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ARTIFICIAL INTELLIGENCE IN THE CONTEXT OF SECURITY OF THE EUROPEAN UNION AND ENVIRONMENTAL CRIME

Abstract: The security of citizens in the European Union is a fundamental problem today. The existing security systems do not have enough personnel to be able to ensure the necessary security for all citizens, individuals, but also legal entities, and ultimately for states. A special problem is the expansive development of artificial intelligence, which, on the one hand, has helped a lot, but also made a lot of difficulties in terms of security. Also, in this paper we specifically deal with acts of environmental crime, caused by the abuse of artificial intelligence.

This paper examines the cause-and-effect relationship between the development of artificial intelligence and new types of abuse, new forms of environmental crimes and violations of personal and environmental safety at the level of the European Union countries. The authors wish to achieve the scientific goal of proving new security risks, caused by the development of artificial intelligence and the disruption of the environment. The initial hypothesis of this paper is that artificial intelligence can contribute to the emergence of new forms of environmental crime, contribute to the avoidance of personal responsibility and the professionalization of the execution of new types of criminal acts and abuses. At the same time, analytical, descriptive and normative methods will be used in this paper.

Keywords: artificial intelligence, information technology, misuse, environment.

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Introduction

This paper deals with a very current and important issue, which is caused by the necessity that the expansive development of artificial intelligence creates significant social changes, which have repercussions on law and security. According to the report of the European Parliament, technologies for automatic facial recognition that perform indiscriminate surveillance can represent a source of potential misuse of artificial intelligence, especially if they perform surveillance over a public area, where there is a large circulation of people. This is a European recommendation, which is not binding, but represents the first step in dealing with potential abuses that may occur.

Public spaces are generally monitored indiscriminately, which means that all persons who pass or stay on the public area are subject to surveillance. In practice, this most often takes place at bus, railway and metro stations, squares and streets and other areas that are security sensitive and can be the place of execution of criminal acts or terrorist acts. Selective surveillance exists when the subject of surveillance is clearly and precisely defined persons or categories of persons, for example pupils, students, patients, prisoners and the like in precisely defined areas. In the case of selective surveillance, there must be clearly defined criteria related to the selection of the persons over whom the surveillance is performed, the selection of the location and the manner in which and under what conditions of the surveillance will be carried out.

In terms of consequences for citizens, the differences between selective and non-selective surveillance can be drastic. Indiscriminate surveillance can have consequences for all citizens, because a priori it is assumed that all citizens are potential perpetrators of criminal acts or terrorist acts. This violates the presumption of innocence guaranteed by the constitution and the law, which states that no one is guilty until proven guilty. Political arguments against indiscriminate surveillance point to a violation of basic democratic principles, according to which citizens should exercise surveillance over the government, and not the government over the citizens through such forms of monitoring movements without any criteria (Krivokapić, 2016, 102).

The European country that most often used indiscriminate surveillance is Great Britain, while London is considered the most covered city in Europe with different types of public surveillance cameras. Among the non-European countries, China leads the way in the use of indiscriminate surveillance. The British justify the installation of cameras with the need to prevent serious crimes and terrorist acts, while China uses the same surveillance system to profile citizens and make decisions about their rights and freedoms. Therefore, the British surveillance system is justified in security reasons, while the Chinese one is based on the authoritarianism and undemocratic system that rules in China (Atanasović, 2009, 121).

In terms of environmental crime, it is a completely new branch of criminal law, which relatively recently became relevant in national and international law. Environmental crime is considered a crime with a particularly expansive trajectory, which directly threatens the safety of the environment, plant, animal and human life. Environmental crimes primarily include illegal logging, animal smuggling, and even modern technologies, including artificial intelligence, can be implicated in these crimes through illegal trade in rare animal species through illegal websites and social networks.

During the year 2025, a conference was organized in Paris called “Dialogue on Security and Development”, which aimed to improve multilateral and multiple responses to the problem of environmental crime. The European Union insists on stronger global coordination, innovative mechanisms for the implementation of laws, as well as a

multi-action response to the problem of environmental crime. In fact, stronger global coordination, introduction of innovative mechanisms in law enforcement and greater responsibility of the public and private sectors are required. Thanks to legal gaps and legal inefficiency, environmental crime is experiencing its full expansion, instead of being dealt with in a quality manner (Antonović, 2024a, 66).

Methodology

Environmental crime, together with global environmental problems, represent one of the leading global issues, which are very actively discussed at the level of the European Union and other international institutions. This topic gained additional relevance due to the emergence of artificial intelligence and modern information technologies, which have a reach in all areas of criminality, including environmental ones.

The aim of this paper is to consider new forms of environmental crimes thanks to artificial intelligence and modern information technologies. First of all, it indicates the ways of committing these crimes, the consequences that arise from the commission of these crimes, as well as the mechanisms of suppression and prevention of these crimes.

The basic hypothesis of this paper is as follows: artificial intelligence can contribute to the emergence of new forms of environmental crime, contribute to the avoidance of personal responsibility and the professionalization of the execution of new types of criminal acts and abuses.

The auxiliary hypotheses of this paper are as follows: artificial intelligence and modern information technologies help in the execution of environmental crimes; the normative and security policy of the European Union is aimed at establishing standards in the application of artificial intelligence, which would set limits regarding the potential possibilities of abuse.

Well-known methods, such as analytical, descriptive, inductive-deductive and normative methods, were used in the preparation of this paper.

The scientific justification of this paper is reflected in its contribution to the academic community in solving the problem of environmental crime, which is placed in the context of artificial intelligence and modern information technologies. Hence, we come to the issue of topicality of the topic, which is best evidenced by the fact that environmental problems are the number one topic at all international and world forums, gatherings and conferences, as well as all those negative phenomena that distort the ecological picture in the world.

Discussion and results

For the purposes of preparing this paper, the author consulted the judicial practice for the territory of the Republic of Serbia, and obtained statistical data on the committed criminal acts against the environment, for the previous three years (2021, 2022 and 2023). Specifically, the territories of the basic courts in Sremska Mitrovica, Šabac, Subotica, Zrenjanin, Kikinda, Sombor, Loznica and Novi Sad were processed. The data were taken from the portal of the courts of Serbia and based on publicly available information of significance.

In the area of the Basic Court in Sremska Mitrovica, one case of committing the criminal offense under Article 265 of the Criminal Code of Serbia² of bringing, damaging, taking abroad and bringing into Serbia a protected natural asset was recorded.

² "Službeni glasnik RS" broj 85/2005, 88/2005, 107/2005, 72/2009, 111/2009, 121/2012, 104/2013, 108/2014, 94/2016, 35/2019. i 94/2024.

The perpetrator was sentenced to a suspended sentence. In the area of this court, seven criminal acts from Article 275 of the Criminal Code of Serbia, forest theft, were committed. Five proceedings ended with a guilty verdict, one was suspended, while one is still ongoing. The persons were sentenced with a suspended sentence, i.e. with a monetary fine.

In the area of the Basic Court in Šabac, one proceeding was conducted for the commission of the criminal offense under Article 266 of the Criminal Code of the Republic of Serbia, bringing dangerous substances into the Republic of Serbia and illegal processing, disposal and storage of dangerous substances. Three proceedings were conducted for the criminal offense under Article 269 of killing and abusing animals, of which two were sentenced to a suspended sentence, and one was fined. In one procedure, one person was released from responsibility in the first instance, and the case was referred to the second instance. For the criminal offense from Article 274 of the Criminal Code, devastation of forests, three proceedings were also conducted, in which two guilty conditional verdicts were pronounced, and in one case a plea agreement was concluded, and a fine was imposed.. The crime of forest theft from Article 275 of the Criminal Code is the most numerous. As many as 33 cases were registered, seven of which are still ongoing, in three cases the charges were dismissed, and in seven cases there was a plea of guilty. In other cases, guilty verdicts were handed down. Also, four proceedings were conducted for the criminal offense under Article 276 of the Criminal Code, illegal hunting, and one for the criminal offense under Article 277, illegal fishing.

In the area of the Basic Court in Subotica, one case of the commission of a criminal offense under Article 265 of the Criminal Code of the Republic of Serbia, destruction, damage, export abroad and import into Serbia of a protected natural asset, was registered, and the outcome of the proceedings was a conviction for a period of ten months with the imposition of a security measure of confiscation of the object. Due to the criminal offense under Article 269 of the Criminal Code, killing and abusing animals, two proceedings were conducted, one of which is still ongoing, while the other ended with a conviction and a monetary fine.

In the area of the High Court in Zrenjanin, i.e. the Basic Court in Novi Bečej, one case of the crime of killing and abusing animals under Article 269 of the Criminal Code of the Republic of Serbia was recorded. The criminal offense of forest theft from Article 275 was registered in 15 cases, and 14 of them ended with a conviction, while in one case the charge was dismissed. Proceedings were also conducted for one criminal offense under Article 277 of illegal fishing.

In the area of the Basic Court in Kikinda, two proceedings were conducted in connection with the criminal offense of bringing dangerous substances into Serbia and illegal processing, disposal and storage of dangerous substances from Article 266 of the Criminal Code. The proceedings ended with convictions. One proceeding was conducted due to the commission of the criminal offense under 277 of the Criminal Code due to illegal fishing. Most of the proceedings, 11 of them, were conducted for the criminal offense of forest theft from Article 275 of the Criminal Code, and there were the most convictions, of which four were prison terms, five were conditional sentences, while the rest were fines.

The Basic Court in Sombor had three cases for the criminal offense under Article 269 of the Criminal Code, killing and abusing animals, which ended in convictions. 12 proceedings were conducted for the criminal offense of forest theft from Article 275 of the Criminal Code, of which the court issued an acquittal in only one case, and a guilty verdict in the other cases. Two proceedings were conducted for the criminal offense of

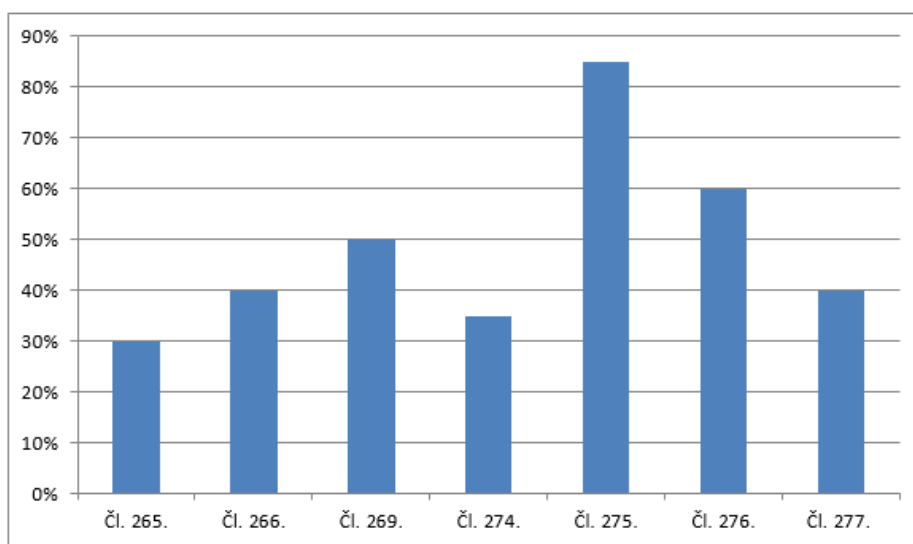
illegal hunting from Article 276 of the Criminal Code, while only one proceeding was conducted for the criminal offense of illegal fishing from Article 277 of the Criminal Code of the Republic of Serbia.

In the area of the Basic Court in Loznica, the criminal offenses of forest theft from Article 275 of the Criminal Code prevailed in as many as 41 court proceedings, while only two proceedings were conducted in connection with the criminal offense from Article 276 of the Criminal Code, illegal hunting. One proceeding was conducted for the criminal offense under Article 274 of the Criminal Code, devastation of forests.

Before the Basic Court in Novi Sad, two proceedings were conducted for the criminal offense of illegal processing, disposal and storage of dangerous substances from Article 266 of the Criminal Code of the Republic of Serbia, in five cases proceedings were conducted for the criminal offense of killing and abusing animals from Article 269 of the Criminal Code. For the crime of illegal hunting from Article 276 of the Criminal Code, two proceedings were conducted. As in the practice of other courts, most proceedings were conducted in connection with the crime of forest theft from Article 275 of the Criminal Code, a total of ten.

Considering the presented data, the result of the research could be presented graphically as follows:

Chart 1: Crimes against the environment and their representation (period from 2021 – 2024)



The following research results can be seen from Chart 1: the most common crimes against the environment are the crime of forest theft from Article 275 of the Criminal Code, followed by illegal hunting from Article 276 of the Criminal Code, killing and abuse of animals from Article 269 of the Criminal Code, illegal fishing from Article 277 of the Criminal Code, bringing dangerous substances into Serbia and illegal processing, disposal and storage of dangerous substances from Article 266 of the Criminal Code and destruction, damage, export abroad and import into Serbia of protected natural assets from Article 265 of the Criminal Code of the Republic of Serbia (Alimpić, 2022, 1325).

Artificial intelligence and the environment

The development of the era of artificial intelligence is linked to the year 1956 during the “Dartmouth College” conference, which was held and organized under the auspices of the Defense Advanced Research Projects Agency (DARPA). This Agency works and operates within the framework of the US Department of Defense. It has funded research and competitions that have resulted in inventions such as driverless cars and the creation of advanced robotics. During 2015, the Agency developed the project “Communication with computers” with the aim of developing artificial intelligence that easily processes natural language and cooperates with people (Antonović, 2023a, 21).

This Conference was attended by leading scientists from the field of information technologies. The goal of the Conference was to analyze and intensify efforts to develop a “thinking machine” better and more adequately. Artificial intelligence must have a multidisciplinary approach because it includes different knowledge that was created by the development of other disciplines that were created earlier. At the same time, one must take into account the importance of understanding intelligence itself, as an essential issue. Precisely, for the stated reason, experts from different fields - computer science, cognitive psychology and economics - first worked on the idea of artificial intelligence. The newly created computer program was capable of demonstrating certain mathematical theorems, and as such it is considered a forerunner of artificial intelligence (Shaw et al., 2019, 21).

The algorithm, which could solve less complex tasks, soon became the foundation for the further development of cognitive architectures. A little later, in 1959, thanks to John McCarthy, the programming language LISP was created, which was intended for programming artificial intelligence, with application to this day. In the period between 1964 and 1966, the ELIZA program was developed that dealt with natural language processing, which laid the foundations for the work of today’s chat bots. So, for almost seventy years, they worked on the creation of artificial intelligence. VOI was created - the holy grail of artificial intelligence, which, due to its complexity, is limited to the field of computer processing, existing memory resources, which contributed to the state’s retreat in financial and industrial terms.

During the eighties of the last century, special programs for neural networks were developed. With it, it became possible to detect handwriting on postal checks, which helped in the detection of bank fraud and abuse. The 90s of the last century were the years of full expansion of artificial intelligence, which gained greater and greater momentum, until the present day. There have been new discoveries in the mechanical industry and many other information technology areas. In 1997, the IBM company constructed the “Deep Blue” computer program, which became famous for its victory over chess grandmaster Garry Kasparov. By defeating the multiple chess champion, the machine proved that it can be superior to humans in all segments. In 2006, the so-called program was developed. of deep learning at the University of Toronto, which made it possible to connect neurons to each other, in order to produce faster and better results (Prlja et al., 2021, 59).

During 2011, IBM constructed the Watson system, which proved its superiority by the victory of two winners of “Jeopardy” quizzes, in which answers are given in an extremely short period of only three seconds, and each incorrect answer carries penalty points. Watson applied artificial intelligence methods, which enabled precise and accurate answers to all questions asked in plain language. In 2014, the Chinese organization “Baidu” constructed a “Deep Speech” system that surpassed the technology

of Google and Microsoft and successfully transcribed 81 percent of the answers, which ensured the highest degree of accuracy of the given answers compared to other systems (Antonović, 2023b, 45).

Google Deep Mind is an artificial intelligence program that was created in 2016, while Alpha Goo is an artificial intelligence program that was created in 2017. This program is characterized by combining an advanced search technique with deep neural networks. All these triumphs of artificial intelligence actually represented significant milestones in the development of intelligent machines with extraordinary powers and abilities.

The arrival of Donald Trump at the head of the USA is considered a big wind behind the development of artificial intelligence because he is a man from the business world, who strongly supports the development of this type of science and a man who wants to establish America at the very top of the countries engaged in the production of artificial intelligence. He announced investments in the development of artificial intelligence in the amount of 500 billion dollars from the private sector alone. With this, he wants to strengthen America's global competitiveness on the international market, and at the same time he announced the merger of large companies, such as OpenAI, Softbank and Oracle, into the company Stargate, which will deal only with the development of artificial intelligence.

The relationship between artificial intelligence and the environment is not harmonious, because artificial intelligence and its work require a lot of energy consumption, which directly harms the environment. The American announcement of expansive production in the field of artificial intelligence implies a far greater consumption of natural resources, which in the end results in a negative balance for the environment. On the other hand, in the international artificial intelligence market, there is a serious race between the USA and China, which also aspires to occupy a dominant place in the production of artificial intelligence. A potential "cold war" between America and China in the field of artificial intelligence may result in a complete disregard for the interests of the environment, and even a serious threat to the ecosystem of planet Earth.

Training large AI models, such as OpenAI GPT-3 or Google's BERT, requires significant energy. For example, GPT-3 training required approximately 1,287 MWh of electricity over a couple of weeks, equivalent to the annual energy consumption of 120 average American homes, and produced approximately 500 metric tons of CO₂ emissions (Antonović, 2022, 17). By comparison, traditional software applications use only a fraction of these resources over their entire life cycle, rather than a shorter training period. The exponential growth in the adoption of artificial intelligence in various fields means that these energy needs will only increase unless more efficient algorithms or energy solutions that incorporate renewable energy are implemented. Data centers are becoming a growing cause for concern due to their rapidly growing energy consumption, which accounts for an increasing share of global electricity consumption. At the global level, they consume about 1% of the total electricity produced, which is equivalent to the energy consumption of certain individual countries.

Over the past year, this type of infrastructure necessary for artificial intelligence has consumed as much electricity as Sweden. On an annual level, the average growth of electricity consumption from data centers grew roughly between 10 and 15 percent. If the growth of the application of artificial intelligence technologically accelerates worldwide and the need for data centers increases, we should not be surprised if the level of electricity consumption by this source becomes at the level of some of the large European economies. The cooling systems themselves represent a significant part of

this demand for electricity, so the consumption is constant. Manufacturing specialized AI hardware, such as GPUs and TPUs, adds another layer to environmental costs that is often harder to see. The production of chips for artificial intelligence applications has a significant carbon footprint, and the average GPU, for example, produces several tons of CO₂ during its manufacturing process and before use.

Artificial intelligence power systems are working to optimize renewable energy sources in different parts of the world. Thereby, efforts are being made to improve energy efficiency in certain facilities, while certain innovations are being made to favor agricultural production and to reduce the irrational consumption of energy sources. The goal of artificial intelligence is to reduce the emission of global gases and reduce the greenhouse effect to some reasonable limits, ending with the year 2030 (Dragović et al., 2024, 66).

Due to the gradual increase in pressure from environmental groups and greater public awareness of these negative effects on the environment, there are initiatives to improve the sustainability of data centers. Such moves by private companies are becoming more and more visible, because large technology companies take proactive measures, but also because of the effects on their public reputation, they try to be as loud as possible. Companies such as Google and Microsoft have committed to base their data centers entirely on renewable energy sources. Google, for example, has been carbon neutral since 2007 and aims to run all of its operations with a carbon-free energy base by 2030. This represents a significant shift from traditional data centers, where many still rely heavily on fossil fuels and have limited sustainability.

Microsoft has also taken somewhat more decisive steps toward greener operations. By the end of this year, the company plans to achieve 100% use of renewable energy for its Azure services in the cloud and data centers. In addition, this technology company is investing in carbon removal technologies to offset the emissions produced and is working to eliminate its historical carbon footprint by 2050. These efforts should in principle set the standard for the entire industry, as they will serve as examples for smaller firms to reduce their harmful emissions and carbon footprint.

In international markets, there is a real expansion in the sale of chips that run artificial intelligence. The ability of artificial intelligence is reflected, among other things, in the ability to assess the real growth of technological applications, which successfully abstracts the real risks of endangering the environment arising from the application of modern technologies.

Security risks and criminal potential

As artificial intelligence and modern information technology in general provide numerous benefits, their application opens the door wide to potential abuses. Artificial intelligence can also be helpful in the execution of various criminal acts, especially when it works in cooperation with social networks and other means of the Internet network. When we talk about environmental crime, artificial intelligence and social networks make their contribution to the criminal acts of smuggling of rare animal and plant species.

Thus, an organized criminal group from the Republic of South Africa was recently exposed, which, through social networks, advertised and offered rare types of cacti. Due to the specificity of the work that this group was engaged in, this group was called the "Cactus Mafia". The Republic of South Africa is the most famous in the world for the environmental crimes of illegal trade in rare plant species. Succulents are mostly traded - plants that do not require special care and attention. This category includes many types of cacti. These are very rare and endangered plants, with which it is strictly forbidden to

trade. The distribution of these plants is done through modern information technology and social networks, where they are openly offered for sale.

On those black markets, available through social networks and information technologies, rare plants have a special price, that is, the rarer the plant, the higher the price. Prices oscillate drastically, so the plant, which last year cost only one euro on the illegal market, today costs 1,700 euros, because in the meantime it has been declared a rare plant. Succulents have a special price due to their attractive appearance and are very popular with buyers in the West (Antonović, 2024b, 25).

The Internet provides unimagined possibilities in the process of selling these plants. The Republic of South Africa is at the top of the list of countries struggling with this problem, followed by Chile, Mexico, and European countries, such as Italy, where a large number of rare plants intended for illegal markets were seized in Ancona. It is estimated that the profits from this type of trade are very large. So, for example, in Chile, the annual income is up to 23 billion US dollars.

The consequences for the environment are catastrophic. The Republic of South Africa is already facing the disappearance of a large number of rare plant species. Plants that are saved from the clutches of illegal traders, generally cannot continue their independent life in their natural habitats, but in artificial conditions of botanical gardens and gardens with special care.

In addition to the problem of illegal trade in rare plant species, trade in rare animals and ivory trade should be highlighted as a major global problem. In 2013, the United Nations warned that the illegal trade in rare animals and ivory endangers certain animal species, which are already very rare and on the verge of extinction. The Conference on International Trade in Endangered Species (CITES) was held in Bangkok, where the problem of the expansion of illegal trade in rare animals was pointed out. On the issue of illegal property benefits, it was emphasized that illegal animal traffickers earn approximately or the same as drug or arms traffickers.

In particular, Thailand is facing a major problem of ivory trade, which is why this country was forced to adopt very strict laws with severe penalties for ivory traders. However, trade in tusks is not criminalized in Thailand, which illegal traders use as an alibi for their illegal business. Although trade in Asian tusks and ivory is allowed, African ivory and tusks appear as an object of illegal trade.

Furthermore, there was an increase in trade in the so-called ice ivory, i.e. mammoth tusks. In Great Britain, trade in frozen ivory was banned in 2018, and in 2022 the Ivory Act was passed, which has since been extended to new endangered animal species. The tusks of hippopotamuses, walruses, narwhals, orcas, as well as whales' sperm, have been introduced into the new protected categories (Beachey, 2007, 279).

Trade in frozen ivory remained outside the legal framework, which today represents a serious problem. Unfortunately, this type of trade is not covered by the umbrella Convention on International Trade in Endangered Species of Wild Fauna and Flora. Woolly mammoths disappeared as early as ten thousand years ago, but their disappearance is a mode of preserving rare varieties that are facing extinction today. Global warming and negative climate phenomena additionally represent a problem for the survival of many rare plant and animal species.

In the relationship between elephants and woolly mammoths, there are numerous similarities in genetics, which indicates the potential danger of elephants becoming extinct in the same manner as woolly mammoths. The similarity between these two species is first reflected on the basis of their tusks. The first mammoths appeared in Africa about five million years ago, and radiated into at least 10 species, all of which

come from the same family of modern elephants, known as the Elephantidae. From a structural point of view, the tusks of mammoths and elephants are identical and both have the so-called Schreger lines.

However, artificial intelligence also has its positive sides, when it comes to the criminal acts of illegal trade in rare animals. In particular, the illegal trade in tigers is very lucrative. However, an artificial intelligence algorithm could help identify tigers better because each tiger has distinctive patterns on its skin that no other member of its species has. Successful identification of these patterns would help in tracing missing tigers, which are the subject of illegal trade.

The European Union has also established numerous forms of criminal offenses of poaching on its territory. Eels, tigers, leopards, rhinoceroses, narwhals, whales, elephants, toucans, parrots, iguanas, insects, lizards, snakes and frogs are widely traded in the European Union. Regarding the illegal trade in plants, cacti, corals, sea dates and sea cucumbers are most often traded in the European Union. Plants are falsely classified as medicinals and medicinal preparations (Zlosa, 2020, 112).

Rare plant and animal species from the CITES list are targeted by illegal traders. Over 40,900 CITES-listed species – including approximately 6,610 species of animals and 34,310 species of plants – are protected by CITES from overexploitation through international trade. They are listed in three CITES appendices. Species are grouped in appendices according to how threatened they are by international trade. They include whole groups, such as primates, cetaceans (whales, dolphins and porpoises), sea turtles, parrots, corals, cacti and orchids. But in some cases only a subspecies or a geographically separate population of a species is listed (for example, a population of only one country). Table 1 shows the approximate number of species included in the CITES Appendices as of February 23, 2023. The abbreviation “spp.” is used to denote species; “sspp.” for subspecies; “var.” for varieties; “popns” for populations (Antonović, 2024c, 50).

Table 1: Endangered plant and animal species³

Appendix I	Appendix II	Appendix III	
FAUNA			
Mammals	334 spp. (incl. 21 popns) + 14 sspp. (incl. 4 popns)	523 spp. (incl. 22 popns) + 9 sspp. (incl. 4 popns)	46 spp. + 11 sspp.
Birds	156 spp. (incl. 2 popns) + 5 sspp.	1294 spp. (incl. 1 popn) + 6 sspp.	60 spp. (incl. 31 popns)
Reptiles	105 spp. (incl. 7 popns) + 4 sspp.	870 spp. (incl. 6 popns)	215 spp. (incl. 1 popn) + 8 sspp.
Amphibians	24 spp.	351 spp.	5 spp.
Fish	16 spp.	224 spp.	19 spp. (incl. 10 popns)
Invertebrates	69 spp. + 7 sspp.	2193 spp. + 1 sspp.	27 spp. + 3 sspp.
FAUNA TOTAL	704 spp. + 30 sspp.	5466 spp. + 16 sspp.	372 spp. + 22 sspp.

³ Downloaded from: <https://cites.org/eng/disc/species.php> dana 22.05.2025. .

FLORA	395 spp. + 4 sspp. + 12 var.	33764 spp. (incl. 110 popns)	134 spp. + 1 var.
GRAND TOTAL	1099 spp. + 34 sspp. + 12 var.	39230 spp. + 16 sspp.	506 spp. + 22 sspp. + 1 var.

Any species of wild plant or animal can be listed under CITES under the provisions of Resolution No. 9.24 (Rev. CoP17), and the range of wild animals included in the Appendices extends from leeches to lions and from pines to pitcher plants. While more charismatic creatures, such as bears and whales, may be better-known examples of CITES species, the most numerous groups include many less popular plants and animals, such as aloes, corals, mussels and frogs (Antonović, 2023c, 183).

Measures to combat environmental crime in the European Union

In the European Union, it was determined that environmental crime is the crime with the greatest expansion in the past few decades. Within the framework of environmental crime, acts such as the illegal trade of rare and endangered plant and animal species occur most often through modern information technology, the Internet and social networks. Therefore, the connection between modern information technology and artificial intelligence in the process of committing environmental crimes at the international level is clear and obvious. In addition to the mentioned environmental crime, there are also illegal cutting of forests, as well as other illegal activities (Nešković, Antonović, Đelić, T. A., 2018, 102).

Considering that environmental crime is starting to become a legal and security problem of the European Union, at the Dialogue on Security and Development, which was held in Paris in April 2025, the European Union took the position that stronger global coordination must be approached as well as the introduction of innovative law enforcement mechanisms and greater responsibility, both at the level of the public and private sectors. Legal gaps, which exist in European legal systems, help the survival and additional expansion of environmental crime.

The European Union created the “ECO - SLOVE” project, which promotes innovative approaches in the fight against environmental crime. This project connects new modern technologies, artificial intelligence and IT achievements with international entities, includes the work of local communities, and the main goal is to reduce the damage that can occur to the environment.

Artificial intelligence uses scientific sources and data, especially DNA analysis and stable isotopes. “ECO - SLAVE” enables continuous monitoring of illegal markets where rare plant and animal species are sold and identifies key subjects in the execution of these criminal acts. The role of the local community in solving these crimes is reflected through the strategic fight against environmental crime, through strengthening the influence on global political decision-making and through legislative activity. Also, there is an urgent need for strong global coordination and the application of innovative mechanisms for legal implementation, all with the aim of preventing environmental crime and protecting basic natural resources and the security of the European Union.

The essential issue is the question of the impact of environmental crime on the ecosystem and environment of Europe. The consequences are reflected in the increase in the rate of pollution, the degradation of wild and rare plant and animal species, the

reduction of biodiversity, the disruption of the ecological balance and the questioning of the survival of many species.

“ECO - SALVE” is a project financed by the European Union and deals with innovative approaches in the fight against environmental crime through the connection of modern technologies, international cooperation and the involvement of the local community, with the aim of reducing the consequences that can occur in nature. Artificial intelligence enables open sources of data and scientific techniques.

Unfortunately, little is known and little is said about the harmfulness of environmental crime, and the facts are that it is a very big legal and social problem, because it creates serious consequences for the environment and the ecosystem. Among other things, it contributes to the spread of dangerous infectious diseases, environmental disasters and negative climate change. A particular danger is contamination of the food chain, which directly endangers people and contributes to a high mortality rate. Most often, contamination of the food chain occurs as a direct consequence of environmental crime. Therefore, the consequences of environmental crime are direct for human health and ecology. Indirectly, environmental crime can lead to political instability and disruption of social conditions. In particular, this refers to the violation of human rights, the incitement of violence and the promotion of corruption.

On the territory of the European Union, at the beginning of 2025, an extensive action to combat environmental crime was carried out on the territory of France and Spain, which resulted in the arrest of 29 persons who were found to be members of a criminal organization that worked on the sale of illegal plant protection products. This organized criminal group sold around 25 tons of illegal plant protection products and obtained illegal property gains in the amount of five million euros (Kovačević, et al., 2015, 989).

Conclusion

The security issue of the European Union is one of the most important issues today. Within the security policy of the European Union, an important place is occupied by the fight against certain types of criminal acts. Environmental crime is one of the most important issues today, because it is a crime that is expanding, and the consequences of which can be very large.

This paper itself examines the relationship between European security, environmental crime and artificial intelligence. The starting hypothesis of this paper, that artificial intelligence can contribute to the development of new forms of environmental crime, contribute to the avoidance of personal responsibility and the professionalization of the execution of new types of criminal acts and abuses, was partially confirmed through examples of smuggling of rare plant and animal species, which are under special legal protection. The Internet, social networks and other means of modern communication enable the illegal sale and offering of these rare species on illegal markets with maximum protection of personal identities and hiding from personal legal liability. Auxiliary hypotheses of this paper are: artificial intelligence and modern information technologies help in the execution of environmental crimes; the normative and security policy of the European Union is aimed at establishing standards in the application of artificial intelligence, which would set limits regarding the potential possibilities of abuse. However, this paper also proved the existence of positive aspects of the use of artificial intelligence in the fight against environmental crime. In support of the useful aspects, the “ECO - SALVE” project, financed by the European Union, contributes to

better elucidation of these criminal acts and suppression of the negative consequences that may arise.

Like all other technical and technological innovations, artificial intelligence brings with it both positive and negative aspects. Therefore, this problem should be discussed from the aspect of the ethical use of artificial intelligence and care should be taken that every aspect should be viewed from two angles: the benefits and harms that can arise from the use of artificial intelligence. The conclusion is that artificial intelligence should be improved with the aim of helping to suppress environmental crime and increase security at the level of the European Union.

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