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# The Impact of EU Criminal Law Policy on the Prevention of Transnational Environmental Crime

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## Abstract

The aim of the study is to analyse the EU's existing and potential capabilities in criminal law policy to prevent transnational environmental crimes. The study uses statistical analysis, formal legal, comparative legal and descriptive methods. As a result of the work carried out, it was found that today, Ukraine requires special attention in terms of the scale of transnational environmental crimes. About 2,500 environmental crimes committed by Russian companies were recorded in the country. In this regard, the author's in-depth analysis of the current legislative documents related to transnational environmental crimes provides valuable insights. It is determined that changes in the criminal law policy of the European Union may improve the situation with transnational environmental crime. At the same time, the author considers the prospects for further improvement of criminal law policy, including introducing the concept of "ecocide" into the Rome Statute. The author notes the European Union countries' best practices in preventing environmental crimes using criminal law instruments and the SIENA platform's effectiveness in exchanging information on environmental crimes between countries. The findings of this work can be applied in developing mechanisms for the prevention of transnational environmental crimes.

**Keywords**: criminal law policy, transnational environmental crimes, ecocide, Rome Statute, war in Ukraine, European Union, crime prevention

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#### Introduction

The number of environmental crimes is growing by 5-7 per cent every year, which is two to three times higher than the growth rate of the global economy. This fact and the overall environmental degradation have led to increased attention to environmental issues and the need to revise existing environmental policies (Litvak, 2014; Litvak & Litvak, 2020; Anisimova et al., 2021). The adoption of the European Green Deal and the replacement of Directive 2008/99/EN are examples of recent changes.

In general, the environmental policy of the European Union (EU) focuses on the implementation of joint international measures to address both regional and global environmental problems (Cherniavskyi et al., 2019; Tymoshenko et al., 2022). Environmental policy is regulated in the EU at the supranational level, subject to certain limitations related to the principle of subsidiarity. The EU legislation in the field of environmental policy is quite extensive and includes many legislative acts. The adoption of the European Green Deal in 2019 has received the most attention to date. In 2021, the European Climate Law and the Fit for 55 legislative package came into force.

The international prevention of environmental crime involves UN conventional bodies and organisations and other regional and international intergovernmental organisations. At the European level, this includes all regulatory and legislative bodies, including the Commission, Parliament and Council, and courts and agencies, including Europol, Eurojust, etc. In addition, various regulatory and administrative bodies, prosecutors, courts, customs, police, and civil society organisations are involved nationally (Colantoni & Bianchi, 2020).

Until recently, the most critical EU instruments on environmental crime were the Environmental Crime Directive (ECD) and its annexes (European Parliament, 2023). However, in November 2023, the EU Council and Parliament agreed on a new Directive on protecting the environment through criminal law and replacing Directive 2008/99/EC. The new Directive was adopted in February 2024. The main innovations include an update of the list of criminal offences in the field of the environment, which increased the number of such crimes from 9 to 18. In addition, a "qualified crime" was introduced, a deliberate and large-scale crime (for example, large-scale forest fires or significant water, soil, or air pollution that lead to ecosystem destruction). The concept of a "qualified crime" can be compared to ecocide. New fines and penalties for individuals and businesses are also introduced, depending on the severity of the environmental damage (Guillot, 2024). Among other things, one of the objectives of the new

document is to facilitate cross-border investigations and prosecutions (European Parliament, 2023).

One of the reasons for the continued growth of attention to environmental issues is the significant deterioration of the environment due to the war in Ukraine (Trokhymenko et al., 2023). The actions of the Russian Federation in Ukraine belong to the category of transnational environmental crimes. The war unleashed by the Russian Federation in Ukraine will have long-term environmental consequences for Ukraine and countries around the world (Bilokon & Myrna, 2024). Ukraine has come a long way in harmonising its national legislation, particularly in ecology, with EU norms (Oderii, 2015; Getman & Lozo, 2017), but the efforts of one country in the fight against the aggressor are not enough. Therefore, it is essential to study the impact of EU criminal law policy on preventing transnational environmental crimes, including those currently occurring in Ukraine (Orobets, 2022; Kharytonov et al., 2023).

# **Literature Review**

Despite several pessimistic forecasts related to the likely negative impact of the financial and economic crisis on the EU's environmental policy, the Union has recently adopted many initiatives in this area (Burns et al., 2020). The European Green Deal, which aims to transform the region into a competitive, resource-efficient economy with zero greenhouse gas emissions by 2050, is often the focus of research on EU environmental policy (Paleari, 2024). With the introduction of the European Green Deal in 2019, around twenty strategic documents (the European Green Deal Strategic Framework) were added to the existing EU environmental legislation. These documents contain ambitious targets and numerous initiatives while extensively using legislation to achieve the goals (Paleari, 2022).

The aspects of the EU criminal law policy on preventing environmental crimes require special attention. "Green" criminology, which studies the causes, consequences and liability of environmental crimes, has recently gained great importance, drawing attention to environmental damage. This field demonstrates that the various types of behaviour that are the subject of its study are harmful and involve breaking the law (Lynch & Long, 2022). According to the Criminal Law, environmental protection should include preventing environmental crimes, which should be punished to preserve and create a healthy environment for human existence (Mršić, 2021). D'Ambrosio (2024) notes that criminal law doctrine has long ignored criminal law protection of the environment and has only recently attracted attention. At the same time, the researcher notes that the awareness of the need for criminal protection was not accompanied by proper regulation and insists

on reforming criminal law in environmental protection. At the present stage in the EU, the main regulatory document relating to criminal law protection of the environment is Directive 2008/99/EC on protecting the environment through criminal law (European Union, 2008). The main achievement of this document is the consolidation of the provision that environmental crimes must be prevented and the perpetrators must be brought to justice. However, Directive 2008/99/EC did not achieve all the desired goals. Hence, the European Parliament and the Council report proposed replacing this document.

This report pays particular attention to the need to raise awareness of environmental crimes and the damage they cause worldwide, including the crime of ecocide in international criminal law. The introduction of this offence "is of particular importance for the prevention and prosecution of the most serious transnational environmental crimes committed in developing countries".

The efforts of lawyers to strengthen environmental protection through international criminal law have long been centred on efforts to include ecocide as a fifth crime in the Rome Statute of the International Criminal Court (United Nations, 1998). If this is achieved, ecocide will become the first stand-alone environmental crime under the said instrument (Mwanza, 2018). The International Criminal Court is currently the only judicial body with jurisdiction to prosecute the international crimes of genocide, crimes against humanity, war crimes and crimes of aggression (García Ruizet al., 2023). Still, the first attempts to add the crime of ecocide to this list failed (Higgins, 2015). Among the reasons for the failure is the lack of a unified approach to the definition of ecocide. A legal definition of ecocide was developed by an independent expert group under the European Parliament between 2019 and 2021 (Nowak, 2022), which is an essential step towards raising awareness of the need to protect nature through increased legal clarity. At the same time, King (2024) notes that amending the Rome Statute to include ecocide as a fifth crime has many challenges and advantages. However, the formalisation of the definition of this crime is already an essential step towards fair prosecution of ecocide. The debate on the definition of ecocide is still ongoing, which significantly delays the process of improving criminal legislation. Tsilonis (2024) believes that the proposed definition should, on the one hand, be more precise and, on the other hand, contain fewer gaps, which will help to predict any future events. In addition, along with the largest ecocides - the 1986 Chornobyl disaster and the 1989 Exxon Valdez oil spill - the researcher notes the destruction of the Kakhovka Dam in 2023 in Ukraine, which was caused by the criminal actions of the Russian army. This demonstrates the need for increased attention from the international community to the events currently taking place in Ukraine, in particular from the environmental point of view. The impact of the EU criminal law policy on preventing environmental crimes related to the war in Ukraine has been little studied in the scientific literature. In particular, in the context of the events in Ukraine, the consolidation of the concept of "ecocide" in the international legal framework is of particular importance.

# Aim and objectives

The study aims to analyse the EU's existing and potential capabilities in criminal law policy to prevent transnational environmental crime. Objectives of the study:

- to reveal the consequences of environmental crimes committed by the Russian Federation in Ukraine;
- to indicate the primary legislative documents on criminal law regulation of environmental crimes, including in the context of military conflict;
- to describe the cooperation between Ukraine and the EU in preventing environmental crimes of the Russian Federation in Ukraine;
- to reveal the potential capabilities of the EU in preventing transnational environmental crimes in the example of Ukraine;
- using criminal law instruments to assess the best practices in preventing transnational environmental crimes.

## Methodology

## The Research Procedure

The research procedure involves two main stages. The first stage examines the EU's involvement in preventing environmental crimes during the war in Ukraine, while the second stage reveals best practices in tackling such crimes. Each stage includes several sub-stages, as shown in Figure 1.

EU involvement in preventing environmental crimes committed by Russia during the war in Ukraine

Assessment of transnational crimes committed by the Russian Federation on the territory of Ukraine after the beginning of the full-scale invasion

Analysis of the legislative framework regulating environmental crimes in times of war

Assessment of EU involvement in preventing transnational environmental crimes in Ukraine

Analysing the "Environmental Treaty for Ukraine" for recommendations on how to improve the EU's criminal law policy on preventing transnational environmental crime

Best practices in combating criminal offences in the field of environment

Study of the experience of European countries in *preventing* environmental crimes using criminal law instruments

Assessment of the possibilities of cooperation with EnviCrime through SIENA



Figure 1. The research procedure

# Sampling

The study identified the impact of the EU criminal law policy on preventing transnational environmental crimes, as shown in Ukraine. The martial law in Ukraine and numerous crimes committed by the Russian Federation on its territory, including about 2,500 environmental crimes, explain the practicality of choosing this country as an example. The environmental crimes committed within Ukraine are of a catastrophic scale and have an impact on the aggravation of environmental problems both in Ukraine and in the world.

During the research, several legal documents in environmental and criminal law policy were studied, directly or indirectly relating to preventing transnational and other environmental crimes. We also used statistics on the environmental damage caused by Russia's invasion of Ukraine, including the number of EnviCrime reports sent and received through SIENA and the activity of the ten most prominent AP EnviCrime participants from 2017 to 2022.

## Methods

The study's logic is based on consistently using several methods to achieve the research objectives. First, the number and scale of transnational environmental crimes committed by the Russian Federation in Ukraine after the invasion were described using statistical analysis and secondary data. This allowed us to confirm the criticality of this problem and explain Ukraine's choice as the

object of study. In addition, the scale of environmental crimes in Ukraine increases the relevance of studying the impact of EU criminal law policy on preventing transnational environmental crimes. The formal legal method allowed the author to analyse several regulatory documents relating to environmental crimes in wartime. This made it possible to confirm the illegality of the actions of the Russian Federation in Ukraine and to justify the need to bring the perpetrators to iustice. This method also allowed us to note changes in EU policy that may affect the commission of transnational environmental crimes in Ukraine. In addition, using the formal legal method, the author analysed which recommendations in the "Environmental Treaty for Ukraine" may be relevant to improving the EU criminal law policy on preventing transnational environmental crimes. The comparative legal method allowed for comparing existing legislative initiatives and identifying arguments favouring ecocide as the fifth crime in the Rome Statute. The descriptive method made it possible to characterise the best practices of European countries in preventing environmental crimes using criminal law instruments. The statistical analysis method demonstrated SIENA's increased use for exchanging information about environmental crimes between countries.

## Results

EU involvement in preventing environmental crimes of the Russian Federation during the war in Ukraine

As noted above, in studying the impact of the EU criminal law policy on the prevention of transnational environmental crimes, it is essential to examine this impact in the context of the war in Ukraine. There are several objective reasons for this, related to the catastrophic environmental damage caused by the Russian Federation, which extends beyond the borders of Ukraine. Figure 2 shows some statistics related to the environmental damage caused by the Russian Federation in Ukraine.

# 2500 cases

• estimated total number of environmental crimes in Ukraine

## 31% of the territory

• is at risk of environmental destruction

## 20 thousand square kilometres of territory

· almost completely destroyed by the war

# about 200 thousand hectares of territory

· contaminated by mines

#### tens or hundreds of years

• required for demining of territories

#### dozens of mines

•flooded, which is a threat to rivers and seas

#### 3 million hectares of forest area

• need to be restored

## 6 million domestic animals

• died as a result of the war

## thousands of dolphins

• died in the Black Sea because of the war

#### by 80 per cent

• The Holy Mountains National Nature Park in Donetsk region was destroyed

**Figure 2.** Environmental damage from Russia's invasion of Ukraine in numbers (summarised by the author (Proshchuk, 2024))

The Protocol Additional to the Geneva Conventions of 12 August 1949 and the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques of 18 May 1977 are among the essential documents that prohibit environmental damage during war. In the Rome Statute, despite the omission of the crime of ecocide, war crimes against the environment are enshrined in Article 8.

From a legal point of view, the Russian Federation can be held accountable as a state for unprovoked aggression and violation of the UN Charter. In addition, individuals can be held responsible.

Ukraine and the EU are making joint efforts to increase liability for environmental crimes. In 2022, the UN General Assembly adopted the 28 Legal Principles for Protecting the Environment in Armed Conflict. The changes mentioned above in EU legislation concerning adopting the new Directive also

open up new opportunities for Ukraine, particularly given the proposal to include ecocide in the Rome Statute. This will allow the International Criminal Court to bring those responsible for large-scale environmental crimes to justice.

At the initiative of the Office of the President of Ukraine, a high-level working group with international members was set up to develop a set of recommendations for Ukraine and the world that reflect a unified approach to assessing damage, ensuring liability and restoring Ukraine's environment. These recommendations are called the "Environmental Treaty for Ukraine". The document notes that Ukraine is closely cooperating with the International Criminal Court, which gives the latter the right to investigate and prosecute acts committed in the country since November 2013 by persons of any nationality. It is also noted that the Ukrainian Criminal Code already enshrines the concept of "ecocide", and Recommendations 15 of the Assembly of States Parties to the International Criminal Court suggest considering the inclusion of this crime in the Rome Statute. Recommendation 13 also notes that Ukraine has not yet ratified the Rome Statute and suggests considering the benefits of approving it. Recommendation 12 states that Europe should strengthen its capacity to investigate and prosecute ecological war crimes based on universal or extraterritorial jurisdiction and investigate such cases related to Ukraine.

The working group calls on the Prosecutor of the International Criminal Court to consider the case of the destruction of the Kakhovka Dam and hydroelectric power plant to prosecute the perpetrators under Article 8 of the Rome Statute. It is noted that responsibility for such an act could be an important signal of international justice.

Recommendation 16 proposes creating a repository to store international experience and case law in environmental cases. This would facilitate national and international investigations and prevention of environmental crimes.

Recommendation 17 notes Eurojust's role in developing initiatives to prosecute crimes in Ukraine. However, the working group notes that these initiatives do not specifically address environmental crimes, so the relevant documents must be revised (Environmental Treaty for Ukraine. Green Future: Recommendations on Accountability and Restoration, 2024).

Best practices in combating criminal offences in the field of environment

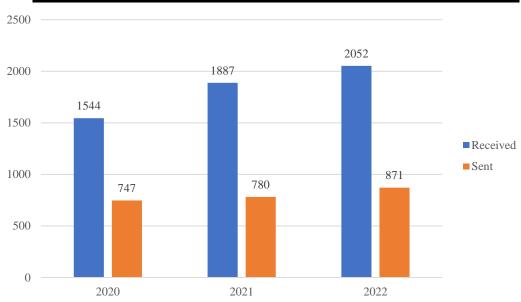
It is worth noting the national practices of certain EU countries in preventing environmental crimes. For example, the Attorney General has developed special instructions for preventing environmental crimes in Denmark. These instructions provide for coordinating activities of the police, prosecutors and administrative authorities. A significant achievement of Finland is creating an

annual report on environmental crimes, including statistical information in this area. Germany publishes annual reports on the activities of prosecutors, particularly in environmental crime, and conducts research projects to combat such crimes. In Sweden, a mechanism has been developed for citizens to report environmental crimes to the police, and the police website has a special section for informing citizens. In Spain, there is a specialised police unit to prevent environmental crimes, and a specialised environmental prosecutor's office has been established. Italy has an environmental police force to prevent environmental crimes.

Thus, European countries have developed mechanisms for reporting and cooperation at various levels to prevent environmental crime. An important area is the exchange of information between stakeholders - society, government and nongovernmental bodies. It is positive that Ukraine is following the European experience. To record the crimes committed by the Russian Federation against the environment in Ukraine, citizens can report crimes they have seen in various ways. The public can contact the Ministry of Environmental Protection and Natural Resources of Ukraine, the State Environmental Inspectorate of Ukraine and other authorised bodies through different communication channels (in person, by telephone or post, or by e-mail). Information can also be provided using other electronic communication channels (SaveEcoWot chatbot, EcoWaste telegram bot, EcoThreat app, EcoInspector 2 app) and transmitted to the relevant authorities. In addition, pre-trial investigation officers and prosecutors can independently identify information about environmental crimes that may be the basis for opening criminal proceedings.

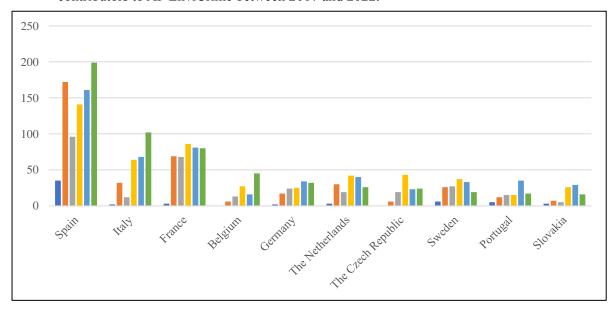
At the international level, Ukraine actively cooperates with Europol. The main channel for information exchange is the SIENA secure information exchange network application. This platform allows for the rapid and secure exchange of relevant information, including environmental crime. Through SIENA AP, EnviCrime (a team specialising in transnational environmental crime and supporting EU law enforcement agencies in their criminal investigations of all types of environmental crime) receives reports of environmental crime.

Since 2020, EnviCrime has received around 5,500 environmental crime reports through SIENA and sent around 2,400. Figure 3 shows the number of reports sent and received by EnviCrime through SIENA.



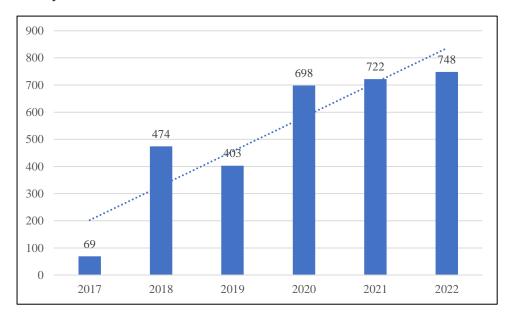
**Figure 3.** Number of notifications sent and received by AP EnviCrime through SIENA (built by the author based on data from (Europol, 2023))

As shown in Figure 3, the number of reports received naturally exceeds the number of reports sent. At the same time, the number of both sent and received reports tends to increase, which may indicate an increase in recorded offences and environmental awareness in the country. Figure 4 shows the ten most significant contributors to AP EnviCrime between 2017 and 2022.



**Figure 4.** The ten most significant contributors to AP EnviCrime in the period from 2017 to 2022 by number of contributions (built by the author based on data from (Europol, 2023))

As can be seen from the figure, Spain made the most significant contribution. In 2022, the country's contribution was at least twice as high as that of other countries. Figure 5 shows the trend in the total number of contributions by country for 2017-2022.



**Figure 5.** Number of contributions per year from 2017-2022 (based on data from the 2023 Environmental Statement (Europol, 2023))

Figures 3-5 show that cooperation with AP EnviCrime through SIENA is gradually increasing, with countries sending growing environmental crime reports through the platform and contributing more to environmental crime investigations. This may indicate the platform's effectiveness and growing environmental awareness.

Thus, cooperation through SIENA can significantly contribute to international efforts to detect and investigate transnational environmental crime. Ukraine can also benefit from this through active information exchange, opportunities for joint investigations, and the exchange of experience with advanced countries.

#### **Discussion**

Several studies have expressed doubts about the effectiveness of the EU's environmental policy shortly. Burns et al. (2020) conclude that although the financial and economic crisis may not have significantly impacted the EU's ambitions in environmental policy, it may have exacerbated existing problems and challenges. Therefore, they predict a slowdown in the EU's environmental policy

activity in the long term. Paleari (2022) notes that one of the main obstacles to achieving environmental goals may be the mismatch between such goals and planned legislative initiatives. However, the most significant obstacles may arise due to the EU policy's inconsistency and the member states' national legal framework. In particular, the implementation of several important goals of the European Green Deal depends to a large extent on the national interests of individual states. In particular, the interests of states do not coincide in matters of the role of nuclear and gas energy, and the application of the circular approach in certain sectors of state economies is often limited. It can be concluded that the absence of mandatory legislative power to achieve the goal of transition to a circular economy allows states to prioritise their own goals. At the same time, much less attention is paid to areas such as achieving zero emissions, investments in nature protection, etc. However, the author's work positively characterises the recent actions of the EU in the field of environmental policy, particularly through the adoption of the new Directive on the Protection of the Environment through Criminal Law. This document increases liability for environmental crimes, expands their list, and introduces the "qualified crime" concept, which may contribute to more effective crime fighting.

Lynch and Long (2022) note that green criminology is a recent phenomenon, and there are still many areas it does not cover. However, it should be in terms of the effectiveness of preventing environmental crime. D'Ambrosio (2024) concludes that criminal law in environmental protection needs to be reformed at the present stage. The researcher cites Italy, where the adopted criminal policy has not contributed to improving the effectiveness of environmental protection. Thus, along with introducing criminal sanctions, other ways and measures should be found to protect the environment. In particular, it is essential to introduce an interdisciplinary approach. Mršić (2021) takes a similar view, insisting on using administrative law measures, primarily preventive ones, as a more effective tool for environmental protection. While agreeing with the above opinions that environmental protection requires an interdisciplinary approach, the author considers it very important to develop criminal law policy and instruments of prosecution for crimes. The researcher emphasises the need to criminalise ecocide as an effective initiative in regulating transnational environmental crimes in the EU criminal law policy. Mwanza (2018) notes that supporters of including the crime of ecocide in the Rome Statute consider it an appropriate rule of liability for environmental damage. García Ruiz et al. (2023) note that adopting an ecocide law may be based on the fact that it will successfully help manage the tension between national and regional economic growth. Also supporting the inclusion of ecocide in the international legal framework, Nowak

(2022) notes that, if adopted into the Rome Statute, the crime of ecocide could provide the International Criminal Court with a highly effective legal tool for prosecuting criminals. These views are reflected in the author's article and the results of the work of the high-level working group on the development of an "Environmental Treaty for Ukraine".

However, including ecocide in the Rome Statute should consider that it will bring both positive consequences and challenges. King (2024) gives the following example: the inclusion of ecocide in the Rome Statute may help to bring perpetrators of this crime to justice, but if a corporation or a state committed the ecocide, it does not make much sense, as these actors are not subject to the influence of the International Criminal Court. It is a significant problem, in particular in the context of bringing the Russian Federation to justice for environmental crimes in Ukraine. Therefore, this issue requires further research. In this context, Tsilonis (2024) concludes that due to the existing limitations of the International Criminal Court, strong arguments can be made to create a new legal institution - the International Criminal Court for the Protection of the Environment. The researcher believes that the joint establishment of such a body would provide a unique framework for combating environmental damage on an international scale.

# **Conclusions**

The actions of the Russian Federation in Ukraine lead to catastrophic consequences for the environment - both within Ukraine and for the whole world. The recent transformations in EU criminal law policy may contribute to preventing transnational environmental crimes, particularly in Ukraine. A critical area is the criminalisation of ecocide.

Particularly noteworthy is the cooperation with AP EnviCrime through SIENA, which enhances the exchange of information on environmental crime between countries. Further research should reveal the limitations in improving the EU's criminal law policy on environmental crime and the opportunities to address existing barriers to optimise legislation.

The findings of the study also allow us to formulate several critical recommendations for the prevention of transnational environmental crimes:

- focus on implementing the recommendations of the "Environmental Treaty for Ukraine", especially recommendations 12, 13, 15, 16, 17;
- promote the coordination of the activities of the police, the prosecutor's office, administrative bodies and other interested parties, in particular, through the formation of special interdepartmental working groups, the development of joint

action plans, conducting training and educational events, cooperation through specialised information systems;

- to develop an appropriate system of reporting on environmental crime and to make such a system mandatory;
- conduct campaigns to inform citizens about environmental crime, its prevention and ways to report the crime, in particular in cooperation with the media and using social networks;
- build cooperation with Europol and other stakeholders to prevent environmental crime through SIENA.

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