



## Information Support For Forensic Expert Activities Of Forensic Institutions: Current Problems Of Theory And Practice

**Zulfukorov Abduvahob Abdumalik**

Lecturer Of The Department Of Forensic Expertise Of The Academy Of The Ministry Of Internal Affairs Of The Republic Of Uzbekistan

**Copyright:** Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

### ABSTRACT

The article examines the process of informatization of the professional activity of forensic experts, the main directions of using computer technology in the informatization of the practical activities of experts, it studies a number of problems in the field of information support of forensic expert activity and in this regard, it is proposed to supplement Article 27 of the Law of the Republic of Uzbekistan “On forensic examination”.

### KEYWORDS

Informatization of the activity of forensic experts, forensic activity, information systems and catalogues, computerization of the information support process.

### INTRODUCTION

In modern conditions, it is impossible to imagine the activity of forensic departments without using the achievements of scientific-technical progress. The Law of the Republic of Uzbekistan «On Informatization» by December 11, 2003 No. 560-II, the Article 3 of it defines the informatization as an organizational social-

economic and scientific-technical process which should create conditions that meet the needs of legal entities and individuals in information by using information resources, information technologies and information systems [1].

At present, Article 27 of the Law of the Republic of Uzbekistan «On forensic examination» dated June 1, 2010 No. Law of Uzbekistan-249 states: «Enterprises, institutions, organizations are obliged to provide necessary information to conduct forensic investigations upon written request of the head of a state forensic investigations. At the same time, state forensic institutions ensure non-disclosure of obtained information, constituting state secrets and other secrets protected by law » [2].

Today the informatization of the professional activity of forensic experts can be defined in the following development directions:

1. The main, related to the information support of conducting forensic investigations;
2. Secondary, is also important which requires: integration of the achievements of science and technology into forensic activity; informatization of the process of training expert personnel and raising their qualifications; organization of information processes in the management activities of state forensic institutions.

Forensic activity also needs improvement by obtaining information about new methods and research methods, because life does not stand still, new objects of research appear, new tasks are set for experts. Here, the question of timely methodological informing the staff of expert subdivisions about various research disciplines becomes relevant.

Forensic activity involves the accumulation of theoretical knowledge, as well as practical developments and experience. Thereafter all the accumulated theory and practice for the purpose of convenient application, as well as

transmission to future generations of forensic experts, needs to be put in order, structured, systematized, archived (for example, in the form of collections - typical samples of expert opinions, in the form of passports of expert methods).

In addition to the methodological component, in the system of information support for forensic investigation activity, there must be noted the legal element which is represented by a set of normative acts on forensic investigations. Thus, regarding the informatization of modern professional forensic investigation activity, several directions of organization of this process can be outlined as follows. We will examine them in more details.

Every day forensic experts in their practical activities involve with diverse information in the form of documents, databases, information systems, catalogues, reference books, libraries, etc. The process of using all these information resources serves for the purposes of solving variety expert problems. The most important information resource is forensic records included in the forensic registration system. Depending on the level of centralization, centralized records are distinguished, which are maintained in the Main Forensic Investigations Center of the Ministry of Internal Affairs of the Republic of Uzbekistan.

Depending on the type of objects taken into account, collections and card indexes related to forensic accounting are distinguished: card indexes of fingerprints seized from the places of unsolved crimes, a collection of fired bullets, shell casings and ammunition with traces of weapons (bullet casings) and lost (stolen) weapons, card indexes and collections

counterfeit money and securities. The above categories are necessary but insufficient part of the information resources required for the implementation of state forensic investigation activities.

Technological progress has brought useful novelties into the organization of informatization of investigative activities. And here, of course, the most important is computerization of the process of information support in expert activities. With the help of computers, many expert problems are solved much faster, more accurately and more reliably than by other means and methods. Every year the range of computerization of expert research is steadily expanding. Below we study the main directions of using computer technology in the process of informatization of the practical activities of experts.

Firstly, computer technology is often used to automate the collection and processing of data obtained in the course of expert research, which can significantly reduce the time required for the production of expert examinations and research, and improve their accuracy and reliability. And here it is necessary to mention the automated workstation of an expert (AWP), the purpose of which is to facilitate the laborious process of performing an examination and drawing up an expert conclusion, which is actual in the conditions of an annually increasing load on each forensic expert. A use of computer programs allows a forensic expert to perform many operations: edit a finished text, mount a new document from existing fragments, quickly find the necessary sections, correct spelling, enter graphic information into the text, and much more. Peripheral equipment connected to a PC (scanners, digital cameras and video cameras,

microscopes, UV and IR radiation devices, etc.) allows you to transfer text and graphic information from objects directly to the computer memory. To work with large text objects entered from a scanner, optical reader programs are used. This should also include a system for analyzing images obtained using a microscope connected to a computer. Such programs improve the quality of ongoing research, in particular, technical and forensic, handwriting studies, and allow to arrange high-resolution photographs of objects as photographic illustrations to expert opinions.

Secondly, computers are widely used in the creation of automated identification search systems (AIPS) for specific objects of examination, as well as in the creation and operation of such systems that act as elements of the forensic registration system (for example, the Papon AFIS). Such data banks, are simpler and more convenient to use, and also allows to quickly provide an expert with necessary reference information.

Thirdly, without computers, it would be impossible to use image analysis systems. Without these programs, it is difficult to carry out diagnostic and identification studies, for example, portrait (photographic combination of a skull and photograph), drawing up photo-compositional portraits.

With the help of modern information technologies, in a number of cases, it has also become possible to replace natural collections and card files on paper with computer databases, automated information retrieval systems (AIPS) for forensic purposes, which are created on personal computers and help for processing large amounts of information.

As for the legal information support, the reference legal systems «Lex.UX», «Norma:UZ» and others are increasingly used in the activities of experts, which allow to quickly track changes in regional legislation, study judicial practice on the application of special knowledge in the course of criminal proceedings.

According to the Decree of the President of the Republic of Uzbekistan No. PP-4125 of January 17, 2019 «On measures to further improve forensic expertise»: «Determine that the priority area for the development of forensic expertise is the implementation of scientific research results in forensic expertise, improving the methodology for conducting forensic examinations, strengthening the human resources of state forensic institutions”[3].

Therefore, it is difficult to overestimate the role of information technology in the activities of expert departments. Informatization of modern forensic activity, in whatever form carried out, serves for the purpose of improving the quality of research, which ultimately increases the reliability of the conclusions obtained by experts. As elements of the information collected during the preliminary investigation, the results of forensic activities, made in the form of conclusions, strengthen the foundation of the evidence base in a criminal case. The introduction of the achievements of modern information technologies into forensic activity contributes to an increase in the significance of material evidence, their comprehensive and complete use in proving.

Currently, there are a number of problems in the field of information support for forensic expertise. It is necessary to legislatively

consolidate the concept and content of information support for the activities of state forensic institutions. It is required to coordinate the activities of all developers of computer systems created to ensure the professional activities of an expert.

Programs should ensure the compatibility of such systems and the possibility of their functioning within the framework of a computerized workstation of an expert (AWP). The creation of a unified telecommunications network of a forensic institution (institutions) both within the framework of one region and throughout the country is also relevant now. The introduction of such a network would optimize information flows between expert units, for example, within the framework of management activities (sending reports), in order to provide timely methodological information to experts, to exchange experience and consult on various issues of practical activity.

In this regard, it would be possible to propose to amend Article 27 of the Law of the Republic of Uzbekistan «On Forensic Science», the following paragraph with the author's definition: «Information support of state forensic institutions is a scientifically organized and continuous process of formation and use (search, receipt, transfer, production and distribution) of systematized information resources necessary for solving forensic problems in the course of organizing and carrying out forensic examination by state forensic institutions and state forensic experts.

## REFERENCES

1. Law of the Republic of Uzbekistan «On informatization» dated December 11, 2003

- 
- No. 560-II, article 3. / Collected legislation of the Republic of Uzbekistan, 2004, No. 6, article 67; Bulletin of the Oliy Majlis of the Republic of Uzbekistan, 2004, No. 1-2, article 10.
2. Law of the Republic of Uzbekistan «On forensic examination» dated June 1, 2010 No. 3PY 249, article 27. // Bulletin of the Oliy Majlis of the Republic of Uzbekistan. - 2010. - No. 22. - Article 173.
  3. By the decree of the President of the Republic of Uzbekistan No. PP-4125, dated January 17, 2019 «On measures to further improve forensic expertise», clause 7. / Collection of legislation of the Republic of Uzbekistan, January 21, 2019, No. 3, art. 47.