

# The role of forensic examination in judicial practice

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**Abstract.** Forensic examination is one of the most reliable means of proof in civil, criminal, administrative and arbitration proceedings. There are many different examinations that can be divided into groups. One of such types is the forensic land expertise. Forensic land expertise is an analysis, a study conducted by specialists in the field of geodesy and cadastre of real estate objects (cadastral engineers), land management materials and title documents for a land plot with actual land use. The article considers an example from the real practice of conducting a forensic land expertise. For the expertise, the expert independently conducted a geodetic survey. The importance of land management expertise, as well as knowledge of an expert in the field of land and civil law, is noted. The problem of the lack of a developed methodology for conducting a land surveying is revealed. To solve this problem, stages of work were identified, and a version of methodological recommendations was proposed.

## 1 Introduction

The purpose of this work was to establish the actual reality. That is, the actual boundaries of the land plot must coincide with the information stored in the Unified State Register of Real Estate.

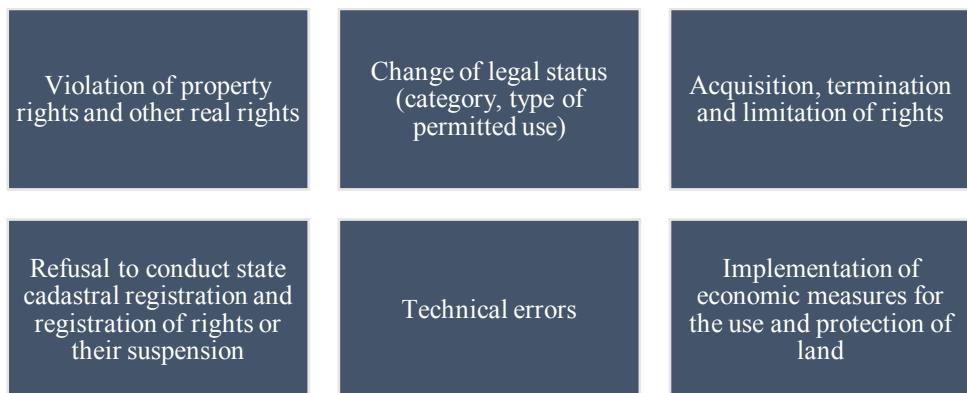
Currently, one of the private lawsuits is the resolution of land disputes. In theory, a land dispute is unresolved disagreements between participants in land relations, which are filed with a court or arbitration court over land rights, as well as property disputes arising from land relations with disagreements about land rights or separately dispute over land rights. Resolving land disputes has procedural peculiarities, one of which is that land disputes are often resolved based on the results of forensic examinations. Forensic land expertise is appointed in case you need to answer questions that require special knowledge in the field of geodesy, land management and cadastre. Statistical studies lead to a violation of earthly rights and the legitimate interests of citizens and legal entities. In accordance with Article.64 of the Land Code of the Russian Federation, consideration and resolution of conflict situations occurring in court.

One of the effective ways is the appointment of land expertise. This is a longer and laborious process. Forensic land expertise is appointed by the courts in cases where, in court proceedings in civil and arbitration cases, there is a need for special knowledge in the field of land management and construction. The interested party, in accordance with the

Russian legislation on civil proceedings, is entitled to apply to the court for the protection of violated or disputed rights, freedoms or legitimate interests. The claim is submitted to the court in writing. A lawsuit - as applied to Russian law - is a requirement made by a claimant in a court (civil, arbitration law, arbitration) procedure and arising from the right belonging to the claimant by virtue of a contract or on other grounds provided by law. [9]

The court makes a decision on the appointment of a forensic examination (part 4 of article 82 of the Arbitration Procedure Code of the Russian Federation). The definition of the purpose of the examination consists of three parts: introductory (the composition of the court petition of the party in which case), descriptive (circumstances, the evidence of which requires an examination), operative (object of research, questions to the expert, who is entrusted, list of materials transmitted) [10].

We can identify their main causes (Figure 1).



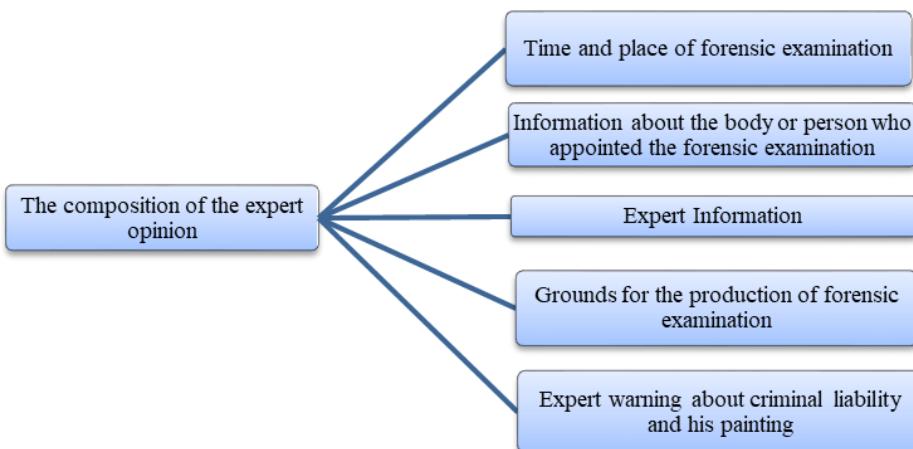
**Fig. 1.** Causes of land disputes of national proceedings.

Often, one may encounter land disputes with rights registration authorities, authorities exercising state land supervision, due to illegal rights registration or disputing the cadastral value of a land plot.

## 2 Theoretical and methodical basis

Forensic land expertise is a procedural action consisting of conducting research and giving an opinion by an expert on matters that require special land management knowledge and which are put before him by the bodies that have appointed the examination in order to establish the circumstances to be proved in a particular case. [6]

The expert opinion is a written form containing a detailed description of the expert studies conducted and the formulation of motivated conclusions (answers) based on these studies on the questions posed to him. In accordance with Art. 25 of the Federal Law No. 73 "On the state forensic activity in the Russian Federation" dated 31.05.2001 in the conclusion of an expert or an expert commission should reflect the information indicated in Figure 2.



**Fig. 2.** The composition of the information expert opinion.

The current civil law identifies the following types of expertise (including land management):

- basic;
- Additional - appointed when the conclusion formed by the expert is unclear or incomplete. At the same time, such an expert can carry out such an examination, as well as another (clause 1 of article 87 of the Civil Procedure Code of the Russian Federation).
- repeated - are appointed if the court has doubts about the validity or correctness of the conclusion formed by the expert. This kind of examination is carried out by another expert (clause 2 of article 87 of the Civil Procedure Code of the Russian Federation).
- complex - are appointed when in order to resolve issues raised by the court, it is necessary to conduct research in various fields of knowledge, are carried out by several experts simultaneously (clause 1 of article 82 of the Civil Procedure Code of the Russian Federation).
- commission fees - are appointed if it is necessary to involve two or more experts to resolve an issue that does not extend beyond one area of knowledge (clause 1 of Article 83 of the RF Civil Procedure Code) [8]. The name "land management expertise" implies actions aimed at the object of land management. The fact is that in the definition lies a discrepancy of reality. According to Article 1 of the Federal Law N 78-FL dated June 18, 2001 (ed. December 31, 2017) "On Land Management", the objects of land management are the territories of the constituent entities of the Russian Federation, the territories of municipalities, as well as parts of such territories [3].

However, forensic land expertise (FLE) is carried out most often in respect of land, and they are not in the list of objects of land management. Perhaps this is due to the fact that prior to the entry into force of the Federal Law N 66-FZ of May 13, 2008, the land plots belonged to the above list and the concept of land management expertise was formed prior to these changes.

One of the most common causes of land disputes is the determination of the boundaries of the land plot, as well as the properties located on it.

It is also not entirely correct to assume that the land survey expertise is carried out for only land plots. Article 6 of the Land Code of the Russian Federation of October 25, 2001 N 136-FZ (as amended on December 25, 2018) contains an exact wording of the meaning of the term "land plot". According to her, as well as the definition of an immovable (Article 130 of the Civil Code of the Russian Federation (Part One) of 30.11.1994 N 51-FZ (as

amended on 03.08.2018), the land plot is inseparably linked with real estate objects located on it [ 2]. Therefore, it is advisable to consider and carry out the land survey expertise taking into account not only the land and its borders, but also the location of real estate on it.

Judicial land management expertise helps to resolve issues related to:

- determination of land boundaries;
- determining the location of various objects relative to the borders of land plots;
- isolation in kind of the land plot;
- determination of the procedure for use of a land plot;
- by challenging the cadastral value.

The most popular reason for conducting a forensic land expertise is the determination of the boundaries of a land plot on the ground.

A land management expert may be a cadastral engineer who is competent in conducting research that includes an expert inspection of the land plots, as well as other objects. The land use planner is a qualified specialist in the field of land relations and geodesy: he is able to analyze case files, title documents and title documents, determine actual land use, and formulate a conclusion on the case.

The task list of an expert land surveyor includes:

- determination of the area and the actual location of the boundaries of the object under study using the Unified State Register of Real Estate, maps, plans, schemes, etc .;
- establishing the fact of imposing the boundaries of one land plot on the borders of another, determining the area and configuration of such an overlay; determining the location of various objects relative to the borders of the land plot;
- identification of the registry error and finding out the proper location of the boundaries of the object;
- clarification of land boundaries;
- carrying the boundaries of the object in nature (on the terrain);
- determination of the boundaries and area of land illegally taken to use.

The list of tasks facing the expert land surveyor is constantly updated due to the emergence of innovations in the legal regulation of land and civil relations and the development of investigative and forensic practice.

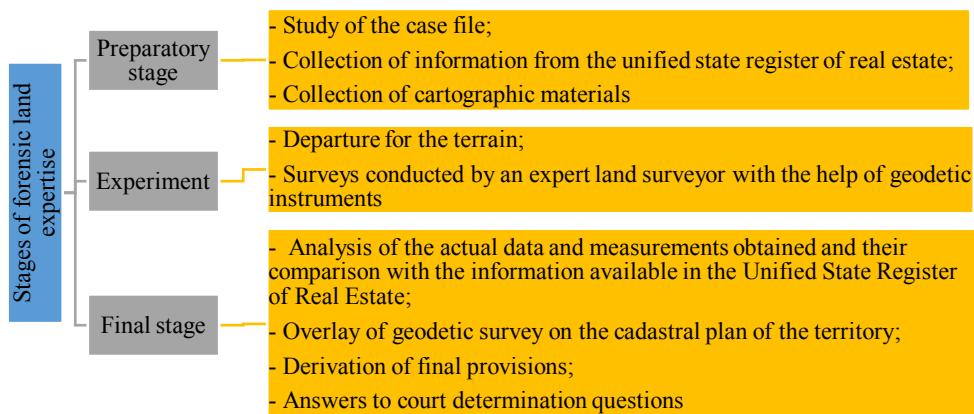
Evaluation of an expert opinion, on the one hand, is rather difficult for the court, since the judge actually does not have the special knowledge necessary for a qualified assessment of the content of the expert's opinion. But at the same time, the court has the right to doubt the results of the forensic examination, including contacting the expert himself for appropriate explanations. The court also has the right to appoint a repeated examination if it finds facts of violation of the procedural rights of the participants in the court hearing when appointing and conducting a forensic examination, which affected or could affect the content of the experts' conclusions. Re-examination, in contrast to the additional examination, must be entrusted to another expert.

One of the shortcomings of the process of carrying out forensic land expertise can be called the lack of approved methods for conducting such examinations. On the issues of determining the location of the boundaries of the objects, it is planned to develop guidelines for improving the work of expert land surveyor. On addressing issues related to determining the market value of land plots, in 2016, the methodological recommendations "Solving expert issues related to determining the market value of construction objects and land plots functionally related to them" were published [7].

In order to recommend them, we have developed the proposed methodology for conducting forensic land expertise regarding the establishment of property boundaries. The complex of land management work on the description of the location of the boundaries of the property includes the following steps and is carried out in the following sequence:

- preparatory stage;
- experiment;
- the final stage (Figure 3).

The essence of forensic land expertise is to help the court to get answers to its questions experimentally. Therefore, the final stage of the examination should include precise provisions (conclusions) regarding violations from one side or another regarding land legislation.



**Fig. 3.** Stages of forensic land expertise.

Having improved and improved the proposed methodology for establishing the boundaries of real estate objects within the framework of the forensic land expertise, it is possible to obtain detailed instructions for action for an expert land surveyor. Thanks to the approved methodology for conducting forensic land expertise when describing the boundaries of a property, clarity of its implementation will be adjusted, and the resulting consequence will be requirements for the type and content of such expertise. That is, the textual and graphical content of the examination should satisfy the demands of the trial to the maximum.

### 3 Results and discussion

An example from the real practice of forensic examination of Golyakova, Yu.E., which she described in her scientific article at the "Antrovita" Research Center [11].

For consideration of the expert was submitted two questions.

1. Corresponds to the actual location of the boundaries of the land plot No. 121, located at the address: Tyumen region, Tyumen district, garden non-commercial partnership "Land surveyor" ul. Pine, boundaries, reflected in the boundary plan of January 13, 2017.

2. To determine the area of such an object (to provide schematically), and to determine the violation of borders on the part of any section.

In the course of the examination, the following sequence was established:

- collection, study and analysis of source documents and materials;
- conducting geodetic measurements on the ground;
- expert preparation of expert opinion.

During the development of expert opinion collected and analyzed:

- civil materials of the national case - 1 volume;
- information of the Unified State Real Estate Property;
- information and documents of the State Cartographic and Geodesic Fund.

Within fourteen calendar days, prior to geodetic measurements, all interested parties should be notified.

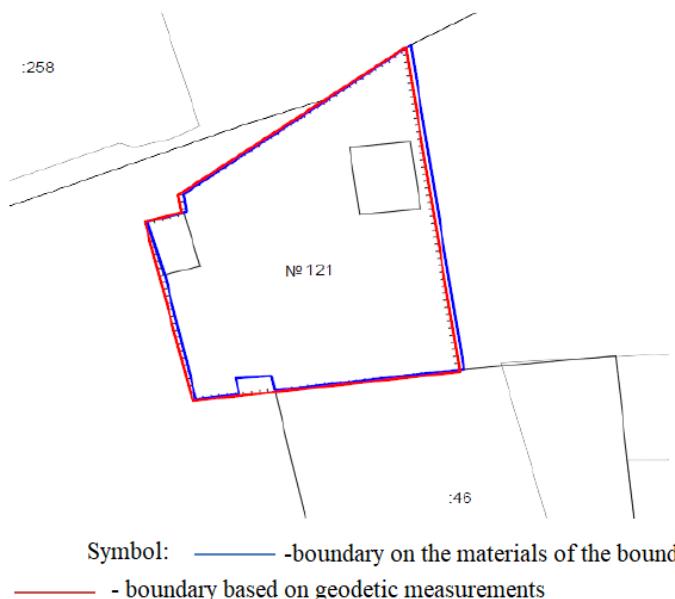
A study was conducted using the following measurement tools:

- Nikon DTM electronic total station - 352 W;
- GNSS - TRIUMPH-1-G3T satellite geodetic multifrequency receiver.

Through geodetic measurements on the ground and the office processing of the results of field measurements were determined and calculated for rectangular coordinates and horizontal spaces.

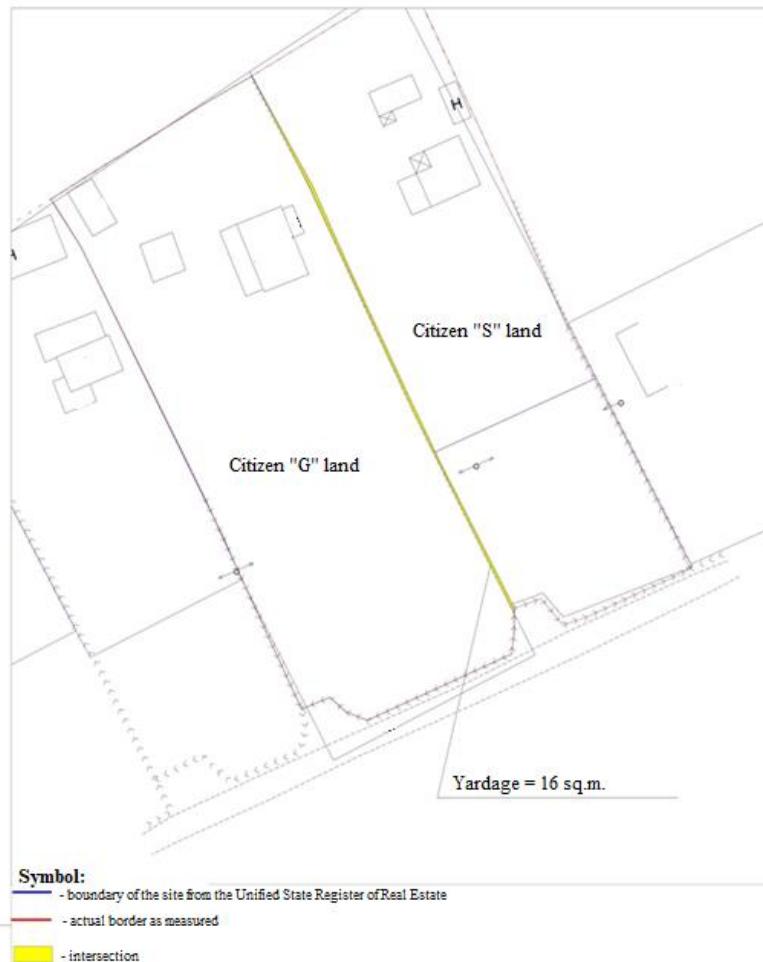
On the first question of the examination, a conclusion was drawn about the discrepancy between the boundaries reflected in the international plan, prepared on January 13, 2017. Figure 4 shows the results of geodetic measurements, which served as a reasonable conclusion.

On second question, an examination was carried out of the data on the excluded borders assigned to the territory and the border that are included in Unified State Register of Real Estate.



**Fig. 4.** The result of geodetic measurements.

We also propose to consider another example from real practice. Citizen "G" applied to the state land control authorities in order to identify illegal use of the land by their neighbors S. Namely, citizen G believes that citizens "S" have incorrectly established fence and thus enjoy part of its legal territory. After studying the materials of the case and carrying out the field work by an expert land surveyor, it was revealed that there were indeed violations, but on the part of the plaintiff. After analyzing the long-standing cartographic materials, as well as information of the Unified State Register of Real Estate, it was established that citizen "G" occupies a part of the territory of the land plot owned by citizens "S" and is equal to 16 sq. M (Figure 5).



**Fig. 5.** A drawing of a geodesic survey together with information about the boundary of Unified State Register of Real Estate.

Thus, an expert land surveyor revealed the innocence of the defendants "S". Thus, the result of forensic land expertise helped the court to understand the case and establish the truth.

## 4 Conclusion

The resolution of land disputes in some cases requires special knowledge in the field of geodesy, cartography, forest management, construction, state cadastre of real estate, ecology, without which it is impossible to make a legitimate and reasonable judicial act, which ends the case on the merits. In this regard, there is a need for the appointment of examinations to establish legally significant circumstances included in the subject of proof, which is a distinctive feature of land disputes. At the moment there is no generalization of judicial practice in the field of land dispute resolution, incl. analysis of the practice of appointment of examinations, which does not allow for the unity of law enforcement practice and conceptual apparatus. In some cases, the analysis of the legal positions of the courts allows to determine the subject of proof for certain categories of land disputes and

predetermines the issues to be resolved in the framework of the examination. The analysis allows us to summarize the issues to be resolved in the framework of the examination of certain categories of land disputes, and in each case, asking questions requires careful preparation, comprehensive preliminary examination by the court of the evidence and taking into account the actual circumstances of the particular case. Land disputes are resolved by the courts for an extended period of time, incl. due to the duration of the examination, lack of documents for examination, at the same time, the resolution of the land dispute, the adoption of a lawful and reasonable judicial act and, accordingly, the effectiveness of the protection of land rights depend on the time for the expert examination, selection and qualification of an expert.

So, the land survey expertise is appointed on the basis of a court ruling, a judge's ruling, a decision of the investigator or the person conducting the inquiry. It can be carried out by a person who has the necessary professional knowledge, has a higher education and has passed certification. Land management expertise is carried out in 3 stages (preparatory, experiment and final), during which the expert evaluates the circumstances of the case, examines the object of examination, conducts field work and forms an expert opinion. Forensic land expertise is an indispensable and unique source of factual information, without which it is almost impossible to handle cases involving land disputes. Land surveyors experts are valuable experts in this field, therefore it is necessary to support the development and improvement of their professional activities in various ways.

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