

There was an apparent convergence as far as the treatment of actors involved in environmental crime is concerned: most regimes have some form of corporate liability, although the precise legal form may differ (criminal or administrative liability). That technical-legal difference may, however, not have important consequences in practice. As far as the specific implementation of corporate liability is concerned, there was, however, divergence (for example concerning the question whether corporate liability applies to all crimes or only to a *numerus clausus*, whether corporate liability is autonomous or deducted from acts committed by the senior corporate management). Convergence also existed (with only the exception of Italy) on the fact that organised crime did not necessitate specific rules for environmental crime and with respect to the necessity to have specific rules for civil servants contributing to environmental crime (again with one exception, Spain).

The greatest amount of divergence between legal systems probably exists as far as the institutions combating environmental crime are concerned. This already concerns the important question of who has the competence to initiate proceedings or to engage in proactive monitoring. Some legal systems largely rely on specialised administrative inspection authorities; others rather on specialised forces within the police; others take a more mixed approach. This has *inter alia* consequences for a stronger focus of the particular legal system on administrative or criminal law enforcement. Divergence was also visible as far as the role of the public prosecutor is concerned. In some cases inspection authorities who have discovered environmental crime are obliged to report this to the prosecutor; in others not. Divergence, at least on paper, also exists as far as the role of the prosecutor is concerned: in five legal systems (following the principle of legality) prosecution is in principle obliged, whereas in two others the opportunity principle was followed. However, that may be rather a dogmatic distinction than having real importance in practice. Also systems following the legality principle do allow prosecutors to abstain from prosecution in a wide variety of cases. An important source of divergence also relates to the fact that in some legal systems public prosecutors are specialised in environmental cases whereas in others this is not the case. Divergence also existed concerning the role of administrative authorities and more particularly their possibility to impose administrative sanctions and more particularly administrative fines. There seems, however, to be a tendency towards an increasing introduction of the possibility for administrative authorities to equally impose financial penalties.

The regulatory level shows a rather mixed picture. In the countries studied, there is divergence in the sense that some countries have incorporated environmental crimes in a criminal code or environmental code whereas others (still) have environmental crimes in sectorial fragmented legislation. That may not be a major issue, even though the fragmented legislation was reported to give rise to problems of overlaps and inconsistencies. There is, however, more convergence with respect to substantive criminal law, at least as far as abstract endangerment and concrete endangerment crimes are concerned. This is to some extent no surprise since those have of course been the main subject of the harmonisation efforts of the EU. As far as penalties are concerned, there seems⁵⁶⁷ to be rather divergence, both with respect to the maximum statutory penalties and to the possibility to impose complementary sanctions.

These findings concerning the relatively large degree of divergence concerning some crucial aspects (more particularly related to the institutions) may of course have consequences at the policy level, more particularly concerning the question to what extent the current Environmental Crime Directives (largely focusing on substantive environmental criminal law) can bring a harmonisation and cure the implementation deficit.

4.3.5 The way forward

This comparative assessment has attempted to highlight a few issues which, taking into account academic literature and the country reports, could be considered as a best practice. Other aspects have been briefly touched upon and may hence be further refined future research are *inter alia*:

- The policy consequences that should be drawn from the fact that notwithstanding the harmonisation of substantive environmental criminal law through the recent directives substantial divergence still exists. The question arises to what extent this divergence (more particularly at the institutional level) may lead to real differences in the countries as far as the enforcement of environmental law, more particularly of legislation implementing European environmental directives is concerned.

- Related to this is undoubtedly the question to what extent it is necessary/desirable/possible to harmonise those institutional aspects as well with a view on curing the implementation deficit. The question could even be asked whether differences in enforcement level are not only related to the regulatory level (at which harmonisation efforts were largely focused so far) but also at the enforcement level. The practical enforcement of environmental law may to a large extent be dependent upon the resources and capacity devoted for example to specialised police and inspection forces.⁵⁶⁸

This equally merits the question to what extent it is necessary/desirable/possible to acquire, as indicated above, more data in order to evaluate the enforcement level in practice. To the extent that the question of data collection would be answered in the affirmative, a further step would be to analyse whether it would be possible to develop a harmonised (e.g. with common definitions) system of data collection with respect to the enforcement of environmental crime.

⁵⁶⁷ This is formulated with caution as there has not been a detailed analysis of statutory penalty levels between the different countries.

⁵⁶⁸ As has been stressed repeatedly in the country reports and summarised in the evaluation, *supra* 3.15.

5 Bibliography

Ambos, Kai. Internationales Strafrecht. München: Verlag C.H. Beck, 2011.

Arlen, Jennifer, and Reinier Kraakman. "Controlling corporate misconducts: an analysis of corporate liability regimes". *New York University Law Review* (1997): 687-753.

Ayres, Ian, and John Braithwaite. *Responsive regulation: transcending the regulation debate*. New York: Oxford University Press, 1992.

Bardach, Eugène, and Robert A Kagan. *Going by the book: the problem of regulatory unreasonableness*. Philadelphia: Temple University Press, 1982.

Biermann, Brigitte. "Umwelt." in *Handbuch Governance: Theoretische Grundlagen und empirische Anwendungsfelder*, ed. by Arthur Benz et al., 424–437. Wiesbaden: Westdeutscher Verlag, 2007.

Bowles, Roger, Michael Faure, and Nuno Garoupa. "The scope of criminal law and criminal sanctions: an economic view and policy implications". *Journal of Law and Society* (2008): 389-416.

Braithwaite, John. Crime, shame and reintegration. Cambridge: Cambridge University Press, 1989.

Clifford, Mary and Terry D. Edwards, "Defining 'Environmental Crime'", in *Environmental Crime: Enforcement, Policy, and Social Responsibility*, edited by Mary Clifford, 6, Burlington: Jones & Bartlett Learning, 1998.

Collantes, Jorge Luis. "The Convention on the Protection of the Environment through Criminal law: Legislative Obligations for the States", available at http://huespedes.cica.es/gimadus/collantes.html.

De Nauw, Alain. Les metamorphoses administratives du droit pénal de l'entreprise. Ghent: Mys&Breesch, 1994.

Esser, Robert. "Nuclear Accidents: Human Rights Challenges in Criminal Proceedings". *European Energy* and Environmental Law Review (June 2013): 86-100.

Faure, Michael. "Towards a New Model of Criminalization of Environmental Pollution: The case of Indonesia". In *Environmental Law in Development. Lessons from the Indonesian Experience*, edited by Michael Faure and Nicole Niessen, 188-217. Cheltenham: Edward Elgar, 2006.

Faure, Michael and Susan F. Mandiberg. "A Graduated Punishment Approach to Environmental Crimes: Beyond vindication of administrative authority in the United States and Europe". *Columbia Journal of Environmental Law* 34 (2009): 447-511.

Faure, Michael. "Effective proportional and dissuasive penalties in the implementation of the environmental crime and ship source pollution directives: questions and challenges". *European Energy and Environmental Law Review* (2010): 256-278.

Faure, Michael. "Effectiveness of Environmental Law: What does the evidence tell us?". *William & Mary Environmental Law & Policy Review* 36 (2012): 293-336.

Firestone, Jeremy. "Enforcement of pollution laws and regulations: an analysis of foreign choice". *Harvard Environmental Law Review* (2003): 105-132.

Fitzmaurice, Malgosia, and Jill Marshall. "The Human Right to a Clean Environment-Phantom or Reality? The European Court of Human Rights and English Courts Perspective on Balancing Rights in Environmental Case". *Nordic Journal of International Law* 76 (2007): 103-151.

Friesen, Lana. "Targeting enforcement to improve compliance with environmental regulations". *Journal of Environmental Economics & Management* (2003): 72-83.

Garcia San José, Daniel. *Environmental Protection and the European Convention on Human Rights*. Strasbourg: Council of Europe, 2005.

Gehring, Thomas, and Sebastian Oberthür. "The Causal Mechanisms of Interaction between International Institutions". *European Journal of International Relations* (2009): 125-156.

Gibbs, Carole and Sally Simpson, "Measuring Corporate Environmental Crime Rates: Progress and Problems", *Crime, Law and Social Change* 51, no. 1 (2009).

Grasso, Giovanni. "Relazione Introduttiva". In *Per un rilancio del progetto europeo. Esigenze di tutela degli interessi comunitari e nuove strategie di integrazione penale*, edited Giovanni Grasso, Rosaria Sicurella, 1-49. Milan: Giuffrè, 2008.

Gunningham, Neil, and Peter Grabosky. *Smart regulation: designing environmental policy*. Oxford: Clarendon Press, 1998.

Harford, Jon D., and Winston Harrington. "A reconsideration of enforcement leverage when penalties are restricted". *Journal of Public Economics* (1991): 391-395.

Harrington, Winston. "Enforcement leverage when penalties are restricted: a reconsideration under asymmetric information". *Journal of Public Economics* 37 (1988): 289-290.

Hawkins, Keith. *Environment and enforcement. Regulation and the social definition of pollution*. Oxford: Clarendon Press, 1984.

Hayes, Anthony, and Neil Rickman. "Regulatory dealing-revisiting the Harrington Paradox". *Journal of Public Economics* 72 (1999): 361-366.

Heine, Günter. "Allemagne. Crimes against the environment". *Revue Internationale de Droit Pénal*, 65 (1994): 731-759.

Heine, Günter. Die strafrechtlichen Verantwordlichkeit von Unternehmen, von individuellen Fehlverhalten zu kollektiven Fehlentwicklungen, insbesonderem bei Großrisiken. Baden-Baden: Nomos, 1995.

Heine, Günter. "Criminal Liability of Enterprises and new Risks. International developments – national consequences". *Maastricht Journal of European and Comparative Law* (1995): 107-128.

Herlin-Karnell, Ester. "EU Criminal Law Relocated. Recent Developments". Uppsala Faculty of Law Working paper (2011): 4-23, available at http://uu.diva-portal.org.

Hey, Christian. "EU Environmental Policies: A short history of the policy strategies". In *EU Environmental Policy Handbook*, edited by European Environmental Bureau, 18. Brussels: 2005, available at http://www.eeb.org/publication/chapter-3.pdf.

Huisman, Wim. *Tussen winst en moraal. Achtergronden van regelnaleving en regelovertreding door ondernemingen.* Den Haag: Boom Juridische uitgevers, 2001.

Huisman, Wim, and Henk G van de Bunt. "Sancties, organisatie criminaliteit en milieudelicten". *Ars Aequi* (1997): 684-697.

Krämer, Ludwig. EU Environmental Law. London: Sweet and Maxwell, 2012.

Loewen, Howard. "Towards a Dynamic Model of the Interplay Between International Institutions," *GIGA*WorkingPapers17(2006), availableathttp://www.giga-hamburg.de/de/system/files/publications/wp17_loewen.pdf.

Macrory, Richard B. *Regulatory justice: making sanctions effective. Final report.* London: Cabinet Office, Regulation Executive, 2006.

May, Peter J., and Søren Winter. "Regulatory enforcement and compliance: examining the Danish Agro-Environmental Policy". *Journal of Policy Analysis and Management* 18 (1999): 625-651.

Mégret, Frédéric. "The Problem of an International Criminal Law of the Environment". *Columbia Journal of Environmental Law* 35 (2010): 195-257.

Meinberg, Volker. "Empirische ErkenntnissezumVollzug des Umweltstrafrechts". Zeitschriftfür die gesamte Strafrechtswissenschaften 100 (1998): 112-157.

Mitsilegas, Valsamis. "From National to global – from empirical to legal: the ambivalent concept of transnational organised crime". In *Critical Reflections on the Concept of Transnational Organised Crime*, edited by Margaret E. Beare, 55-87.Toronto: University of Toronto Press, 2003.

Mitsilegas, Valsamis. "The Council Framework Decision on the Fight against Organised Crime: What can be done to strengthen EU legislation in the field? Note", 2011, available at http://www.europarl.europa.eu/document/activities/cont/201206/20120627ATT47779/20120627ATT 47779EN.pdf.

Mützel, Sophie. "Networks as Culturally Constituted Processes: A Comparison of Relational Sociology and Actor-network Theory". *Current Sociology* 57 (2009): 871-887.

Ogus, Anthony. Costs and cautionary tales: economic insights for the law. Oxford: Hart Publishing, 2006.

Ogus, Antony, and Carolyn Abbot. "Sanctions for pollution: do we have the right regime?". *Journal of Environmental Law* 13 (2002): 283-298.

Pink, Grant William. *Environmental Enforcement Networks: A Qualitative Analysis.* Australia: Charles Sturt University, 2010.

Pirjatanniemi, Elina. "Desperately Seeking Reason - New Directions for European Environmental Criminal Law", *Scandinavian Studies in Law* 54 (2009) 409-430.

Robert, J.H. "Le problème de la responsabilité et des sanctions pénales en matière d'environnement". *Revue Internationale de Droit Pénal* 65 (1994): 954-955.

Rousseau, Sandra. "The impact of sanctions and inspections on firms' environmental compliance decisions", Katholieke Universiteit Leuven, Centre for Economic Studies, working paper No. 2007-04.

Rousseau, Sandra. "Timing of environmental inspections: survival of the compliant". *Journal of Regulatory Economics* 32 (2007): 17-31.

Scalia Valeria. Profili penalistici e obblighi di tutela nella giurisprudenza della Camera dei diritti dell'uomo per la Bosnia e l'Erzegovina. Torino: Giappichelli, 2009.

Schäfer, Hans-Bernd. "The bundling of similar interests in litigation. The incentives for class actions and legal actions taken by associations". *European Journal of Law and Economics* 9 (2000): 183-213.

Sicurella, Rosaria. "'Eppur si muove!': alla ricerca di un nuovo equilibrio nella dialettica tra legislatore comunitario e legislatore nazionale per la tutela degli interessi dell'Unione europea". In *Per un rilancio del*

progetto europeo. Esigenze di tutela degli interessi comunitari e nuove strategie di integrazione penale, edited by Giovanni Grasso and Rosaria Sicurella, 191-284. Milan: Giuffrè, 2008.

Slaughter, Anne-Marie. "Disaggregated Sovereignty: Towards the Public Accountability of Global Government Networks". *Government and Opposition* (2004): 159–190.

Stahl, Michael M. "Doing what's important: setting priorities for environmental compliance and enforcement programmes". In *Compliance and enforcement in environmental law: towards more effective implementation*, edited by LeRoy Poddock et al., 159-166. Cheltenham: Edward Elgar, 2011.

van Drooghenbroeck, Sébastien. La proportionalité dans le droit de la Convention européenne des droits de l'homme – Prendre l'idée simple au sérieux. Bruxelles: Bruylant, 2001.

Vagliasindi, Grazia Maria. "La direttiva 2008/99/CE e il Trattato di Lisbona: verso un nuovo volto del diritto penale ambientale italiano", *Diritto del Commercio internazionale* (2010): 449-492.

Vagliasindi, Grazia Maria. "Obblighi di penalizzazione di fonte europea e principi di politica criminale: le indicazioni promananti dalla materia ambientale". In *L'evoluzione del diritto penale nei settori d'interesse europeo alla luce del Trattato di Lisbona*, edited by Giovanni Grasso, Lorenzo Picotti and Rosaria Sicurella, 133-170. Milan: Giuffrè, 2011.

Vagliasindi, Grazia Maria. "The European harmonisation in the sector of protection of the environment through criminal law: the results achieved and further needs for intervention". *The New Journal of European Criminal Law* (2012): 320-331.

Annex I - List of EFFACE Reports

1) International Environmental Law and Environmental Crime: An Introduction, Teresa Fajardo del Castillo (University of Granada).

2) Analysis of International Legal Instruments Relevant to Fighting Environmental Crime, Valsamis Mitsilegas, Malgosia Fitzmaurice and Elena Fasoli (Queen Mary University of London) and Teresa Fajardo del Castillo (University of Granada).

3) Organised Crime and Environmental Crime: Analysis of International Legal Instruments, Teresa Fajardo del Castillo (University of Granada).

4) *The European Court of Human Rights and Environmental Crime*, Valeria Scalia (University of Catania).

5) *EU Environmental Law and Environmental Crime: An Introduction*, Teresa Fajardo del Castillo (University of Granada).

6) Articles 82-86 of the Treaty on the Functioning of the European Union and Environmental Crime, Giovanni Grasso, Rosaria Sicurella and Valeria Scalia (University of Catania).

7) Directive 2008/99/EC on Environmental Crime and Directive 2009/123/EC on Ship-source Pollution, Grazia Maria Vagliasindi (University of Catania).

8) Directive 2004/35/EC on Environmental Liability, Ugo Salanitro (University of Catania).

9) Organised Crime and Environmental Crime: Analysis of EU Legal Instruments, Teresa Fajardo del Castillo (University of Granada).

10) *Actors and Institutions Relevant to Fighting Environmental Crime*, Shirleen Chin Sing Joo and Wouter Justus Veening (Institute for Environmental Security).

11) *Networks and NGOs Relevant to Fighting Environmental Crime*, Lucy Olivia Smith and Katharina Klaas (Ecologic Institute).

12) *Fighting Environmental Crime in France: A Country Report,* Floriana Bianco, Annalisa Lucifora and Grazia Maria Vagliasindi (University of Catania).

13) Fighting Environmental Crime in Germany: A Country Report, Stephan Sina (Ecologic Institute).

14) *Fighting Environmental Crime in Italy: A Country Report,* Annalisa Lucifora, Floriana Bianco and Grazia Maria Vagliasindi (University of Catania).

15) *Fighting Environmental Crime in Poland: A Country Report*, Valsamis Mitsilegas, Malgosia Fitzmaurice and Elena Fasoli (Queen Mary University of London).

16) *Fighting Environmental Crime in Spain: A Country Report*, Teresa Fajardo del Castillo (University of Granada), Juan Fuentes Osorio (University of Jaen), Inmaculada Ramos Tapia (University of Granada) and Jesús Verdú Baeza (University of Cádiz).

17) *Fighting Environmental Crime in Sweden: A Country Report*, Niels Philipsen and Michael Faure (Maastricht University, METRO).

18) *Fighting Environmental Crime in the UK: A Country Report*, Valsamis Mitsilegas, Malgosia Fitzmaurice and Elena Fasoli (Queen Mary University of London).

