

## LEGAL REGULATION OF ELECTRONIC DOCUMENT MANAGEMENT FOR TRANSPORT

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### ABSTRACT

The article gives a general description of legislation governing the documentary support of management and the electronic document management system within transport system, shows the problems of development there-of and ways to overcome them. On the basis of foreign experience, reasonable intervention of the state in the activities

of participants in electronic document management is justified. According to the author, balanced, scientifically based control by the state over organization of the electronic document management is necessary in Russia as well, because the situation in managing the economy and especially transport needs more stringent office work and establishment of legal and regulatory framework in this area.

**Keywords:** *documentary support of management, mixed document management, electronic document management system, transport.*

**Background.** *Important changes have recently been made to legislation governing the use of databases on electronic media. Now they are called «public information systems» [7] (this concerns, in particular, the use of such systems in the human resources management activities of the the public service, as well as anti-corruption issues. For example, in the Federal Law of December 25, 2008 No. 273-FZ «On corruption prevention» a new edition of article 16 «Register of persons dismissed due to loss of confidence» is inscribed [5]).*

*Electronic means of editing and processing are widely used in management, therefore document management is considered as an integral part of the information support of management systems. Effective document management is a mandatory component of effective management. Under the influence of new information technologies, fundamental changes are taking place in management activities (processes of substantiation and decision-making, organization of their implementation are automated), and the skills and professionalism of specialists are improving.*

*Undoubtedly, the most advanced technologies used in the field of documentation support are informational. This does not mean that you should forget about paper document management, but today the transition from paper document circulation to electronic one plays a very important role. The use of electronic document management in management is a key factor in the modern «office revolution» [15].*

*The law gives the terms that are most widely used in automated documentary support of management (DSM) technologies, namely: information, documented information, information technologies, information system, information owner, access to information, information and telecommunications network, information confidentiality, electronic communication, information systems operator.*

*GOST [Russian state standard] R7.0.8-2013 «System of standards on information, librarianship and publishing. Record keeping and archiving. Terms and definitions» [8] explains basic concepts in the field of office work and archiving. The terms established by the standard are recommended for use in all types of documentation and literature included in the scope of work on standardization and (or) using their results. The standard reveals both the basic concepts in organization of DSM, and the*

*terms that have recently entered into use in organization of document management (for example: an electronic document, its authenticity, reliability, integrity, electronic signature, electronic document flow, inclusion of the document in the electronic document management system (EDMS), metadata, etc.).*

**Objective.** *The objective of the author is to consider legal regulation of electronic document management, particularly regarding transport.*

**Methods.** *The author uses general scientific methods, comparative analysis, legal and content analysis.*

**Results.** *In our time, the document serves as the main means of presenting information in any organization [1, 2, 3]. All management activities in Russia are carried out with the help of documents that are at the same time the source, result and instrument of the activity performed. There is no single definition of the term «document»; in the context of the article, the definition enshrined in the Federal Law of July 27, 2006 No. 149-FZ «On Information, Information Technologies and Information Protection» [4] will be used: the document is fixed on the material carrier information with details that allow to identify it. The concept of an electronic document is given in the same federal law: this is a documented information presented in electronic form, that is, in a form suitable for human perception using electronic computers, as well as for transmission through information and telecommunications networks or processing in information systems. However, more often a simpler definition is used: this is a document in which information is presented in digital form, prepared and executed in the prescribed manner.*

*Electronic document management is designed to ensure the automation of processes: reception, registration, processing, distribution, mailing of correspondence, signing, correspondence between organizations, branches and divisions. For legal regulation of work with electronic documents, the notion of an «electronic document» and the possibility of its use on an equal basis with traditional documents in various fields of activity should be included into the regulatory legal acts.*

*The use of electronic documents requires legislative basis providing them with appropriate legal force, the establishment of procedures for their certification, as well as protection against distortions in the process of electronic exchange.*

Based on this, attempts are being made, among other things, to create legal conditions for the use of electronic signature technology.

Electronic document management is carried out through information systems, computer networks, the Internet, e-mail and other information technology tools. At the same time, not only commercial enterprises, but also government agencies are trying to debug and automate work with business information. There are dozens of software products that automate document management to one degree or another.

In GOST R53898-2013 «Electronic document management systems. The interaction of document management systems. Technical requirements for electronic communication» [9], the National Standard of the Russian Federation GOST R7.0.97-2016 «SIBID. The system of organizational and administrative documentation. Requirements for execution of documents» [12] and the Model instructions for office work in public organizations [13] the requirements corresponding to the new conditions are formulated. Those requirements concern among other aspects scalability, distribution, modularity, openness but maintain a certain ratio of former paper and new electronic media.

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The idea of a mixed electronic paper document management underlies the conceptual approach, which involves a phased expansion of the scope of electronic documents. The mixed concept is relevant given the fact that different organizations and enterprises are at different stages of introducing and using electronic document management technologies. But absolute abandonment of the paper document management will not work because of unreliability of electronic means. As for the original document, it does not exist in the electronic version (because it is a set of zeros and ones). In reality, we receive an electronic copy of the document.

To ensure storage of an arbitrary number of electronic documents, two main parameters must be considered: the cost of storing one megabyte of information and the speed of access to information. These parameters are inversely proportional to each other – depending on the tasks to be solved, it is necessary to find the optimal ratio and to choose a quality carrier. The choice of carrier is also influenced by the shelf life of information.

Regulatory and methodological databases for storage of electronic documents are currently in an emerging form, although there are examples of such well-developed basic acts as GOST R54989-2012/ISO/TR18492:2005 «Ensuring the long-term preservation of electronic documents» [11]. It establishes six key factors for the long-term secure use of electronic documents: their readability, interpretability, identifiability, accessibility, clarity and authenticity.

In the future, document management will, in our opinion, be electronic-paper in terms of the composition of documents, but with the growth of their electronic component. However, various variations of combining the elements of both are likely. Electronic document management is gradually entering the daily life of most Russian companies and government departments. Demand, we all know, creates supply, and now

many different systems, both domestic and foreign, are on the market.

As for many enterprises, main workflow remains in paper form, despite active attempts to rearrange most of the workflow on automated rails. Not every company succeeds in this; for some of them, the possibility of electronic document management is limited by law, and potential users are not always ready for such a mode, they do not fully understand the pros and cons of the proposed innovations.

Paperless information technology, of course, facilitates data management. With its help, system conditions are formed that provide an automated and centralized exchange of information, and the necessary information is extracted from all available sources. When introducing electronic document management, however, the presence of the following is required:

- means of communication between workplaces;
- services and technical capabilities for digitizing incoming paper documents;
- computing equipment performance adequate to the implemented document management software;
- 100 % equipment with personal computers of all employees working with documents;
- psychological readiness of managers to use electronic analogues of a handwritten signature on a document;
- an automated office management system that allows the transition to electronic document management.

When deploying a network technology, it should be remembered that employees who do not have access to electronic documents actually cease to take any part in the affairs of the organization. Those who will receive the document in non-electronic form will only be able to read it. Even for simple approval, employees need computing equipment connected to the electronic document management system (EDMS). Using EDMS, all departments and structures turn to be part of the single information environment. Proceeding from this, firstly, the speed of processing documents within the enterprise increases, and secondly, it is easier to protect documents from unauthorized access.

Modern systems use data encryption that prevents information leakage. Depending on the qualifications of the employees, productivity increases and the likelihood of errors in the processing of documents decreases. The organization's budget also benefits from the introduction of EDMS, since it saves money spent on consumables in the past, payment for postal and courier services, photocopying of materials, and reduces labor costs.

Thus, the electronic signature allows to replace the traditional seal and handwritten signature, ensuring the authorship and immutability of the document after its signing. Using a computer «facsimile», it is possible to sign any version of an electronic document, recording and storing information about who signed it and when. Only the owner, who has a signature key certificate, is entitled to use the electronic version. The registration number of the key certificate contains twenty-four characters, mainly alphanumeric, for example, 018603075BBC010109804258. The electronic signature period is no more than ten years.





The main law governing validation of documents in the electronic form is the Federal Law of April 6, 2011 No. 63-FZ «On Electronic Signature» [6]. It provides definitions of the certificate of the electronic signature verification key, the qualified certificate of the electronic signature verification key of the owner, the certification center, the corporate information system, the public information system, etc.

The rules for determining the types of electronic signatures when receiving state or municipal services are contained in the Resolution of the Government of the Russian Federation of June 25, 2012 No. 634 «On the types of electronic signatures that can be used when applying for state and municipal services» [10]. If, for example, a power of attorney is always signed with a reinforced qualified digital signature, notarized copies of documents are certified with a reinforced qualified digital signature of a notary, then if there is no notarization requirement, copies of documents can be certified with a simple electronic signature. It is a full-fledged replacement of a handwritten signature, has full legal force in accordance with the legislation of the Russian Federation.

The federal law «On electronic signature» establishes two types of them: simple and reinforced, the second can be qualified and unqualified. A simple electronic signature confirms the fact of a signature with a login and a password. As such, the cryptographic electronic signature in this case is not used. A reinforced unqualified signature is created using cryptographic tools, but a certificate issued by a non-accredited verification center can also be used to generate a signature. Such a signature confirms the fact that a signature has been created by a certain person and that the document has not changed since it was signed. Reinforced qualified electronic signature is created using cryptographic means approved in the course of duly approved procedure and has a certificate from an accredited verification center

acting as a guarantor of signature authenticity. An electronic document signed with it, in all cases, is equivalent to a paper document with a handwritten signature. A qualified signature is recognized as valid until otherwise determined by a court decision.

We have listed only a small part of what will promote more rapid development of electronic document management and the transition to a more advanced level in working with electronic documents. Global trends, the experience of other countries should be taken into account.

**Conclusion.** It seems that for our country it is the most appropriate to use the experience of Germany, which includes a reasonable state intervention in the activities of participants in electronic document management [14]. This is explained by the fact that legal relations on the use of electronic telecommunications in commercial activities have emerged relatively recently, no country has effective legislation in this area yet. Therefore, it is extremely irrational to start the process of developing relevant norms on gravity. First of all, we need limited, balanced and scientifically grounded control and supervision by the state, at least at the initial stage of reforming the system. In addition, we must take into account the economic situation and the level of legal relations in Russia. Simple copying of foreign legislation without taking into account national specifics may result in negative consequences.

At the moment, paper remains a more universal information storage device. But more and more domestic organizations and enterprises realize that their effective work, improvement of information and document service, increase of productivity and quality of work of the administrative apparatus are impossible without introduction of modern electronic technologies and special software. The transition to work with electronic documents is becoming one of the main factors in evolution of the business of office work.

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