Forensic construction and technical examination in criminal proceedings

E G Zhuravlev

1Irkutsk National Research Technical University, 83 Lermontov st., Irkutsk, 664074, Russia
E-mail: zhuravlev@yandex.ru

Abstract. The object is the procedures of appointment and production of forensic examinations and assessment and use of their results in criminal courtroom proceedings. The main emphasis is on the theoretical and legislative basis of forensic examinations in the Russian Federation, including the construction and technical ones. The procedures of appointment and production of forensic construction and technical examinations (FCTE) in criminal procedures are described. Special attention is paid to the organizational, procedural and methodological problems of appointment and production of forensic construction and technical examinations. The ways of improving the methodological support of the FCTE and developing solutions to these problems are outlined.

When hearing criminal cases, questions whose solution requires special knowledge often arise. They can be solved without the use of special knowledge, i.e. special skills and abilities acquired as a result of targeted professional training and experience [1].

Statistical indicators reflect the need for special construction and technical knowledge in legal proceedings.

The forensic construction and technical examination (FCTE) as a kind of forensic engineering and technical examinations plays an important role in the investigation of criminal cases: poor quality construction works that cause deaths of people, theft of funds or state property damage. An analysis of the investigative practice shows that in almost every criminal case, the forensic examination is appointed either at the initiative of an investigator or a victim, or at the request of the suspect (accused) and his representative.

The factual basis for the appointment of a forensic examination is sufficient data giving grounds to believe that the issues arising in the case can be resolved through the use of special knowledge in science, technology, art or craft. The legal basis for an examination is a decision on the appointment of a forensic examination made by officials (part 1 of Article 195 of the Criminal Procedures Code of the Russian Federation [2]).

In recent years, a large number of crimes have been committed in the construction and budgetary fields. An effective fight against this type of crimes is impossible without appropriate expert support [3].

A construction and technical examination is required when the contractor commits crimes by deliberately overstating the volume of works performed in order to receive budget funds from the customer for the works that have not been performed or when the contractor commits crimes by replacing the types and technologies of construction works with more expensive ones. Customers often
conclude fictitious contracts without intending to perform construction works and aiming to receive budgetary funds.

Experts and specialists are able to make a very valuable contribution to the activities of the investigator and the court during the forensic examination. In this regard, the role of forensic examinations in criminal cases has significantly increased.

When appointing a forensic construction and technical examination, an important role is played by the preliminary consultation of a specialist (expert).

The studies show that when appointing a forensic construction and technical examination the correct organization of expert support ensures the completeness, quality and efficiency of the preliminary investigation, which in turn solves the task set for the expert, and, accordingly, contributes to the achievement of the examination goal.

However, despite the obvious need to attract special knowledge when hearing criminal cases, this process is slow and difficult [3]. There are many gaps in the rules regulating the organizational aspects and procedural problems of expert activities in criminal proceedings.

Thus, the current state of the issue is characterized by its insufficient scientific development and real significance for legal proceedings. In this regard, numerous procedural, methodical and organizational problems require examination and registration of expert results and effective protection in the legal proceedings.

Since it is the investigator who appoints an examination, the results depend on his actions during the forensic examination procedures.

The lack of special knowledge creates such problems as incorrectly set examination tasks, or problems arising when choosing examination objectives.

Along with these problems, the tasks assigned are sometimes not solved by the forensic expert.

Reasons related to the content of questions posed to the expert:

- incorrect questions;
- questions beyond the expert's competence;
- questions whose insolubility is due to the lack of the required research methodology.

Reasons related to the nature of research objects:

- objective unsuitability for research.
- insufficient information about the object.
- poor quality of research objects.

Reasons related to the nature of materials for examination:

The completeness and quality of materials are important conditions for the experts. In practice, these requirements are not always met by the persons who appointed a forensic construction and technical examination.

To identify the features and shortcomings, all stages of a forensic construction and technical examination have to be analyzed.

1. Dealing with issues related to the appointment of an expert examination.

According to Part 1 of Article 195 of the Code of Criminal Procedure of the Russian Federation [2], to specify the issues arising during the investigation, the investigator issues a resolution recognizing the need for a forensic examination.

At this stage, it is necessary to determine:

- expediency of an examination (in some cases, the level of science and technology does not allow for effective research and it is enough to consult a specialist);
- content and sequence of questions;
- content of documents required for the examination;
- deadline and costs;
- experts with a required level of knowledge, experience and technical equipment.

Other issues are also solved by the investigator. These are organizational, technical and methodological issues.
According to Article 58 of the Criminal Procedures Code of the Russian Federation [2], a judge or an investigator can consult a knowledgeable person - a specialist – in order to find, consolidate and seize objects and documents, use technical means when studying criminal case materials, pose questions to an expert, specify issues within his professional competence.

At this stage, the specialist must study the available materials containing information about a specific event and assist the investigator in resolving such issues as:

- expediency of a forensic construction and technical examination;
- the need to conduct an inspection of the scene of crime and its deadline;
- content of questions;
- recommendations for the selection of an expert organization and an expert.

The need to attract experts and appoint a comprehensive examination is established by Article 201 of the Criminal Procedures Code of the Russian Federation [2].

Expert consultations are very important for the correct formulation of questions. Experts do not have to answer vague and incorrectly formulated questions, or those questions that have no value for further investigation.

Investigators often pose questions that go beyond the expert's knowledge or are legal by their nature (related to the assessment of a criminal act).

Most of these problems can be solved if the investigator does not neglect prior consultation with a specialist.

2. Preparation of case materials on the subject of examination.

One of the features of a forensic construction and technical examination in criminal proceedings is its multi-object nature, large-scale, organizational and technological complexity. Such features are determined by specific research objects - both buildings and structures, and documents. There are a lot of documents (projects, contracts, etc.) accompanying the processes of construction and operation of objects; the composition of documents is often chaotic and requires long and painstaking systematization. In this regard, in order to reduce the examination duration, it seems expedient to entrust the systematization of documents to a specialist and representatives of the parties to the case before the appointment of a forensic examination. The latter are well versed in the array of documents used in the construction works, their status, significance and relationship. The basis for systematization can be a sequence (chronology) of the production of construction works, their performers, types of works performed, etc.

At this stage, the specialist establishes the absence of certain documents necessary for the study, and informs the investigator of possible consequences of the incompleteness of initial data: in this case, it is impossible to make an expert conclusion.

This approach helps to provide the expert with initial data necessary for the study.

3. Resolution on the forensic construction and technical examination.

The investigator issues a resolution on the appointment of a forensic construction and technical examination in the manner prescribed by Part 1 of Article 195 of the Criminal Procedures Code of the Russian Federation [2].

The resolution states:

- grounds for the appointment of a forensic examination;
- name of an expert or expert institution;
- questions;
- materials.

At the same time, there are unclear, but very significant questions: is the facility safe for an expert examination; whether the parties to the case are ready to take measures for direct visual perception of "hidden" works; what is the volume and degree of completeness and systematization of technical documents on the object of examination, etc.

Each of these issues has its own productive solution only with the direct participation of a specialist until the appointment of an examination.
Forensic practice seeks to minimize the time required for forensic examinations, including by reducing the time required to provide the expert with additional materials. An effective solution would be the appointment of a competent person who has been a specialist in the case and contributed to the solution of the above issues related to the appointment of forensic construction and technical examinations. This statement is based on the principle of direct participation of a knowledgeable person at the earliest stages of legal proceedings. Such actions will lay the foundation for an effective solution to the problems that determine the duration of examinations.

Constant and fruitful cooperation of specialists (experts) and investigators is of great importance for solving the above-mentioned problems. Investigators should improve their level of knowledge about the work of experts, and experts should help investigators to avoid mistakes when appointing forensic examinations.

Such preventive works can be performed by holding joint scientific and practical seminars, conferences of forensic experts and investigators or judges. Methodological recommendations on shortcomings and mistakes in expert investigative activities can be provided and published.

A specialist who is not a state forensic expert, but possesses special knowledge, qualifications and experience in a particular field of science or technology should be involved in expert activities on a paid basis with the obligatory conclusion of a provision of consulting services agreement.

The cost of consulting services and payment procedures should be determined in accordance with the tariffs and procedures established by forensic organizations.

Money is paid to the forensic expert organization (specialists) upon the performance of its duties under the agreement.

Payment can be made at the expense of the federal budget, or a participant in criminal proceedings.

As an analysis of investigative and expert practice shows, the choice of an expert organization or an expert plays an important role in the appointment of forensic construction and technical examinations. The correct choice is a guarantee of the timely receipt of an expert opinion. In this regard, when choosing an expert organization or an expert, the investigator must assess the level of professional training of experts, their competence, the level of material and technical support, as well as the location of expert organizations.

According to the current legislation, the level of competence of a person acting as a non-state expert is determined by an investigator or a court.

All procedural codes indicate only one basis (requirement) for appointing a person as a forensic expert - special knowledge. (Article 57 of the Criminal Procedures Code of the Russian Federation [2], Article 85 of the Civil Procedures Code of the Russian Federation [4], Article 55 of the Arbitration Procedures Code of the Russian Federation [5]).

According to the procedural codes, forensic experts should inform about their level of education, specialty, work experience, academic degrees and (or) academic titles (Article 204 of the Criminal Procedures Code of the Russian Federation [2], Article 86 of the Arbitration Procedures Code of the Russian Federation [5]). The requirement for higher education can be found in Federal Law No. 73-FZ of May 31, 2001. "On the state forensic examination in the Russian Federation" [6]. These data help the court (investigator) in determining the expert's competence.

Using the results of an analysis of expert practice, the following recommendations for the procedural legislation on special knowledge of a competent person at different stages of criminal proceedings can be provided:

1) the wording of issues to be resolved, documents required to ensure the completeness of examination, the deadline and cost;
2) preparation of case materials on the subject of examination: completeness of documents;
3) resolution on the appointment of a forensic construction and technical examination: accurate wording of questions in compliance with their sequence and formulations proposed by specialists; determination of a deadline correlated with the real time costs for conducting research and drawing up an expert opinion.
References

[1] Butyrin AY 2006 Theory and Practice of Judicial Construction and Technical Expertise (Moscow: JSC "Publishing House" Gorodets )

[2] The Criminal Procedure Code of the Russian Federation: Federal Law of the Russian Federation of December 18, 2001, No. 174-FZ (as amended on July 31, 2020) http://stupkrf.ru/

[3] Rossinskaya ER 2006 Forensic examination in Civil, Arbitration, Administrative and Criminal Procedure (Moscow: Norma: Infra-M)

[4] The Civil Procedure Code of the Russian Federation: Federal Law of the Russian Federation of 14.11.2002. No. 138-FZ (as amended on July 31, 2020) http://docs.cntd.ru/document/901832805

[5] The Arbitration Procedure Code of the Russian Federation: Federal Law of the Russian Federation of 07.24.2002. No. 95-FZ (as amended on 08.06.2020) http://docs.cntd.ru/document/901821334

[6] The state forensic expertise in the Russian Federation: Federal Law of the Russian Federation of May 31, 2001 No. 73-FZ (as amended on July 26, 2019) http://docs.cntd.ru/document/901788626

[7] Tshovrebov E S and Niyazgulov U D 2020 On measures for the efficient use of secondary resources and resource saving in a utility and construction complex Proceedings of Universities. Investment. Construction. Real estate 10(2) pp 274–285

[8] Sobolev V I and Chernigovskaya T N 2020 Research into the dynamics of radio telescope foundations using laser vibration measuring equipment Proceedings of Universities. Investment. Construction. Real estate 10(3) pp 420–427

[9] Komarov A K, Ivanov I A and Lundenbazar B 2019 Theory and practice of the use of gabions for forming protective structures Proceedings of Universities. Investment. Construction. Real estate 9(1) pp 78–89 DOI: 10.21285/2227-2917-2019-1-78-89

[10] Peshkov V V 2020 IOP Conf. Ser.: Mater. Sci. Eng. 880 012100