

# ACCESS TO A COMPUTER SYSTEM AS A SPECIAL METHOD OF FORENSIC INVESTIGATION

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## **Abstract**

*Access to a computer system is the entry into a computer system or a means of storing computer data, either directly or remotely, through specialized programs or through a network, in order to identify evidence.*

*The special methods of forensic investigation are the techniques applied by the competent authorities in criminal investigations, aimed at detecting or investigating serious crimes and suspects in order to gather information, so that the persons concerned are not aware of this. The special method of supervision regarding to access to a computer system is stipulated by the Article 138 (1) (b) of the Romanian Criminal Procedure Code.*

*The article presents and analyzes some legal and technical aspects regarding the special method of forensic investigation of access to a computer system. Moreover, the article emphasizes that the access to an information system must not harm in any way the fundamental rights or freedoms of citizens, private life, honor or subject them to illegal restrictions.*

**Key Words:** *special method; forensic; investigation; access; computer system.*

**JEL Classification:** [K14]

## **1. Introduction**

The special techniques and methods of criminal investigation are contained in the Romanian Code of Criminal Procedure, both in Chapter IV, entitled *Special methods of supervision or research*, and in Chapter V, entitled *Conservation of computer data*.

The special method of supervision regarding to access to a computer system is stipulated by the Article 138 (1) (b) of the Romanian Criminal Procedure Code.

According to article 138 (3) of the Criminal Procedure Code, *access to a computer system* is „the entry into a computer system or in a means of storing computer data, either directly or remotely, through specialized programs or through a networks, in order to identify evidence”.

Access to a computer system is an important tool in the fight against serious crimes.

*Access* means any successful interaction with a computer system and the entry into all or only on one side of the computer system. (Spiridon, 2008: 243).

The special method of forensic investigation of access to a computer system presented in Article 138 (1) (b) of the Romanian Criminal Procedure is used under the name of *technical supervision*.

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The *computer system* represents according to paragraph 1 of Article 181 of the Romanian Criminal Code "any device or set of devices interconnected or in functional relation, of which one or more ensure the automatic processing of data, by means of a computer program".

The computer system can be a mobile phone, a desktop computer, a laptop computer, an electronic tablet, a personal digital assistant, an ATM - Automated Teller Machine.

The computer data represent according to paragraph 2 of Article 181 of the Romanian Criminal Code "any representation of certain facts, information or concepts in a form that can be processed through a computer system".

At the same time, according to Article 35 (1) (d) of the Law no. 161/2003 regarding to some measures to ensure transparency in the exercise of public dignities, public functions and in the business environment, the prevention and sanctioning of corruption, this category includes any computer program that can determine the performance of a function by a computer system.

## **2. Procedural aspects regarding the access to a computer system**

The measure of the technical supervision of the access to an information system is ordered by the judge of rights and freedoms in the situation when the following conditions are fulfilled cumulatively, according to Article 139 (1) of the Romanian Criminal Procedure Code:

- a) The criminal prosecution proceeding had begun;
- b) There is a reasonable suspicion regarding the preparation or commission of offences against national security provided by the Romanian Criminal Code and special laws, as well as in the case of drug trafficking offences, carrying out illegal operations with precursors or other products likely to have psychoactive effects, offences related to non-compliance with weapons, ammunition, nuclear and explosive materials, offenses related to trafficking and exploitation of vulnerable persons, acts of terrorism, money laundering, counterfeiting of coins, stamps or other values, forgery of electronic payment instruments, in the case of crimes committed by computer systems or electronic means of communication, against the patrimony, in the case of blackmail, rape, illegally deprived liberty, tax evasion, in the case of corruption offences and offences assimilated to corruption offences, offenses against the financial interests of the European Union or in case of other offences for which the law provides for the imprisonment of 5 years or more;
- c) The measure must be proportionate to the restriction of fundamental rights and freedoms, given the particularities of the case, the importance of the information or evidence to be obtained or the seriousness of the crime;
- d) The evidence could not be obtained otherwise or obtaining them would entail particular difficulties that would prejudice the investigation or there is a danger to the safety of persons or valuable property.

The measure of the technical supervision of the access to a computer is arranged during the criminal prosecution, for a maximum period of 30 days, at the

request of the prosecutor, by the judge of rights and freedoms from the court whose competence would be to judge the case in the first instance or from the appropriate court in its grade in whose constituency is the headquarters of the prosecutor's office of which the prosecutor who made the request is part (Article 140 (1) of the Romanian Criminal Procedure Code). The request made by the prosecutor must include: indication of the technical supervision measures that are required to be arranged, the name or other identification data of the person against whom the measure is ordered, if known, indicating the evidence or data from which the reasonable suspicion arises regarding the commission of an offence for which the measure can be ordered, indicating the deed and the legal classification. The prosecutor must submit the file of the judge of rights and freedoms (Article 140 (2) of the Romanian Criminal Procedure Code).

The present application requesting the approval of the technical supervision of access to a computer system is solved on the same day, in the council room, without the parties being summoned, the participation of the prosecutor being compulsory. The judge of rights and freedoms when he considers that the request is well-founded, orders the admission of the prosecutor's request and immediately issues the mandate of technical supervision, the drafting of the minute being compulsory.

The decision of the judge of rights and freedoms and the mandate must include: the name of the court; date, time and place of issue; the name, first name and quality of the person who made the conclusion and issued the mandate; indicating the measure of access to a computer system; the period and purpose for which the measure of access to a computer system was authorized; the name of the person subject to the measure of technical supervision of the access to a computer system or its identification data, if known; indicating, if necessary, the nature of the measure, the identification elements of each telephone, the access point to a computer system and any known data for identifying the communication path or account number; the signature of the judge and the stamp of the court (Article 140 (5) of the Romanian Criminal Procedure Code).

The conclusion by which the judge of rights and freedoms rules on the measure of technical supervision of access to a computer is not subject to appeal. A new application for approval of the same measure can be made only if new facts or circumstances, unknown at the time of solving the previous request by the judge of rights and freedoms, have arisen or been discovered.

There is also the situation when the prosecutor can authorize the method of technical supervision of access to a computer system, through an ordinance, when there is an emergency, and obtaining the mandate of technical supervision under the conditions of article 140 would lead to a substantial delay of the investigations, to the loss, alteration or destruction of evidence or would endanger the safety of the injured person, the witness or the members of their families and when the conditions stipulated by Article 139 para.1 and para. 2 of the Romanian Criminal Procedure Code are fulfilled.

According to the provisions of Article 141 (5) of the Romanian Criminal Procedure Code, regarding the computer data identified by access to a computer system, the prosecutor can dispose, by ordinance the following procedural measures: the creation and preservation of a copy of these computer data; the suppression of accessing or removing these computer data from the computer system. The copies shall be made by appropriate technical means and procedures, such as to ensure the integrity of the information contained therein.

In case, the judge of rights and freedoms finds that the conditions stipulated by the Article 141 (1) of the Romanian Criminal Procedure Code are not respected, he will invalidate the measure taken by the prosecutor and order the destruction of the evidence obtained under it. The prosecutor will destroy the evidence thus obtained and draw up a report to this effect (art. 141 para. 6 of the Romanian Criminal Procedure Code). With the request for confirmation of the measure or separately, the prosecutor can request the judge of rights and freedoms to take the measure of technical supervision of access to a computer system under the conditions of Article 140 of the Romanian Criminal Procedure Code (Article 141 para. 7 of the Romanian Criminal Procedure Code).

The prosecutor implements the measure of the technical supervision of access to a computer system or may order it to be carried out by the criminal investigation body or specialized workers within the police department (art. 142 paragraph 1 Criminal Procedure Code). Persons who are called to provide technical assistance in the execution of the supervision measures are obliged to keep the secret of the activities performed, under the sanction of the criminal law.

In order to carry out the activities provided by the Article 138 paragraph (1) (b) of the Romanian Criminal Procedure Code, the prosecutor, the criminal investigation bodies or the specialized workers of the police directly use the appropriate technical systems and procedures, so as to ensure the integrity and confidentiality of the data and information collected (Article 142 para. 1<sup>1</sup> of the Romanian Criminal Procedure Code).

The providers of public electronic communications networks or the providers of electronic communications services intended for the public or of any type of communication are obliged to collaborate with the prosecutor, the criminal investigation bodies or the specialized workers within the police, within the limits of their competences, for the implementation of the technical supervision mandate (Article 142 para. 2 of the Romanian Criminal Procedure Code).

The prosecutor or the criminal investigation body prepares a report for each activity of technical supervision, in which the results of the performed activities are recorded, which concern the fact that forms the object of the investigation. The copy is attached in a sealed envelope, a copy of the media containing the result of the technical supervision activities. The support or a certified copy of it will be kept at the prosecutor's office, in special places, in a sealed envelope and will be made available to the court, at its request. After the court has been notified, the copy of the support containing the technical supervision activities regarding access to a

computer system and copies of the minutes is kept at the court registry, in special places, in a sealed envelope, at the exclusive disposal of the judge. or to the complete vested with the settlement of the case (Article 143 para. 1 and para. 2 of the Romanian Criminal Procedure Code).

The computer data regarding the fact that is the object of the investigation and which were obtained by using the measure of technical supervision of access to a computer system are provided by the prosecutor or by the criminal investigation body in a report, in which is mentioned the issued mandate to perform these, the identification data of the computer systems or of the access points, the names of the persons who made the communications, if these are known, the date and time of each call or communication. The minutes are certified for authenticity by the prosecutor. After the cessation of the surveillance measure, the prosecutor informs the judge of rights and freedoms about the activities carried out (Article 143 para. 4 and para. 5 of the Romanian Criminal Procedure Code).

The measure of the technical supervision of access to a computer system may be extended, for well-justified reasons, by the judge of rights and freedoms from the competent court, at the motivated request of the prosecutor, if the conditions provided by the Article 139 of the Romanian Criminal Procedure Code are fulfilled, each extension may not exceed 30 days. The total duration of the measure of access to a computer system, regarding the same person and the same fact, may not exceed, in the same case, 6 months.

### **3. Some technical-tactical aspects regarding the access to a computer system**

Since *access to a computer system* consists of entering a computer system or a means of storing computer data, either directly or remotely, through specialized programs or through a network, in order to identify evidence, we consider that in Romania they are authorized to own and use appropriate means for the verification, processing and storage of information, according to the law, the following institutions (Moise, Stancu, 2020: 336): Romanian Intelligence Service; Ministry of Internal Affairs, through the General Directorate of Information and Internal Protection, the General Anti-corruption Directorate and the General Directorate for Combating Organized Crime; Ministry of National Defense, through the General Directorate of Defense Information; The Public Ministry, the Prosecutor's Office attached to the High Court of Cassation and Justice, through the Directorate for the Investigation of Organized Crime and Terrorism Offences and the National Anti-corruption Directorate.

We mention that all these authorities have formed in their headquarters, specialized structures for the implementation of the technical supervision measures aimed at accessing a computer system (Tudoran, 2012: 165). Also, through these structures, the law enforcement bodies proceed autonomously, directly, immediate and independently upon the concrete implementation of measures to monitor access to a computer system from its own locations (Buzatu, 2012: 298-299).

From a technical-tactical point of view, there are a number of problems that must be clarified by the criminal investigation team, through the method of technical supervision of access to a computer system, these being the following (Buquet, 2011: 358-367): the illegal activity carried out; the ways, methods and means used; the place and time of the crime; the identity and quality of the victims, when they exist; the consequences of the crimes committed; the identification of the criminals, their quality and the contribution each has to the commission of the crimes; the forms of guilt, the motive and the purpose of the illicit actions.

### Conclusions

Access to a computer system, as a special investigative technique implies by the way of accomplishment interferences with the right to privacy, thus it is necessary to respect the European standards of protection contained in Article 8 of the European Convention on Human Rights, as well as in the jurisprudence of the European Court of Human Rights. The interference exercised by authorities or by third parties represents a limitation of the exercise of the rights to private and family life, at home or to correspondence, and in order to comply with the provisions of the European Convention on Human Rights, it must cumulatively meet the following criteria: the interference must be provided by law; the interference must serve a legitimate purpose; the interference must be necessary in a democratic society; the interference must be proportionate to the intended purpose.

Access to a computer system as a special investigative technique is achieved by the use of technical means, such are equipments, software through which the actual access to the computer system is realized, these bearing in the specialized literature the name of *operative technique*.

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