

# Investigations using digital technology

*N G Shuruhnov*<sup>1,\*</sup>, *I V Voevodina*<sup>1</sup>, *S V Stroilov*<sup>1</sup> and *E A Maslennikova*<sup>1</sup>

<sup>1</sup>Academy of the Federal penitentiary service of Russia, 1 Sennaya str., Ryazan, 390000, Russia

**Abstract.** Despite the fact that activities of authorized persons in during urgent investigative actions are episodic, the absence of responsibility for successful completion of investigation is unacceptable. In this case, law enforcement agencies are fulfilling a single socially important goal, and this should be realized by the relevant officials. Regarding the dynamics of accumulation of information during the investigation of a crime, it should be noted that during urgent investigative actions, an initial array of evidentiary information is formed, which is the result of transformation of initial background knowledge of relevant official regarding what happened under the influence of information obtained by investigative and operational means. The Criminal Procedure Law contains requirements both for the mechanical accumulation of a certain amount of evidence highlighting certain circumstances included in the subject of proof, and for their compliance with strictly established requirements. We are talking about the reliability, sufficiency, relevance and admissibility of evidence, which actually determine the possibility of ultimately using this information in deciding whether a person is guilty or innocent of committing a crime. The required amount of evidence that meets the requirements of reliability and sufficiency ensures the reliability of the evidence base in a criminal case. The evidence obtained should be assessed in the aggregate on the basis of the inner conviction of the person carrying out urgent investigative actions. Their use in the production of further investigation, in the course of court proceedings, depends on how procedurally correct evidence will be collected by the bodies of inquiry during the production of urgent investigative actions.

## 1 Introduction

Different departmental affiliation of the bodies of inquiry and investigative units, disinterest of a person performing urgent investigative actions in increasing the efficiency of procedural activities often create various kinds of adverse consequences for the investigation process. Indeed, an official, realizing that his or her activities only precede the preliminary investigation, and the criminal case will soon be transferred to the head of the investigative body, performs the necessary procedural actions in view of legislative consolidation of such a duty. At the same time, the interest to provide the maximum possible assistance to the investigator, who will investigate this criminal case in the future, is at a rather low level. And there is an actual absence of normatively established

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\* Corresponding author: [a.copytowa@yandex.ru](mailto:a.copytowa@yandex.ru)

requirements for the quality and content of materials of a criminal case transferred upon completion of urgent investigative actions.

The possibility of realization of information obtained in the course of urgent investigative actions, the quality and quantity of its receipt depends on the organizational and legal component of criminal procedural activity of a representative of the body of inquiry [1]. It is the powers granted by the legislator to relevant officials that allow them to properly organize their activities, effectively conduct an investigation in the part assigned to them, accumulate important evidentiary information.

## **2 Methods**

In this study, methods of interviewing, questioning and polling were used, which ensured the reliability of research results, helped to identify the issues of law enforcement practice of institutions of the Federal Penitentiary Service of Russian Federation, and to identify complex issues of normative legal regulation of the production of urgent investigative actions. Success of any research is impossible without the use of methods of analysis and synthesis, which imply the study of positions of various scientists regarding the issues of criminal procedural activities of bodies of inquiry in criminal cases, in which a preliminary investigation is mandatory. This approach ensured accumulation of scientific knowledge for development of meaningful proposals based on the current legislation, allowing to improve this area of activity.

## **3 Results**

The validity and reliability of the research results are also achieved due to the polygamy of the process of applying various methods, techniques, tools and their complexes. The presence of these characteristics is supported by a detailed analysis of the empirical data obtained.

Attention should be paid to ensuring the use of information obtained as a result of implementation of information technologies during urgent investigative actions in the subsequent investigation of crimes. So, in course of our research, it was found that in 26.21% of cases there was a subsequent recognition as inadmissible evidence in criminal cases about the facts of crimes, especially those obtained using various technical means.

We also carried out research, as a result of which, heads of penitentiary institutions answered the question "what technical means does the penitentiary have for carrying out urgent investigative actions?" Following answers were received: 65.05% of respondents note that the institution has a unified suitcase for inspecting the scene; 17.48% of respondents note that they have at their disposal a minimum arsenal of technical means that can be used in the performance of urgent investigative actions (computer, photo camera, video camera); 11.65% of respondents indicate the presence of a complex of unified suitcases in the penitentiary for working with various traces and objects at the scene; 6.80% state the presence of search devices; 3.88% indicate the lack of necessary technical means in the penitentiary institution; 0.97% point to a specially equipped workplace of the person performing urgent investigative actions.

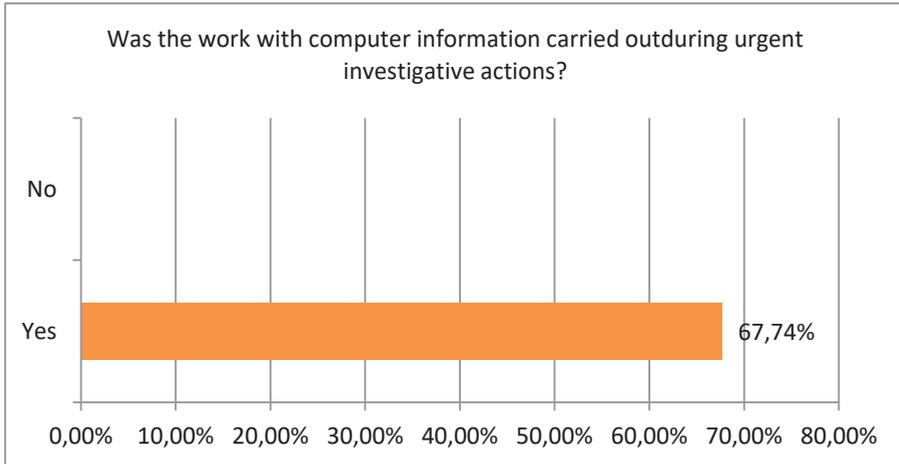


Fig. 1. Application of various technical means.

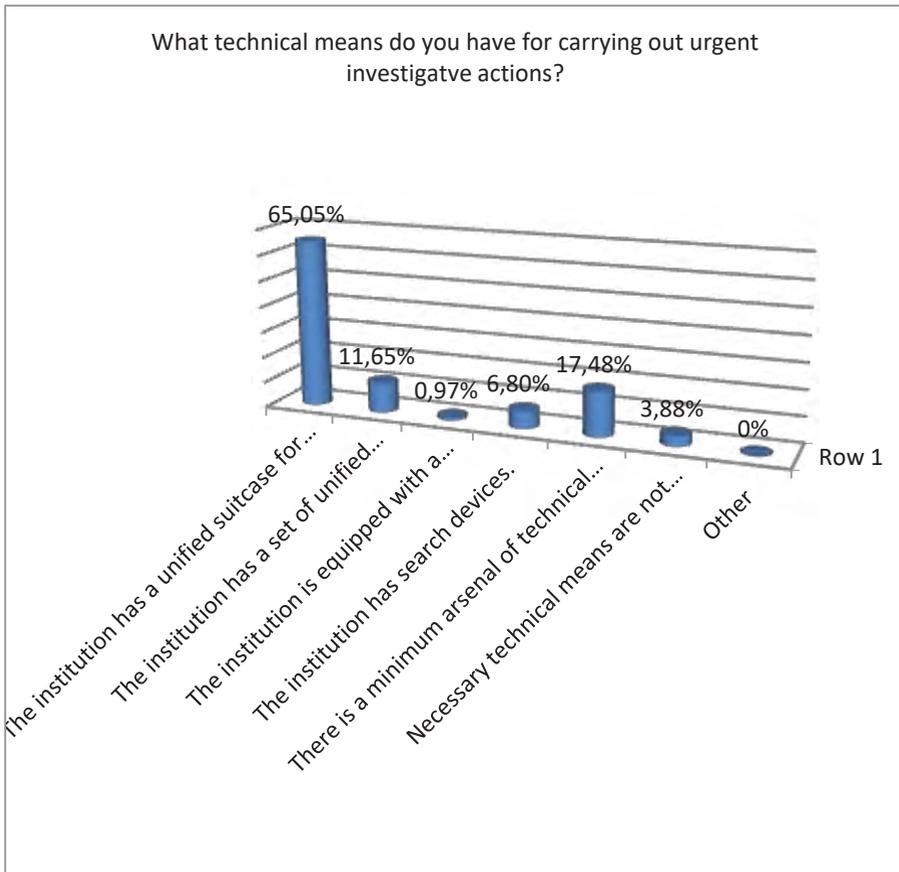


Fig. 2. Types of technical means.

## 4 Discussion

It is worth agreeing with the opinion expressed in the scientific literature, that currently established procedure for production of urgent investigative actions is characterized by a clear narrowing and limitation of the powers of bodies of inquiry, which leads to a decrease in the effectiveness of corresponding activity. [2, p. 12]

Ensuring the admissibility of evidence obtained on the basis of implementation of information technologies during urgent investigative actions in the future is laid down at the initial preliminary stage and, in particular, when they are seized. Strict adherence to procedural rules is here necessary, the legality of all performed manipulations. For example, we consider the best comprehensive removal of a mobile device, without removing SIM-cards or flash drives. If this is not possible, when packaging the parts of the device, ensure that the assembly is identical during the examination.

Detection of mobile devices occurs, as a rule, during an inspection or search. The task of the person performing the indicated investigative actions is to take measures to ensure the safety of information presumably stored on the device or its drives.

Solution to this problem seems possible when following system of actions is implemented:

- 1) exclusion of contact of unauthorized persons with a mobile device, as well as other citizens participating in the investigative action;
- 2) prevention of attempts to independently extract information, flash drives, SIM cards, including for the purpose of checking the actual location of required information in their memory;
- 3) ensuring the invariability of information accumulated on a device.

In fact, the person performing urgent investigative actions, upon detecting a mobile device, must fix it by means of photo and video recording with reference to a room or area, pack it in compliance with the appropriate procedural order, provide the necessary documentary registration, during which the detected device must be individualized.

At the same time, in view of the danger of losing important evidentiary information, we consider it inappropriate to inspect the mobile device in order to demonstrate the information contained on it and determine the possibility of confirmation of the circumstances included in the subject of proof. You should not use various programs for downloading information from a mobile device, synchronizing it with a computer, for example, iTunes, UnlockRoot, EasyRootingToolkit, Gingerbreak, Samsung PC Studio, Nokia PC Suite and others. The situation becomes much more complicated if the device is blocked. So, there is a risk of damage to information due to changes, including in the operating system (Symbian, Android, AppleiOS, Blackberry OS, Windows OS) when installing the necessary software that opens appropriate access to the device's resources. Therefore, to create the possibility of using information obtained in the framework of urgent investigative actions, as evidence, it is advisable to seize [3, p. 235-248] discovered in the course of investigative actions of computer technology without interfering with their memory and devices. In the future, after the transfer of materials to the investigating authority, the specified material evidence can be examined using specialized software. For example, the subdivisions of Investigative Committee of Russian Federation are armed with UFED hardware and software systems that allow them to conduct operational research of various mobile devices, extract information from their memory, GPS receivers, SIM cards and flash drives.

To ensure the promptness of the investigation and detection of persons involved in the commission of a crime, we assume the need to involve an employee of penitentiary institution - a computer specialist (if any) - in order to provide assistance and advice in carrying out certain actions with a mobile device during the examination. In any case, with

obvious technical complexity of a mobile device, the presence of lock codes, it is more justified to ensure the participation of a competent specialist in this field or to appoint a forensic computer-technical examination. It should be borne in mind that the examination as an urgent investigative action in conditions of penitentiary institution must be carried out as soon as possible, thereby excluding the possibility of destruction of traces of a crime by the interested convicts [4, p. 60].

The issue of using information obtained as a result of implementation of information technologies during urgent investigative actions in the subsequent investigation of crimes is closely related to the compliance of authorized officials with requirements of legality. At the same time, we stand on the position of imposing this obligation on the authorized persons. So, urgent investigative actions should be carried out exclusively by an official appointed for this in accordance with the established procedure.

It is mandatory to comply with general rules for production of investigative actions [5-6], enshrined in Art. 164 of the Criminal Procedure Code of Russian Federation. In particular, in each specific case, their production requires:

1. The legal basis, which is either the decision of a person carrying out urgent investigative actions, or a court decision.
2. Compliance with the time interval of investigative actions, in particular prohibition on their production at night.
3. The exclusion of facts of use of violence, threats and other illegal measures, as well as creation of danger to the life and health of persons involved. It should be noted that during the investigation in the penitentiary, the fact of concentration of a special contingent there actualizes the issue of ensuring the safety of persons in the restricted area. For example, it is precisely this prohibition that creates difficulties in attracting witnesses to the production of investigative actions.
4. Mandatory individualization of persons involved in the investigation.
5. Familiarization of participants with their legal status and the procedural order of conducted action.
6. Alerting the participants about the fact of use of information technologies during the investigation.
7. Compliance with the order of production of investigative actions. In addition, one should tactically correctly choose the sequence of necessary manipulations with objects in the course of investigative actions.

The foregoing does not at all mean the exclusion of any coercion in the production of urgent investigative actions and the use of information technologies in the course of them. The corresponding official of penitentiary institution, if there are legal grounds, can propose the fulfillment of legal requirements, including the use of physical force and special means [7] to ensure activities [8, p. 772-781]. However, any coercive influence applied in the course of criminal proceedings must be justified, lawful, adequate to counteraction and not violate the rights and legitimate interests of persons taking part in the investigative action.

The legality of investigative actions carried out presupposes their appropriate procedural execution. The latter requires fixing the actions performed in the protocol. The fact of using information technologies in the framework of investigative actions should be reflected in the course of procedural registration of relevant results. In this case, technical means used must be individualized and accurately described in the protocol. Reflection of corresponding investigative actions in the protocol is also required by the fact that an official of the body carrying out operational-search activity is involved in its production. Separately, it is worth mentioning the importance of adhering to the procedural rules for handling objects and documents seized during investigative actions. In particular, violation of the packaging requirements makes it impossible in the future to use the relevant items as material evidence, the production of expert research, clearly reducing the effect of the proof

process. [9, p. 138] Fixation of the seized items must guarantee the impossibility of access to them without damaging the packaging, the invariability of information contained in them. For example, the seizure of a cell phone during a search should be accompanied by its packaging, allowing for its transportation and storage, excluding the possibility of mechanical damage. In particular, it is advisable to carry out this procedure using soft wrapping materials, placing the corresponding item in a container, tight box, etc.

## 5 Conclusion

Compliance with the requirement of timeliness of investigative actions to prevent the loss of required information and ensure the possibility of their use in future criminal proceedings is undoubtedly important. Unreasonable delay in implementation of urgent investigative actions can lead to ineffectiveness or impossibility of activity aimed at detecting, collecting and fixing evidentiary information, due to its destruction by interested persons.

Ensuring the possibility of using information obtained during urgent investigative actions in the subsequent investigation of crimes is facilitated by the observance of requirements of objectivity by the person producing them. The latter is accomplished through accurate and detailed recording of various circumstances without introducing any changes at the place of investigation. The protocol of investigative action must reflect all the actions performed in the sequence in which they were carried out, as well as technical means used. Objectively objectifies the activities of the person performing urgent investigative actions, the fact of using information technologies to record the progress and results of the measures being taken. Various technical means and their complexes allow not only to exclude the subjectivity of procedural activities, but also ensure the completeness of investigation, excluding damage and loss of evidentiary information. In this aspect, we share the scientific position [10-14] that the efficiency of the proof process is significantly increased due to the qualified use of modern scientific and technical means, software, coupled with the competent use of classical techniques and methods of searching, collecting and researching information in the framework of investigation.

In addition, it seems unacceptable on the part of the person conducting the investigation to impose on a specialist all responsibility for the success of investigative actions involving the use of information technologies. It should be remembered that, first of all, an employee performing urgent investigative actions is responsible for their effectiveness, and accordingly he or she must lead them, direct the activity of a knowledgeable person, be aware of the essence and meaning of the manipulations being performed.

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