



Research Article

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Criminal offenses in the field of Cybernetics related to computer - Computer forgery and computer fraud

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Abstract

Nowadays, the development of information technology, computer devices and various Internet networks are worldwide spread. The scale of this development has posed a challenge in finding appropriate mechanisms to mitigate their negative effects. In the field of criminal justice, one of these mechanisms and the most important is the material criminal law, which through the prediction of criminal offenses in the field of cybercrimes contributes to the prevention of these offences. Among numerous provisions of the substantive criminal law, specifically related to criminal offenses in the field of cybernetics, the criminal offense "Computer forgery", provided by Article 186/a and the criminal offense "Computer fraud", provided by Article 143/b, are of particular importance recognized by the Budapest Convention and doctrinal sources as cybercrimes related to computers. Due to the significance of these offenses in practice, being the most commonly committed crimes in Albania since their first inclusion in Albanian criminal legislation, this paper aims to provide relevant recommendations by discussing the historical context and evolution of these two provisions, various aspects of the legal analysis of cybercrimes, enriched with official data on the consumption of these offenses in Albania in recent years.

Keywords: computer forgery; computer fraud; Budapest Convention.

1. Introduction

Computer forgery and computer fraud are two of the many criminal offenses in the field of cybernetics provided by the Criminal Code of the Republic of Albania, otherwise the substantive criminal law. Referring to the official data of the General Prosecutor's Office, these two criminal offenses remain the most used in practice, therefore the most investigated and judged by the competent bodies. However, despite this,

the number of registrations of criminal proceedings for these offenses remains low compared to the high level of development of information technology combined with the development of computer equipment and various Internet networks.

Based on these data, the importance of dealing with these two criminal offenses is great. Both in the context of their detailed study and in the context of finding recommendations in accordance with the current criminal situation in the country. In this perspective, the treatment of the evolution of the provision of computer forgery and computer fraud, the analysis of the constituent elements of these two criminal offenses, as well as the analysis of the data obtained by the General Prosecutor's Office on these criminal offenses, constitute the main points on which it relies the work.

2. Computer forgery

The provision of the Criminal Code for the criminal offense of computer forgery provides that:

*"Entering, modifying, deleting or omitting computer data, unlawfully, in order to create false data aiming to submit and use them as authentic, despite of whether the created data are directly readable or understandable, are punishable by imprisonment from six months to six years. When this very act is committed by the person whose task is to safeguard and administer computer data, with accomplices, more than once, or has brought about serious consequence to the public interest, is punishable by imprisonment from three up to ten years."*¹

The criminal offense of computer fraud was added to the Penal Code by law no. 10023/2008. This law came as a result of the ratification of the Budapest Convention, which, among other things, in its article 7 provides that:

*"Each Party shall adopt such legislative and other measures as may be necessary to establish as criminal offences under its domestic law, when committed intentionally and without right, the input, alteration, deletion, or suppression of computer data, resulting in inauthentic data with the intent that it be considered or acted upon for legal purposes as if it were authentic, regardless whether or not the data is directly readable and intelligible. A Party may require an intent to defraud, or similar dishonest intent, before criminal liability attaches",*² forcing the Albanian state to criminalize actions that constitute computer forgery.

The object of this criminal offense is the protection of the authenticity of computer data. The purpose of this article is to create a criminal offense parallel to the forgery of tangible, physical documents, thus filling the gaps in the criminal law related to ordinary, classic forgery, which generally refers to the forgery of various physical documents. It is meant the criminal offenses such as: *"Forgery of documents"*,³ *"Forgery of school documents"*,⁴ *"Forgery of health documents"*,⁵ *"Forgery of identity cards, passports or visas"*,⁶ and *"Forgery of civil status documents"*.⁷ The current prediction of computer falsification comes in accordance with the importance and the wide range of documents or other data with electronic evidentiary value, the falsification of which in

¹ Article 186/a of the Criminal Code.

² Article 7, Budapest Convention, ratified by law no. 8888, dated 25.4.2002.

³ Article 186 of the Criminal Code.

⁴ Article 187 of the Criminal Code.

⁵ Article 188 of the Criminal Code.

⁶ Article 189 of the Criminal Code.

⁷ Article 191 of the Criminal Code.

many cases brings the same serious consequences as traditional acts of forgery. We take into consideration here the high number of electronic documents that are currently enabled by the E-Albania portal, and that in the absence of the provision of this criminal offense would remain unpunished.

Meanwhile, due to the object that this provision protects, but also due to the consequence that comes in the consumption of this criminal offense, the legislator has assessed its categorization as a crime, which is then followed by a punishment of up to 10 years of imprisonment.

Objectively, this criminal offense is committed by entering, changing, deleting or removing computer data. These actions have the same meaning as we have analyzed above in other offences. Referring to practice, in order to be more specific, the actions constituting computer forgery include altering the generalities in an electronic document, removing or altering photographs in various electronic documents, removing or altering other identifying data, and certainly essential aspects in terms of their evidentiary strength, but always of a computer nature.

For the purposes of this offence, the false information does not necessarily have to be directly legible or understandable, as indeed this may be the true intention of the perpetrator of this offence. And in case the provision would not make a provision as it currently does, then the provision would be incomplete creating a gap, which would question the efficiency of the provision in practice.

In terms of the provision, protecting the authenticity of data in electronic documents, resulting from the aforementioned actions that constitute the objective aspect of this criminal offense, applies equally to both public and private documents. This is because the provision, in its content, does not refer to a specific, concrete protection, thus legislating protection of the authenticity of computer data in any field, including both public and private domains.

Further in the analysis, the subject of this crime can be general or special, since from the very content of the provision, we understand that the criminal offense is committed according to the provision of the first paragraph by a general subject and according to the second paragraph by the one who is responsible for the storage and administration of computer data, who may be a public or private employee. So, in both cases, the above actions are performed by a person that does not have the right to perform actions with them, with the specific purpose of creating false data, presenting and using it as authentic.

From the subjective side, this criminal offense is committed with direct intent and with the special purpose of presenting false data as authentic. Contrary to the provision in the convention, in which the intention of the offender is optional, our legislation has chosen not to make this specification, leaving the purpose open and guaranteeing the stability of the provision over time (Miha, 2024).

We have qualified circumstances when the crime is committed in collaboration, more than once or has brought serious consequences for the public interest. All circumstances which reflect a serious form of organization of the perpetrators and therefore a high social risk. It is not for nothing that if the crime is committed under these circumstances, the maximum sentence is 10 years in prison.

Regarding the causal link between actions and consequences, we can say that, through computer forgery, very serious and great consequences can come, especially in the

legal and practical context, since in many cases computer forgery is hidden in another criminal offense. For example, a person can create false financial statements to secure a loan or obtain funds, which consumes both the criminal offense of computer forgery and that of fraud the bank seeking the loan.

Meanwhile, taking into consideration the fact that in a large part of cases, computer forgery is carried out through sophisticated technology tools, which enable a high percentage of the forged document to have the same appearance as the original one, society, institutions, every natural person and legal, in the face of any suspicious case, show special attention and communicate directly with law enforcement bodies.

Based on the data received from the General Prosecutor's Office,⁸ for the year 2021 there were 74 criminal proceedings registered, which ended in 3 defendants convicted, and for the year 2022 there were 81 criminal proceedings registered, which ended in 4 convicted defendants. As it is understood a high disproportion between the number of registered proceedings and the number of convicted defendants. Of course, analyzing this disproportion with caution, taking into consideration the cases where the computer forgery was carried out for the purpose of financial gain and the court may have convicted the defendant for computer fraud and not this criminal offense, as well as cases where we are not really ahead computer forgery, or the commission of the work by a specific author is not proven, again the disproportion remains high.

3. Computer Fraud

For the criminal offense of computer fraud, the Albanian Penal Code provides that: *"Entering, modifying, deleting or omitting computer data or interfering in the operation of a computer system, in order to ensure for oneself or for other parties, through fraud, an unfair economic benefit or to cause to a third-party asset reduction, are punishable by imprisonment from six months up to six years. This very act, when committed in complicity, or more than once, or when it has brought about serious material consequences, is punished by imprisonment from five to fifteen years."*⁹

Historically, just like the criminal offenses discussed above, this criminal offense was also provided for the first time by the material criminal law in 2008, through the entry into force of law no. 10023, dated 27.11.2008 and pursuant to Article 8 of the Budapest Convention, which provides that:

*"Each Party shall adopt such legislative and other measures as may be necessary to establish as criminal offences under its domestic law, when committed intentionally and without right, the causing of a loss of property to another person by: a any input, alteration, deletion or suppression of computer data, b any interference with the functioning of a computer system, with fraudulent or dishonest intent of procuring, without right, an economic benefit for oneself or for another person."*¹⁰

The provision underwent changes in 2013 through the entry into force of law no. 144, dated 2.5.2013, due to the obligation to reflect in the legislation one of the Decisions of the Constitutional Court, in the content of which, among other things, it was argued that:

⁸ Annual Report on the State of Crime for 2022, last accessed on 31.01.2024, in the link: file:///C:/Users/jona.vina/Downloads/Raporti_Vjetor_kriminaliteti_2022_Kuvendit_Prokuroria_e_Pergjithshme_6915.pdf.

⁹ Article 143/bi of the Criminal Code of the Republic of Albania.

¹⁰ Article 8 of the Budapest Convention, ratified by law no. 8888, dated 25.4.2002.

"47. From the above, the Court considers that, by itself, each of the main punishments provided for by Article 29 of the Criminal Code, applied when necessary together with supplementary punishments as well as the penalty of a fine according to the provisions of Article 34, paragraph fifth and sixth, of the Criminal Code, are sufficient in achieving the goal of criminal punishment and in proportion to the principles of criminal legislation while simultaneously respecting the principle of separation of powers.

48. The court considers that the a priori provision of the two main punishments for criminal offenses such as forgery of seals, stamps or forms or forgery of civil status acts, outside of the criteria analyzed above, is not in proportion to the situation that has dictated (the fight against organized crime) as well as contradicts the principle of individualization of punishment and therefore the principle of justice by the court, as it removes from the latter the possibility of determining, case by case, the criminal punishment according to the circumstances of the concrete case under judgment....

... 50. The court notes that the addition made to Article 29 of the Criminal Code by the legislator with Law No. 9086, dated 19.06.2003, by foreseeing provision of imprisonment and fine, has served as a legal basis for all the changes undertaken later in the Special Part of the Criminal Code for the provision of the two main punishments in various criminal offenses including the criminal offenses provided in Articles 190 and 191 of the Criminal Code, subject to review....

.... 52. Finally, the Court concludes that articles 29, last paragraph, 190 and 191, of the Criminal Code, which sanction the provision of the two main punishments, that of imprisonment and a fine, infringe the article 17 of the Constitution and as such should be revoked."¹¹

Based on this argument, the amendments of 2013 made it possible for the sanction for the criminal offense of computer fraud to no longer provide application of the two main punishments, that of a fine and that of imprisonment, but only one of them, specifically that with imprisonment. As cited above, this change has been justified, analyzed mostly in relation to the principle of proportionality of punishments provided by the provision before the 2013 changes, with the goal that is intended to be achieved through it, both before the 2013 changes and after these changes. The principle which must be evaluated case by case, considering a fair balance between the limited right and the public interest or the protection and guarantee of the rights of other citizens, the tool used in relation to the situation that dictated it, of the violated right and the goal that the legislator seeks to achieve in the specific case.

"35. ... So, in other words, if the severity of the punishment (the provision of the two main punishments), is proportional in relation to the importance of the concrete violation and the possible consequences that may come from it."

Based on the above, at the end of the examination of this case, the Court assessed that this provision is not proportional and as such should be abolished. Returning specifically to the analysis of the criminal offense of computer fraud, and specifically the object of this criminal offense, we say that the legislator through this sanction aims to protect property from any illegal manipulation that may occur during the processing of computer data. This is also explained by the fact that this criminal offense is placed in Chapter III - Criminal offenses against property and in the economic sphere, Section II - Fraud, of the Criminal Code of the Republic of Albania.

In the analysis of the objective side of this criminal offense, we can say that, computer

¹¹ Decision no. 47, dated 26.07.2012 of the Constitutional Court.

fraud is a criminal offense with a general object, which aims to protect the property of different individuals from actions violate it. The actions are: entering, changing, deleting or removing computer data, as well as interfering with the operation of a computer system, with the sole purpose of carrying out an illegal transfer of property.

Referring to the above, we understand that the realization of this crime requires entering the computer data as a first step. This is because there can be no change, deletion or removal of computer data without performing the first action, that of entering the computer data. Further, the criminal offense of computer fraud is accomplished through insertion and alteration, which means modification of existing data. It is realized through insertion and deletion or removal, which means the destruction of existing data or any other action that does not allow the subject holding the data to access the data freely (Ratkoceri, 2023). As well as keeping in consideration the sanctioning of this criminal offense and the stability of its prevention in time, the legislator has selected as a way of committing it also any intervention in the operation of a computer system. This provision criminalizes a wide range of interventions, which, considering the day-to-day development of technology, may be unknown until the moment of their detection by the victim or the responsible bodies.

Furthermore, the subject of this criminal offense can be anyone who has reached the age of 14 and is responsible for understanding the actions performed and the consequences of their actions. The consumption of this criminal offense by a special subject does not constitute an exception, since for the purpose of economic benefit, a subject who has certain access rights to computer data, in a computer system, in excess of them, consumes the objective side of this criminal offense. Also, it should not be overlooked that the author of this criminal offense possesses special computer skills, through which he carries out the criminal offense of computer fraud.

While related to the subjective side of this criminal offense, as we mentioned above, the purpose is essential for this provision, since in order to consider the criminal offense as completed, it is not enough only to fulfill the elements analyzed above, but it must the above actions are intended to provide oneself or third parties with an unfair economic benefit or to cause a third party to lose property. So, all the actions of the objective side of the criminal offense, the ways of its execution, have the main purpose of benefiting from the perpetrator's undeserved financial income or reducing it. This purpose causes this criminal offense to be categorized as a criminal offense with a special purpose of an economic character, the non-existence of which leads to the non-consummation of this infringement and the occurrence before the criminal offense of unauthorized computer access,¹² interference with computer data¹³ or computer systems.¹⁴

Referring to practical cases, often, along with the economic consequence, there are other serious consequences for the victims, such as the theft of personal information, including social security number, ID card number, or details of the credit card, etc., which in the future can be used for other crimes. Thus, the handling of this criminal offense by every included authority of the criminal process requires seriousness, care and professionalism.

A very important element of the subjective side, but also the objective side of this

¹² Article 192/bi of the Criminal Code.

¹³ Article 293/bi of the Criminal Code.

¹⁴ Article 293/ci of the Criminal Code.

criminal offense, which has brought legal debate among experts in practice, is related to the fact that the criminal offense of computer fraud refers to an equipment, despite the fact that at the end is not being in the sense of holding rights.

In response to this debate, experts are divided in two directions. Those who argue that this provision refers to the fraud that the author does to various computer devices for the purpose of his unfair financial gain. And those who appreciate that computer fraud cannot be done to the device as it is not a being within the meaning of the criminal provision of classic fraud.

Of course, determining the exact and right position in this case presents great difficulty, but let's look at a simple analysis of it, according to our point of view based mainly on the current provision of the computer fraud and classic fraud provision.

First, the current provision of computer fraud provides that:

*"Entering, modifying, deleting or omitting computer data or interfering in the operation of a computer system, in order to ensure for oneself or for other parties, through fraud, an unfair economic benefit or to cause to a third-party asset reduction, are punishable by imprisonment from six months up to six years...."*¹⁵

While the current provision of the criminal offense of classic fraud provides that:

*"Appropriation of private or public property for oneself or other persons, through submission of false facts or concealing of true facts, lie or abuse of trust, shall constitute the criminal offense of fraud and it shall be punished by up to five years of imprisonment."*¹⁶

In the interpretation of both provisions, the way of their formulation, confuses the analysis and attitudes in practice. This is because in computer fraud it is required that the actions of its objective side are carried out with the aim of providing themselves or third parties with financial benefit, fraudulently, and from the content of the classic fraud provision we understand that these actions cannot be directed to a computer device, as they are closely related to the human being. Specifically, the presentation of false facts or the concealment of true facts, lies or abuse of trust are actions that can only be directed to human beings, causing them to believe and not to computer equipment that is automated.

Referring to the above, we consider that there is no doubt that the criminal offense of computer fraud is directed to computer equipment. Just as there is no doubt that the actions of the objective side of the criminal offense of classic fraud, can only be directed against human beings and never against computer equipment. Under these conditions, it is considered necessary to change the provision of Article 143/b, removing the term "fraudulently", and not concluding the theoretical analysis, but also the practice of implementing these provisions.

Meanwhile, due to the purpose foreseen in the content of this criminal offense, its consumption cannot come from negligence, but only under the form of willful guilt, which means the performance of actions with awareness and intention to have consequences, unfair economic benefits.

If we refer to the second paragraph of the provision, we note that when the criminal offense is committed in cooperation, to the detriment of several persons, more than once or when it has brought serious material consequences, it is punished with imprisonment from five to fifteen years. So, qualifying circumstances that reflect high

¹⁵ Paragraph 1, Article 143/b, Criminal Code.

¹⁶ Paragraph 1, Article 143, Criminal Code.

social risk, for which the maximum penalty is up to fifteen years.

Further in the analysis, based on the data of the General Prosecutor's Office,¹⁷ for the year 2021 there were 71 registered criminal proceedings, which ended in 2 convicted defendants, and for the year 2022 there were 88 registered criminal proceedings, which ended in 3 defendants convicted.

The specific weight of this criminal offense in the group of criminal offenses "Against computer crime" for the year 2021 is 30.45%, while for the year 2021 it was 30.74%. From the statistical data in 2022, there is an increasing trend of 23.94% of proceedings registered for the criminal offense provided for by Article 143/bi of the Criminal Code "Computer Fraud", compared to 2021." Even for this criminal offense, like computer forgery, there is a disproportion between recorded proceedings and convicted defendants.

4. Conclusion

At the end of the analysis of the criminal offense of computer forgery and computer fraud, the case of competition between these two criminal offenses should also be in focus. Thus, referring to the content of the provisions of each of them, we see that the criminal offense of computer fraud is equal to the objective side of the criminal offense of computer forgery plus the purpose of unfair economic benefits. Taking this structure into consideration, in the case where the author has fulfilled the objective side of the criminal offense of computer forgery with the intention of deceiving and benefiting financially from it, we estimate that there should be no competition between these two offenses, punishing the author for both criminal offenses, but only for computer fraud, which in this case absorbs the objective side of the criminal offense of computer forgery as a way of committing the crime.

Meanwhile, taking into consideration the above argumentation of the elements of the objective and subjective side of the criminal offense of computer fraud as well as the content of the provision of classic fraud, it is recommended to change the provision of Article 143/b, specifically the removal of the term "by fraud", as the current existence of this term confuses the practical application of this provision and often leads to its incorrect application.

Also, referring to the low figures of conviction of the perpetrators of the criminal offenses of computer forgery and computer fraud, compared to the number of registrations of criminal proceedings for these criminal offences, but also to the level of unstoppable development of technology in every element of it, the competent bodies must take all the necessary measures to guarantee the full investigation and trial as provided by the legislation in force.

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