



Research article

DOI: <https://doi.org/10.21202/jdtl.2023.46>

Remote Methods of Conducting Transactions Using Digital Technologies

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Keywords

artificial intelligence,
balance of interests,
blockchain,
digital technologies,
distant contract,
distant transaction,
electronic document,
information technologies,
law,
smart contract

Abstract

Objective: to substantiate the need to identify new contractual constructs (models) taking into account the specific relations associated with the use of remote method of contract conclusion through digital technologies and to study the possible risks for their participants.

Methods: along with special legal methods, the method of critical analysis was fundamental for the research process, which allowed us to evaluate and interpret the main sources and norms of civil law in relation to distant transactions. It also allowed assessing the current state of legislation in this area in the context of developing processes of digitalization and technologization of civil-law relations.

Results: a critical analysis of the current state of legal regulation of remote ways of concluding contracts is presented, their classification is given. It is concluded that the digital technologies development gives rise to new remote ways of transactions, as well as fills with new content the procedures of contract conclusion, traditional for civil law. The expediency of singling out the concept of a "distant transaction" as a legal category in order to create a special civil-law regime is substantiated, and the basic concept being that of a "distant contract". Certain types of distant contracts are analyzed to substantiate the need for special legal regimes in cases when the distant method of contract conclusion is combined with the use of digital technologies. It poses such problems as the distribution of risks of technological failures, hacker attacks, compliance with the balance of interests of the parties taking into account information asymmetry, and the need to protect the weaker party.

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Scientific novelty: an attempt is made to define such concepts as a “distant contract” and a “distant transaction” and to identify their features. The expediency is substantiated of considering a distant contract as a separate legal construction (model) of the contract. Within this framework, a special legal regime should be developed and fixed, which can be extended to unilateral distant transactions. The problems of legal regulation caused by the use of information technologies are formulated, and legal constructions for their solution are proposed.

Practical significance: the final conclusions and proposals can be used both in contractual practice by the participants of civil turnover and for the normative consolidation of the concept and features of “distant contract”, “distant transaction”. A special legal regime can be created, taking into account the specificity generated by the use of digital technologies.

For citation

Savelyeva, T. A. (2023). Remote Methods of Conducting Transactions Using Digital Technologies. *Journal of Digital Technologies and Law*, 1(4), 1058–1086. <https://doi.org/10.21202/jdtl.2023.46>

Contents

Introduction

1. Notion and types of distant transactions
 - 1.1. Scope of use and regulation of the remote method of contract conclusion
 - 1.2. On the notion of distant transaction. Types of distant contracts and other transactions
2. Providing the balance of interests of the parties in certain distant transactions
 - 2.1. Contracts concluded via Internet sites
 - 2.2. Contracts concluded by drawing up a single electronic document signed by the parties
 - 2.3. Contracts concluded remotely in notarized form (certified by two or more notaries)
 - 2.4. Contracts concluded by exchange of electronic documents
3. Certain aspects of distant transactions beyond the scope of private law regulation
 - 3.1. Assignment of public functions to private subjects (carriers of information on distant transactions)
 - 3.2. Peculiarities of proof in disputes arising out of distant transactions
 - 3.3. Utilization of the potential of artificial intelligence, smart contracts in remote interaction of participants of contractual relations

Conclusions

References

Introduction

The development of digital technologies affects all spheres of human activity, including the relationship of participants in civil turnover when signing and executing transactions.

Digital technologies allow participants in civil turnover to negotiate, enter into contractual relations, exchange documents, execute and accept execution, and communicate their will to the other party remotely. At the same time, the use of digital technologies makes remote interaction between parties to a contract fundamentally different from the “pre-digital” era.

Current legislation tries to take the development of information technologies into account. For example, the Civil Code of the Russian Federation (hereinafter – CC RF, or the Code)¹ was supplemented in 2019 with norms providing for the possibility of concluding a contract in electronic form (by exchanging electronic messages, by concluding a single electronic document)².

Meanwhile, the legislator does not single out remote transactions as a separate category. A legitimate question arises as to the expediency of such separation given the practical needs of civil turnover, as well as from the doctrinal viewpoint. Is it sufficient that the law provides for an electronic form of transaction?

The criterion of the correctness answer to this question should be the test regarding the balance of interests of the parties to remotely concluded transactions. Is it achieved within the current legal regulation, given that there is no special legal regime due to the remote nature of interaction between the parties, which excludes direct perception of the other party’s will, familiarization with the subject of the transaction at the time of its execution, etc.?

It should be noted that a lot of legal literature is devoted to the study of the electronic form of the transaction. However, a number of important aspects of the parties’ remote interaction, going beyond the form of the transaction, remain without due attention, including the issue of observing the balance of interests of the parties.

Meanwhile, it is obvious that the effectiveness of digitalization of remote ways of transactions should be estimated through the prism of observing the balance of interests of the parties. Otherwise, neither the objectives of digitalization nor the objectives of legal regulation will be achieved.

It should be noted that the conclusion of a contract by exchanging messages, letters, as well as by signing a single document, are traditional for civil law and are regulated in sufficient detail in the CC RF.

¹ Civil Code of the Russian Federation (Part 1) of 30.11.1994 No. 51-FZ (with amendments). SPS KonsultantPlyus. <https://clck.ru/36brfs>

² On making amendments in Part 1, 2, and Article 1124 of Part 3 of the Civil Code of the Russian Federation. No. 34-FZ of 18.03.2019. (2019). Collection of legislation of the Russian Federation, 12, Art. 12.

The possibility of exchanging electronic messages using digital technologies does not, at first glance, change the essence of the traditional approach, as only the form of the message changes. The same can be said about the possibility of concluding a contract by signing a single electronic document.

However, such a view is superficial. Indeed, the use of digital technologies inevitably generates risks of technological nature, including risks of destruction or distortion of the electronic document content, risks of violating the interests of a party due to a probable information asymmetry, etc.

This study is devoted to the analysis of remote ways of making transactions using digital technologies. The objective is to assess how traditional approaches to the civil law contract conclusion and the current civil law legislation meet the new challenges arising due to the active use of digital technologies in the interaction between the contractual relations participants.

The paper consists of three sections. In the first section, we analyze remote ways of concluding a contract and making unilateral transactions, as well as their peculiarities related to the use of digital technologies. The objective is to decide whether or not it is appropriate to single out “remote contract” and “remote transaction” as legal concepts. The second section of the work is devoted to reviewing certain types of distant contracts in the aspect of the balance of the parties’ interests. The third section studies the aspects of the parties’ remote interactions, which are beyond the scope of private law regulation, but may serve to confirm or refute the expediency of considering remote transactions as a legal concept and establishing a special legal regime.

1. Notion and types of distant transactions

1.1. Scope of use and regulation of the remote method of contract conclusion

The remote method of concluding various transactions has become widespread in civil turnover. Remote trade, remote banking, including settlements with the use of bank cards, crediting and even conclusion of real estate transactions in a remote format have become ingrained in our everyday lives.

Any transaction where the parties use remote communication means, including postal messages, e-mail, SMS messages, Internet, etc., instead of physical presence at the stage of negotiations and transaction conclusion, can be referred to the remote mode of transactions.

As for the legal regulation of the remote method of transactions conclusion, it should be noted that there is no systematic approach taking into account the specificity of relations associated with the use of this method of contract conclusion in various spheres. For example, the remote method of retail sale of goods is quite thoroughly regulated by the legislation³.

³ Civil Code of the Russian Federation (Part 2) 14-FZ of 26.01.1996 (ed. of 24.07.2023) (with amendments valid since 12.09.2023), Art. 497. SPS KonsultantPlyus. <https://clck.ru/36briF>; On protection of consumer rights. No. 2300-1 of 07.02.1992 (with amendments), Art. 26.1. SPS KonsultantPlyus. <https://clck.ru/36brjV>; Decree of the Government of the Russian Federation No. 2463 of 31.12.2020. (2020). SPS KonsultantPlyus. <https://clck.ru/36brka>

Speaking about other spheres of using the remote method of contract conclusion, it should be noted that there is no special legal regulation, with rare exceptions, which will be considered further. This approach is due to the fact that the legislator probably sees no need for such regulation.

In view of the above, it seems important to analyze the existing general legal norms relating to the remote method of concluding contracts in order to assess the sufficiency of legal regulation under the rapid development of digital technologies and their practical implementation.

The process of digitalization requires a rethinking of many traditional views on the contractual sphere, including the remote mode of contracting.

In our analysis, we leave out the issues of using artificial intelligence in the field of interaction between parties to civil law contracts.

At the same time, one cannot but recognize the increasing influence of artificial intelligence on all spheres of our life. One of such manifestations is the transfer of communications to the virtual environment (cyberspace) (Filipova, 2023). In view of the above, the influence of artificial intelligence on the interaction between the parties in the remote way of concluding transactions deserves a separate study.

By virtue of clause 1 of Art. 160 of the CC RF, a transaction in writing must be made by drawing up a document expressing its content and signed by the person(s) making the transaction or by duly authorized persons. The written form of a transaction shall be deemed to be complied with also in case a person makes a transaction with the help of electronic or other technical means which allow reproducing the transaction content on a material medium in an unaltered form. The requirement for a signature shall be deemed to be fulfilled if any method is used that allows reliably determining the person who has expressed the will. The law, other legal acts and the agreement of the parties may provide for a special way of reliably determining the person who expressed the will.

Any contract concluded between absentees may be qualified as a distant transaction in the broad sense.

The Code regulates in detail the procedure for concluding a contract between absentees, which includes sending a proposal (offer), its consideration by the acceptor, sending an acceptance, and its receipt by the offerer. By virtue of clause 1 of Art. 433 of the CC RF, "the contract is recognized as concluded at the moment when the person who had sent the offer receives its acceptance"⁴.

The legislator has established the consequences of sending an offer containing a term for acceptance (Art. 440 of the CC RF), an offer that does not contain a term for acceptance (Art. 441 of the CC RF), the consequences of late acceptance (Art. 443 of the CC RF) and so on.

The remote method of concluding a contract can also include the conclusion of a contract through the acceptor's conclusive actions. For example, by virtue of clause

⁴ Civil Code of the Russian Federation (Part 1) of 30.11.1994 No. 51-FZ (ed. of 24.07.2023) (with amendments valid since 01.10.2023). SPS KonsultantPlyus. <https://clck.ru/36eEQ9>

3 of Art. 438 of the CC RF, the performance by the person who received the offer, within the period established for its acceptance, of actions to fulfill the terms of the contract specified in it (shipment of goods, provision of services, performance of work, payment of the appropriate amount, etc.) is considered an acceptance, unless otherwise provided by law, other legal acts, or specified in the offer.

Digitalization, namely, the possibility of sending an offer and acceptance using information technologies, makes it necessary to take a new look at the procedure of concluding a contract between absentees and to single out in a separate category contracts concluded remotely by exchanging documents not in the traditional paper form.

Moreover, the scope of the remote method of concluding a contract covers not only exchanging offer-acceptance letters or messages, but also signing a single document in electronic form.

In 2019, important amendments were made to the CC RF, in particular to Article 434 of the Code. By virtue of clause 2 of this article, a contract in writing may be concluded by drawing up a single document (including an electronic one) signed by the parties, or by exchanging letters, telegrams, electronic documents or other data in accordance with the rules of the second paragraph of clause 1 of Art. 160 of the Code.

As is known, agreements on real estate (Articles 550, 560, 651, 658 of the CC RF), a corporate agreement (Article 67.2 of the CC RF), an agreement on establishment of a joint stock company (Article 98 of the CC RF), etc. are subject to conclusion by signing a single document.

Contracts concluded by signing a single electronic document can certainly be referred to distant contracts.

A number of contracts concluded by means of a single document require notarization. In particular, notarial certification is required for a rent contract (Article 584 of the CC RF), as well as a transaction aimed at alienation of a share in the authorized capital of a limited liability company (clause 11 of Article 21 of the Law on Limited Liability Companies)⁵.

Participants of civil turnover may notarize transactions in cases provided for by the agreement of the parties, even if this form is not required by law for transactions of this type (clause 2 of Article 163 of the CC RF).

As part of the digitalization process in our country, in 2019 the notary officials were empowered to perform notary acts remotely. One of the novelties was the rules of certifying a transaction by two or more notaries without their personal presence⁶.

This refers to the situation when the parties to the transaction are located in different regions and make the transaction without leaving their location. In this case, notarization of the transaction is carried out by notaries of different regions. The parties to the transaction

⁵ On limited liability companies. No. 14-FZ of 08.02.1998 (ed. of 13.06.2023). SPS KonsultantPlyus. <https://clck.ru/36brni>

⁶ On amendments to the Fundamentals of legislation of the Russian Federation on notary and to certain legislative acts of the Russian Federation. No. 480-FZ of 27.12.2019. (2019). Collection of legislation of the Russian Federation, 52 (Part I), Art. 7798.

prepare a draft agreement with the help of notaries, and then sign the text on paper and in electronic form. Such contracts may also be referred to remote transactions.

An important category of distant transactions are smart contracts. Smart contracts can be used in various spheres and at different stages of contractual relations. Smart contracts allow consumers to choose a supplier and enter into a contractual relationship with them. When deployed on a blockchain, smart contracts can automatically enter into and enforce agreements (Kirli et al., 2022).

Notably, there is no legal definition of a smart contract. Different points of view regarding their legal nature have been expressed in the literature. The legal community is trying to find answers to the question whether it is possible to apply traditional contractual constructs to a smart contract and to what extent (Savelyev, 2016; Belov, 2021; Efimova, 2019; Churilov, 2020; Shelepina, 2021; Tsepov, & Ivanov, 2022; Chelysheva, 2022, Hsain et al., 2021).

Meanwhile, despite the controversy regarding the concept of smart contract, as was rightly noted in the literature, smart contracts are actually used in everyday life, e.g., when calling for a taxi, renting a car, etc. (Utkin, 2022).

According to some authors, “a smart contract is a computer program (or computer code) that can only be concluded using blockchain technology and allows automatically concluding, executing and terminating various contracts upon the occurrence of predetermined legal facts” (Efimova & Sizemova, 2019).

The draft Federal Law “On digital financial assets” gives the following definition: “A smart contract is an agreement in electronic form, the fulfillment of rights and obligations under which is carried out through the automatic execution of digital transactions in a distributed ledger of digital transactions in a sequence strictly defined by such an agreement and upon the occurrence of circumstances defined by it”⁷.

This definition was excluded from the text of the law and while discussing the bill, the Committee on Economic Policy, Industry, Innovative Development and Entrepreneurship expressed a negative opinion on this issue. The Committee pointed out that “a smart contract is essentially a computer algorithm that allows participants of the distributed ledger to exchange assets; it is a technology and cannot be recognized as a type of civil law contract”. The Committee’s Conclusion stated that the only and sufficient rule for “smart contracts” is stipulated by Article 309 of the CC RF: “the fact of a transaction execution by a computer program is not disputed (except for cases of interference with the program). After the users are identified in the system, their behavior is subject to the algorithm of the computer program organizing the network, and the person “buying” a virtual item (digital right) will receive this item automatically”⁸.

⁷ On digital financial assets: draft Federal Law No. 419059-7 (edition submitted to the Russian State Duma, text as of 20.03.2018). SPS KonsultantPlyus. <https://clck.ru/36bron>

⁸ Conclusion of the Committee on economic policy, industry, innovative development and entrepreneurship of 03.04.2018 No. 3.8/522 “On the draft Federal Law No. 419059-7 “On digital financial assets”. SPS KonsultantPlyus. <https://clck.ru/36brpn>

Researchers rightly point out that one of the most pressing problems of smart contracts is that they are based on procedural programming languages. A code in a procedural language usually must specify how to solve a problem by explicitly providing clear instructions that govern its behavior (Ferro et al., 2023).

The issues related to smart contracts require a separate study due to the voluminous nature of the material, the ambiguity of some starting positions both in understanding smart contracts and in understanding the reliability of the results obtained when using smart contracts, especially given that they are subject to attacks (Aquilina et al., 2021).

In this paper, smart contracts will be touched upon only to the extent necessary for analyzing distant transactions as a legal category in general.

Speaking of the legal regulation of remote transactions, it should be noted that their separate relevant aspect is how to ensure the confidentiality of information, including personal information.

This issue becomes especially relevant in transactions with a foreign element, when there is an export of personal information. It is no coincidence that on February 24, 2023, the Cyberspace Administration of China (CAC) issued "Measures on standard contracts for exporting personal information" (Kennedy, 2023).

We believe that the issues of personal data export within remote transactions with a foreign element require a separate study in order to legislatively stipulate mechanisms to control the transfer of such data outside Russia.

Continuing the theme of legal regulation of digital technologies used in remote interaction between the transaction parties, it is necessary to point out another aspect that goes not only beyond the scope of civil law regulation, but also, perhaps, beyond the scope of legal regulation in general. It is about the differences in the legal consciousness of lawyers who are engaged in lawmaking and law enforcement activities, and subjects who carry out technical development of the use of digital environment in various spheres of human life, including remote interaction. An interesting study in this area has been conducted by foreign authors, who have identified fundamentally different views on security in lawyers and robotics specialists (Rompaey et al., 2022).

This issue is beyond the scope of our paper. However, we cannot but note this problem as one of the possible reasons for the difficulties of introducing technical achievements in jurisprudence.

Summarizing the above, we can state that the remote way of concluding a contract, i. e. without simultaneous personal presence of the parties and expression of will in the place of conclusion of the contract, is not new for the legislation. Legal regulation of the procedure for concluding a contract between absentees has always been rather detailed. At the same time, the development of digital technologies gives rise to new remote ways of concluding contracts and fills the previously established procedures of interaction between the parties with new content.

1.2. On the notion of distant transaction. Types of distant contracts and other transactions

The current legislation does not consider remote transactions as a separate category, nor establish a special legal regime for their participants, only regulating the electronic form of a transaction.

As it was stated above, the remote method of contract conclusion is not new for our legislation. The exchange of written messages is a classic way of concluding a contract.

At the same time, one should admit that the remote method of interaction between the parties to the transaction gives rise to certain specificity in the relationship. Actually, this method excludes a party's direct familiarization with its subject matter at the stage of will expression and limits the possibility of the party identification, as well as direct perception of the will of the other party.

Together with this specificity, the use of digital technologies significantly affects interaction between the parties, inevitably generating risks caused by the use of these technologies.

This allows questioning the expediency of considering a distant transaction as a legal category, as well as the need to create a special legal regime, taking into account the balance of interests of the transaction parties. After all, remote interaction using digital technologies gives rise to issues related to information asymmetry, the need to recognize a transaction participant as a weak party and provide them with adequate means of protection, distribute technological risks, etc.

Earlier, we have considered the issues related to the legal regulation of remote methods of civil law contracts conclusion, among which we can distinguish:

- 1) contracts concluded with a distant method of retail selling of goods;
- 2) contracts concluded by means of exchange of written messages in the classical form;
- 3) contracts concluded through the exchange of electronic messages;
- 4) contracts concluded by means of conclusory actions;
- 5) contracts concluded remotely by signing a single document in an electronic form;
- 6) contracts concluded remotely in a notary form (by certification by two or more notaries);
- 7) smart contracts.

A question arises whether all these contracts can be considered remote. To answer this question, it is necessary to define the concept of a distant contract.

If a distant contract is understood as any contract that is concluded without the parties' personal presence at the moment of will expression at the place of the contract conclusion, then almost all of the above contracts can be considered distant contracts.

We believe that such an understanding of a distant contract would be unnecessarily broad, as it would not meet the objectives of creating a special legal regime for this type of contract.

In our opinion, a special legal regime is required where the remote method of concluding a contract is combined with the use of digital technologies. It is the use of digital technologies that poses such problems as distributing the risks of technological failures, hacker attacks, observing the balance of interests of the parties, protecting the weaker party, which should be solved within the framework of a special legal regime.

If we reduce the remote interaction between the parties during the contract conclusion and execution only to the specifics of the contract form (the fact that the contract is concluded in electronic form), then all the above aspects will remain beyond the scope of attention.

At the same time, one cannot deny the importance of the issues related to the contract conclusion in electronic form. Here, it is very important to master certain skills to work with Internet services, to increase the legal literacy of civil circulation participants; lawyers must study more deeply the peculiarities of the electronic form of contract and understand their peculiarities compared to a classical contract (Tărchiță & Nagy, 2015).

The expediency of considering a distant contract as an independent legal category is that it allows shifting the focus from the contract form to the specifics of establishing the contract content, the scope of rights and obligations arising, the distribution of risks stemming from the remote nature of interaction between the parties.

From these positions, the following types of distant contracts should be considered:

- 1) contracts concluded on the Internet;
- 2) contracts concluded through the exchange of electronic messages;
- 3) contracts concluded remotely by signing a single document in an electronic form;
- 4) contracts concluded remotely in a notary form (by certification by two or more notaries);
- 5) smart contracts.

All the above types of contracts are similar in that the parties interact remotely at the pre-contractual stage, at the stage of contract conclusion and, as a rule, at the stage of contract execution. The expression of will is mediated, and the will is perceived by the other party through information technologies.

In this case, one of the parties to the contract may be the right holder of the information resource through which the will is expressed. Moreover, this party forms the rules of remote interaction, thus having an informational advantage in the contractual process.

All this requires that the other party be provided with certain guarantees, which are possible within the framework of a special legal regime. Within the framework of this legal regime, at least the following issues should be resolved:

- the criteria for establishing the status of the contract parties, recognizing one of them as a weak party;
- the conditions of liability of the parties, including the application of the “strict” liability principle (regardless of fault), and the limits of its application;
- the party bearing the risks of technological failures and hacker attacks;
- the distribution of the burden of proof between the parties.

We believe the legislator should consider a distant contract to be a separate contractual structure, along with other contractual structures stipulated in Part 1 of the CC RF (option contract, subscription contract, etc.). As a justification, it can be pointed out that such a contract has no less specificity, and the emerging relations require the establishment of a special legal regime.

In the subsequent part of this paper we will consider the issues of observing the parties' balance of interests in relation to certain types of distant agreements listed above. This will serve as an additional argument in support of the expediency of singling out a distant agreement as a separate contractual construction.

The next issue that should be touched upon is unilateral transactions, namely, whether the concept of a remote unilateral transaction may exist along with the concept of a distant contract.

When answering this question, it is necessary to proceed from the essence of a unilateral transaction and the consequences of its conclusion.

By virtue of clause 2 of Article 154 of the CC RF, a unilateral transaction is a transaction, for the execution of which the expression of the will of one party is necessary and sufficient, in accordance with the law, other legal acts or the agreement of the parties.

Taking into account the content of Article 160 of the CC RF, a unilateral transaction can be made in an electronic form.

By virtue of Article 155 of the CC RF, a unilateral transaction creates obligations for the person who made the transaction. It may create obligations for other persons only in cases established by law or by agreement with these persons.

It is the unilateral nature of will expression, the absence of consequences in the form of creating obligations for other persons that raises doubts about the possibility of remote unilateral transactions.

At the same time, it should be noted that unilateral transactions in a number of cases can be recognized as remote ones.

For example, the literature shows the prospects of remote participation of a notary in the certification of wills (Yatsenko, 2019; Mikhailova, 2020). In this case, a will is a remote transaction.

One more important aspect should be taken into account. Among unilateral transactions, transactions requiring perception and transactions not requiring perception are distinguished (Akuzhinov, 2020). Regarding transactions requiring perception, A. V. Egorov points out: "The essence of distinguishing this category is that this type of unilateral transactions becomes effective not from the moment of the will expression, but from the moment the will expression is received by the addressee" (Egorov, 2015).

One should note that most unilateral transactions are transactions requiring perception. They include, in particular, unilateral refusal from the contract (fulfillment of the contract). By virtue of Article 450.1 of the CC RF, the right to unilateral refusal from the contract (fulfillment of the contract) may be exercised by the authorized party by notifying the other party of the refusal from the contract (fulfillment of the contract). The contract is terminated

from the moment of receipt of this notice, unless otherwise provided by this Code, other laws, other legal acts, or the contract.

There are no obstacles for declaring a unilateral withdrawal from the contract in an electronic form (of course, if there are grounds for withdrawal from the contract out of court).

In this case we have, at first glance, a contradictory situation. On the one hand, the right to withdraw from the contract does not depend on the counterparty, their behavior and attitude to this being irrelevant in terms of legal consequences for the person refusing the contract. From this viewpoint, unilateral repudiation of the contract must not be considered as a remote transaction.

On the other hand, the contract repudiation must not only be stated but also perceived by the counterparty. This means that, although the behavior of the counterparty is irrelevant to the person repudiating the contract, nevertheless the performance of a unilateral transaction involves interaction with the counterparty.

If such interaction is carried out using information technologies, there is every reason for establishing a special legal regime discussed earlier. The above indicates that unilateral transactions requiring perception may be referred to remote transactions, if the communication of will to the counterparty is carried out using digital technologies.

This said, we believe that the basic concept should be the concept of a distant contract. A special legal regime should be developed and enshrined within the structure of a distant contract, which can be extended to unilateral transactions.

2. Providing the balance of interests of the parties in certain distant transactions

2.1. Contracts concluded via Internet sites

Transacting on the Internet has become so widespread that it makes it necessary to consider the way in which transactions are conducted from the viewpoint of balancing the parties' interests.

First of all, it should be noted that when the conclusion of certain agreements is available exclusively through participation in Internet services, this means that it is impossible to carry out various forms of activity without Internet access (Lim & Pan, 2021). This should be considered as a factor that violates the rights of potential consumers.

This aspect goes beyond the scope of private law regulation and deserves a separate study. However, it cannot be ignored when it comes to balancing the interests of civil turnover participants. Below we will consider the peculiarities of the order of concluding contracts via Internet sites in the aspect of civil law regulation. Any contract is an agreement of the parties, the content of which is a set of conditions that the parties have agreed upon.

Therefore, it is important to familiarize the user with the contract terms (the offer published on the website). After all, mindlessly clicking "I agree" button threatens with unpredictable consequences.

The main options for expressing the user's consent to the agreement terms published on the website depend on the way the agreement terms are published:

1. The text of the agreement is placed directly on the website page.
2. The offer is not placed directly on the site page; familiarization is possible by clicking on a hyperlink.
3. The site has a record of the user's implied consent to the terms and conditions in the case of continuing the use of the site.

In the latter case, doubts arise as to whether the contract can be considered concluded, which should be resolved taking into account the specific circumstances (Grin, 2019).

The order of concluding a contract via Internet sites violates the balance of interests of the parties. Due to the information inequality, a user is a weak party and should be endowed with appropriate means of protection, including the right, provided for in clause 2 of Article 428 of the CC RF, to demand amendment or termination of the contract with retrospective effect.

Summarizing the brief consideration of the contracts conclusion via Internet sites, we should state that such contracts meet the conditions sufficient to qualify them as adhesion contracts by virtue of Article 428 of the CC RF.

A way to maintain the parties' balance of interests would be to enshrine the rule on extending the adhesion contract regime to transactions made via Internet sites. At that, the website owner could be given the opportunity to exclude the effect of Article 428 of the CC RF if the website provides a technical opportunity for the consumer to participate in the development and adjustment of the agreement terms published on the website.

At the same time, one may agree that "the protection mechanisms provided for in clause 3 of Article 428 of the CC RF cannot be fully realized. It is a question of the absence of certain criteria in the legislation, allowing in practice to 'decipher' (or specify) whether legal relations imply inequality of bargaining power and determination of the contract terms by one of the parties only, which give the weaker party the mentioned legal guarantees" (Ovchinnikova, 2022).

We should agree that "the current regulation does not allow properly assessing the good faith and equality of the parties to the agreement, if the terms are formed by only one party using computer technology" (Kuzmina, & Lomakina, 2022).

Thus, the above allows concluding that the procedure for concluding contracts via Internet sites violates the parties' balance of interests. A user is a weak party due to information asymmetry and inequality of negotiation opportunities. This requires establishing a special legal regime to regulate the parties' relations within the procedure for such transactions.

In addition, a separate study is required to determine the expediency of legislative restriction of cases when the lack of availability of Internet services excludes the possibility of concluding contracts and entails limitation of access to goods, services or is an obstacle to the implementation of certain activities.

2.2. Contracts concluded by drawing up a single electronic document signed by the parties

Clause 2 of Article 434 of the CC RF provides that a contract in writing may be concluded by drawing up a single document (including electronic) signed by the parties.

Contracts are signed by electronic signatures⁹. Such a contract can be fully referred to a distant contract.

Some researchers express doubt that the possibility of using an electronic contract in the form of a single document appeared only after the amendments to the Code were made in 2019 (Kostikova, 2022).

This method of contract conclusion has become quite common in the real estate sphere. Contracts of sale and purchase, equity participation in the real estate objects construction, acts of acceptance and transfer of real estate are concluded in this form.

A detailed analysis of real estate transactions is beyond the scope of this study. However, the author would like to express her attitude to the remote execution of documents on the real estate transfer.

We believe the legislator's admission of such execution of deeds with real estate was hasty and insufficiently elaborated. In this case "risks arise for both parties. A buyer may face the fact that the real estate condition does not correspond to the way it was shown by a seller remotely via a video link. The process of proof will be complicated for the buyer because the videos are not recorded. Besides, the buyer, having signed the acceptance certificate, does not actually receive possession of the real estate.

For the seller, such registration of the transaction and the acceptance certificate may also create problems. For example, an unscrupulous buyer may claim that the deal was concluded under the influence of deceit or delusion, because the real estate was not inspected. The buyer can also claim that there was no actual transfer of real estate, the signing of the act was fictitious" (Savelieva, 2022).

The above indicates the presence of unresolved issues in connection with the remote interaction between the parties.

2.3. Contracts concluded remotely in notarized form (certified by two or more notaries)

The necessity and efficiency of using digital technologies in notary activity is beyond doubt. The remote notarization of transactions significantly simplifies the receipt of notary services by civil turnover participants.

Parties to a transaction located in different regions can conclude a contract and notarize it without leaving their location.

⁹ On electronic signature. No. 63-FZ of 06.04.2011 (with amendments). SPS KonsultantPlyus. <https://clck.ru/36brtE>

The procedure for entering into such remote transactions includes the following main stages:

- 1) the parties preliminary agree on the contract terms and conditions;
- 2) each party selects a notary at the place of its location;
- 3) the notary executes a transaction passport in the software, including information on the transaction, participants, and representatives;
- 4) documents are added to a database;
- 5) the following information is recorded:
 - a party signs information on the transaction participant with a simple electronic signature;
 - a notary signs information on the transaction participant with a reinforced qualified signature;
- 6) notaries exchange information in the database and approve the transaction passport; the consequence is blocking of all operations with the agreed part of the transaction passport;
- 7) all notaries signs the transaction passport;
- 8) the transaction is certified, including:
 - communication in videoconference format takes place, the parties (representatives) read the contract;
 - each party signs a hard copy of the contract;
 - each party signs the agreement with a simple electronic signature;
 - notaries sign the agreement with a qualified electronic signature;
 - the videoconference is completed and the notaries register the recording;
- 9) the documents are sent for state registration.

As we can see, the contract is executed and signed not only in electronic form, but also on paper. In this regard, the literature rightly raises the question of establishing the moment of expressing a person's will to make a transaction (Lapteva & Solovyanenko, 2022).

In the aspect under consideration, in relation to this type of distant contracts, it is necessary to analyze to what extent the mechanism of such a transaction conclusion is a reliable guarantee for its participants.

It should be noted that the remote nature of the transaction certification does not reduce the level of requirements to the notary's activity of ensuring the transaction legality. As in the case of transaction certification in person, the notary verifies the legal status and capacity, establishes the will and the voluntariness of will expression, explains the consequences of the transaction, and verifies the legality of the transaction content.

At the same time, the use of information technologies, while creating convenience and comfort for transaction parties, has the downside of creating security risks in transactions. Such risks include the destruction or distortion of the electronic transactions content due to hacker attacks, introduction of a virus into the software. There may be problems with identification in remote interaction.

One should agree with E. A. Kirillova that "digitalization of the Russian notary provides new opportunities for citizens, but digital technologies are only an auxiliary tool, which

cannot replace a specialist like a notary who guarantees the legality of transactions” (Kirillova, 2021).

Also, questions arise about the consequences of technological failures, including the procedure for establishing the valid will of the parties, the procedure for claiming and evaluating digital evidence. Many of such questions, regrettably, remain unanswered so far.

2.4. Contracts concluded by exchange of electronic documents

When analyzing remote transactions in terms of balancing the parties’ interests, one cannot but ignore contracts concluded by the exchange of electronic documents.

Analysis of judicial practice shows a significant number of disputes in which a court has to evaluate messages sent by e-mail¹⁰, SMS, messengers,¹¹ etc.

It should be noted that similar issues are considered by foreign courts. As is known from literature, the general trend is to recognize such correspondence as admissible evidence, but this is not an unconditional provision. In each case a judge assesses the admissibility of such evidence (Kozlova & Sergacheva, 2022).

It seems that the legislator and/or, possibly, higher courts should give relatively clear guidelines to civil turnover participants regarding the possibility or impossibility of using remote communication without electronic signature in typical situations.

The safest way for civil turnover participants is to build a two-stage system when using electronic communication:

- concluding an agreement on the implementation of electronic document flow in the traditional form (indicating the specific types of documents and addresses for correspondence);
- actually exchanging electronic documents.

It should be noted that the conclusion of such agreements on electronic document flow is widespread in banking practice.

In other spheres, regrettably, such electronic document flow is practically never applied. The parties exchange scanned copies of draft contracts, protocols of disagreements, e-mail letters of offer, letters of acceptance, acts, or other documents to fulfill contractual obligations. At the same time, the parties execute no documents that legitimize electronic document flow.

¹⁰ Enactment of the Presidium of the Supreme Appellation Court of the Russian Federation No. 18002/2012 of 12.11.2013 in case A47-7950/2011. SPS KonsultantPlyus. <https://clck.ru/36brts>

¹¹ Ruling of the Perm Cassation Court of general jurisdiction No. 88-22889/2020 of 30.10.2020 in case No. 2-1314/2019; Ruling of the Third Cassation Court of general jurisdiction No. 88-17185/2020 of 29.10.2020. SPS KonsultantPlyus. <https://clck.ru/36brSB>

Judicial practice is not uniform in the approaches to assessing correspondence not certified by electronic signature. Courts, as a rule, adjudicate disputes taking into account the previous practice of the parties, their behavior on obligations fulfillment after the correspondence, and provide assessments based on the performance of conclusive actions, subsequent approval, etc.

Participants of civil turnover should treat correspondence carefully, and in the most important cases conclude contracts/agreements concerning the procedure of remote interaction by means of electronic document flow.

To ensure predictability in the court disputes resolution, it is advisable to adopt clarifications at the level of the Supreme Court of the Russian Federation. Such clarifications should be based on the approach distinguishing between the stages at which correspondence was conducted and the establishment of various presumptions for proving the legitimacy of such correspondence.

Stricter criteria for the pre-contractual stage should be established. Correspondence without an electronic signature should not be regarded as legally significant (offer or acceptance). The exception, of course, should be cases when the parties concluded an agreement on electronic document flow.

This approach is justified by the fact that the sender has not yet entered into a relationship with the counterparty, has not confirmed their identity with an e-mail address and should not bear the risk that an unauthorized message will be sent via their mail.

In the case of subsequent stages, a presumption could be introduced that a message sent from the e-mail address specified in the contract is recognized as an expression of the will of the party to the contract.

The above indicates the need to develop clear guidelines to distribute the burden of proof when resolving disputes concerning the assessment of a contract "conclusion" in the course of remote interaction via electronic document flow.

3. Certain aspects of distant transactions beyond the scope of private law regulation

The need to single out distant transactions into a separate category is due, among other things, to a number of specific aspects outside the civil law regulation. Some of these aspects will be discussed in this section without claiming to be complete.

3.1. Assignment of public functions to private subjects (carriers of information on distant transactions)

The process of digitalization of the contractual sphere inevitably raises before the Russian legislator the problem of assigning public functions to private entities –carriers or keepers of information on the interaction of parties to contractual relations in the digital environment.

The assignment of public duties to private entities is not a new phenomenon. This can be confirmed by several examples from the banking sector, like the implementation of control functions by banks to combat criminal money legalization (laundering)¹² or performance of currency control functions¹³.

Public functions are economically burdensome for credit organizations, as they require additional expenditures not directly related to making money. This contradicts with their civil-legal status as commercial organizations, the objective of which is to make profit. Meanwhile, the legislator has assigned these functions to credit organizations, and, obviously, the obligations to perform them should be considered as an integral part of their legal status.

Apparently, the issue will have to be solved in a similar way in relation to private entities – right holders and keepers of information on transactions in the information environment.

Foreign literature notes the transformation of the tasks faced by Internet providers. “Private actors do not only take part in designing rules for their sector but they are the ones responsible for defining infringements. Private actors do not simply assist public enforcement by implementing rules; today private actors proactively counter infringements and design strategies and tools to do so” (Tosza, 2021).

With the rapid development of remote transactions, it will be necessary to legislatively address the issue of assigning functions to Internet providers that go beyond their private interest. Such functions should include the obligation to store and provide information on transactions executed on the Internet (in the event of a dispute between the parties), as well as the obligation to monitor certain transactions or operations in order to protect the public interest.

3.2. Peculiarities of proof in disputes arising out of distant transactions

The remote nature of interaction between the parties to a transaction using digital technologies at the pre-contractual stage, at the stages of conclusion and execution of the contract gives rise to the question of the specifics of dispute resolution and the proving process in such disputes.

The current legislation does not establish any procedural peculiarities of dispute consideration, including collection and evaluation of digital evidence or distribution of the burden of proof.

¹² On combating criminal money legalization (laundering) and terrorism funding. No. 115-FZ of 07.08.2001 (with amendments). SPS KonsultantPlyus. <https://clck.ru/36brw7>

¹³ On currency regulation and currency control. No. 173-FZ (with amendments) of 10.12.2003. SPS KonsultantPlyus. <https://clck.ru/36brwh>

In foreign literature we found a rather detailed study on the collection, storage, access to digital evidence related to the investigation of traffic accidents. The paper attempts to comprehensively investigate a range of issues related to proving transportation accidents, including methods of obtaining and transferring evidence in the digital environment, data access, role and responsibilities of various stakeholders (Philip & Saravanaguru, 2022).

The described structure of building an accident investigation using digital evidence is of interest not to forensics only.

As for evidence and proof in civil disputes arising from remote transactions, we should note that the evidence verifiability and the parties' trust in evidence sources considered in the above work are of paramount importance.

It seems that the procedures for recognizing certain evidence as admissible in disputes over distant transactions should be regulated at the level of law. In this case, the parties should have an opportunity to agree upon the method of certain facts confirmation within the limits established by law. The legislator should set these limits taking into account the balance of interests of the parties to a distant transaction, as well as the probable information asymmetry.

Another important aspect of consideration of disputes arising from distant transactions refers to the court's application of a particular standard of proof and peculiarities of distribution of the burden of proof.

The current procedural legislation does not contain a definition of the standard of proof. In the legal literature there are different viewpoints regarding the expediency of legislative stipulation of this legal construct (Tokareva, 2023).

Meanwhile, the analysis of judicial practice shows that in resolving disputes courts develop approaches to using certain standards of proof in relation to various categories of disputes ("balance of probabilities", "clear and convincing evidence", "clear and convincing evidence")¹⁴.

It seems that for disputes on remote transactions, in terms of proving the facts based on interaction using digital technologies, a special standard of proof should be developed, taking into account the legal status of the parties to the transaction.

This issue requires special research. In terms of setting a problem for discussion, it can be proposed that the obligation to provide digital evidence should be imposed on the party that keeps information or is the closest to the one who keeps it. The same party should have the burden of proving the document immutability in case the other party alleges that it was distorted. The party that is the keeper of evidence in the digital environment should be subject to the "clear and convincing evidence" standard for the circumstances it refers to. For the other party, the "balance of probabilities" standard is sufficient.

¹⁴ Ruling of the Judicial Division on economic disputes of the Supreme Court of the Russian Federation No. 308-ES17-6757(2, 3) of 06.08.2018 in case No. A22-941/2006. SPS KonsultantPlyus. [ссылку](#); Ruling of the Judicial Division on economic disputes of the Supreme Court of the Russian Federation No. 305-ES16-18600(5-8) of 30.09.2019 in case No. A40-51687/2012. SPS KonsultantPlyus. <https://clck.ru/36brxP>

3.3. Utilization of the potential of artificial intelligence, smart contracts in remote interaction of participants of contractual relations

Certain business spheres carry risks and inconveniences for key participants that could be solved by utilizing the opportunities inherent in digital technologies but not fully used in practice.

As an example, let us take construction of various commercially beneficial facilities (apartment buildings, hotels, business centers, etc.) The key participants in a construction project may include a developer, a builder, a designer, a technical customer, a general contractor, investors, insurers, a credit organization, etc.

At the moment, the relations between the construction project participants are built within bilateral contractual obligations, approximately as follows:

- developer – designer;
- developer – investor(s);
- developer – general contractor;
- general contractor– contractor;
- general contractor– supplier;
- developer – technical customer;
- developer – credit organization;
- developer – insurance organization.

It is important for project participants to obtain objective and verified data:

– at the initial stage – regarding the state of the real estate market, supply and demand for similar objects, market trends, as well as the cost of construction and prospects for its change;

– at subsequent stages – regarding market changes in the parameters initially included in the business model, as well as the degree of the object readiness in relation to the established schedule.

The current practice shows that the collection, verification and analysis of information are carried out by different entities, which negatively affects the investment climate.

For example, at the very initial stage the developer should assess the prospects of the territory development, decide on the concept of the future construction, conduct economic analysis, including forecasting the return on investment, select the appropriate land plot, and ensure the development of project documentation.

At the stage of obtaining bank funding, all parameters included in the business model are checked and evaluated by the credit organization, which takes additional steps to obtain objective data from independent sources and uses its own methods to assess the risks of the project. Investors, when deciding to invest in a project, are also interested in obtaining objective information and correctly assessing the project potential.

Later, at the construction stage, all participants are directly interested in having reliable information about the project progress and the impact of the changes affecting the parameters laid out in the business model.

When collecting and analyzing information, none of the subjects can be sure of its objectivity, the correctness of its assessment, and the adequacy of the risk taken. This creates uncertainty among investors about the project payback; hence a prolonged consideration of the credit application by the credit organization and the establishment of credit terms based on conservative approaches aimed at hedging risks, including the risk of unreliable information.

These circumstances lead to the fact that entrepreneurs in the construction sector eventually reject interesting ideas, as it is difficult to prove the prospects of payback and income to investors and the lending bank.

A similar situation occurs in other areas where the business process is based on industrial and financial integration with a large number of entities. As it is noted, a supply chain financing has recently emerged – a financial activity derived from the production chain of the real economy. The application of smart contracts in the supply chain is proposed. This will solve the problem of access to credit resources for small and medium-sized enterprises (Zhang et al., 2021). The supply chain and all its logical relationships must be fully mapped to the blockchain network to ensure that each one is transparent, authentic and verifiable (Dietrich et al., 2020).

Of interest is the research conducted by Will Serrano, who presents the Validation and Verification (V & V) model, an AI-based data marketplace that consists of three levels of verification, each having value for certain project participants. Silver verification, for example, has value for insurers in particular. It involves analyzing data to find deviations from a range or a value-added rule. The third level – Gold verification: data prediction based on multiple Artificial Intelligence (AI) algorithms and Machine Learning (ML) models – is relevant to the city in general or to asset managers and city developers (Serrano, 2022).

The above allows concluding that the implementation of an informational interactive model with data verification via blockchain and smart contract will solve the problem of trust between participants in business processes with a high degree of production integration. It will also provide an opportunity for effective management and commercialization of a project or investments.

In our opinion, the legal mechanism for implementing such an informational and economic model of a project or a supply chain should imply, as an initial stage, the enshrinement of rules in public law providing for:

- developing requirements to AI for solving the above tasks;
- carrying out an expert examination of the correctness of the tasks to be performed by the AI and the recognition of the results of their solution. The expertise should be conducted with the participation of specialized state bodies (in the field of construction and supervisory bodies in the field of banking, etc.).

Relations between private law subjects can be built using the model of remote transactions. The area of such transactions will be the use of data contained in the project's information model without the right to make adjustments, delete data, etc.

A more detailed analysis of the proposed option of using remote transactions is not possible at the moment due to the lack of well-developed basic approaches even at the level of draft regulations or doctrinal provisions in this area of public law.

Conclusions

1. The development of digital technologies gives rise to new remote ways of conducting transactions, as well as provides new content to the traditional civil law procedures for contract concluding via the exchange of messages.

2. The current legislation does not single out a “remote contract” as a legal construction (model) of a civil law contract.

Meanwhile, the use of digital technologies in the remote method of interaction between the contractual relations participants generates a significant number of problems that could be solved within a special contractual construction of “remote contract” under a special legal regime.

3. The author distinguishes the following features of a “remote contract”:

- the contract is concluded without personal presence of the parties at the moment of will expression at the place of the contract conclusion;
- digital technologies are used in remote interaction.

Under a special legal regime of “remote contract” the following issues should be solved, as a minimum:

- the criteria for establishing the status of the parties to the contract, while recognizing one of them as a weak party;
- the conditions of liability of the parties, including the application of the “strict” liability principle (regardless of the presence of guilt) and the limits of its application;
- who bears the risks of technological failures or hacker attacks;
- the distribution of the burden of proof between the parties.

4. Along with a “distant contract”, “distant transactions” should be distinguished as a legal category.

This said, the basic concept should be that of a “distant contract”, the rules of which can be extended to unilateral distant transactions.

5. A unilateral transaction may be qualified as a distant transaction if the following features are present:

- a unilateral transaction is a transaction requiring perception;
- communication of the will expression to the counterparty is carried out using digital technologies.

6. The need to single out distant transactions as a separate category is due, among other things, to a number of specific aspects that fall beyond civil law regulation. These include:

- assignment of public functions to private subjects (carriers of information on distant transactions);
- peculiarities of proof in disputes arising from remote transactions;
- using the potential of AI and smart contracts in the remote interaction of participants of contractual relations.

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Conflicts of interest

The authors declare no conflict of interest.

Financial disclosure

The research had no sponsorship.

Thematic rubrics

OECD: 5.05 / Law

PASJC: 3308 / Law

WoS: OM / Law

Article history

Date of receipt – July 31, 2023

Date of approval – August 21, 2023

Date of acceptance – November 30, 2023

Date of online placement – December 15, 2023



Научная статья

УДК 34:004:347.45/.47

EDN: <https://elibrary.ru/lbzqze>

DOI: <https://doi.org/10.21202/jdtl.2023.46>

Дистанционные способы совершения сделок с использованием цифровых технологий

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Ключевые слова

баланс интересов,
блокчейн,
дистанционная сделка,
дистанционный договор,
информационные
технологии,
искусственный интеллект,
право,
смарт-контракт,
цифровые технологии,
электронный документ

Аннотация

Цель: обоснование необходимости выделения новых договорных конструкций (моделей) с учетом специфики отношений, связанных с использованием дистанционного способа заключения договора посредством цифровых технологий и возможными рисками для их участников.

Методы: наряду со специально-юридическими методами основополагающим в процессе исследования стал метод критического анализа, что позволило оценить и интерпретировать основные источники и нормы гражданского права применительно к совершению дистанционных сделок, проанализировать современное состояние законодательства в этой области в контексте развивающихся процессов цифровизации и технологизации гражданско-правовых отношений.

Результаты: представлен критический анализ текущего состояния правовой регламентации дистанционных способов заключения договоров, дана их классификация. Сделан вывод о том, что развитие цифровых технологий порождает новые дистанционные способы совершения сделок, а также наполняет новым содержанием традиционные для гражданского права процедуры заключения договора. Обоснована целесообразность выделения понятия «дистанционная сделка» в качестве правовой категории в целях создания специального гражданско-правового режима, при этом базовым понятием должно являться понятие «дистанционный договор». Проанализированы отдельные виды дистанционных договоров для обоснования идеи о необходимости специальных правовых режимов в случаях, когда дистанционный способ заключения договора сочетается с использованием цифровых технологий, применение которых ставит такие проблемы, как распределение рисков технологических сбоев, хакерских атак, соблюдение баланса интересов сторон с учетом информационной асимметрии, необходимость защиты слабой стороны.

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Научная новизна: предпринята попытка дать определение таких понятий, как «дистанционный договор», «дистанционная сделка», выделить их признаки. Обоснована целесообразность рассмотрения дистанционного договора в качестве самостоятельной правовой конструкции (модели) договора, в рамках которой должен быть разработан и закреплён специальный правовой режим, который может быть распространён на односторонние дистанционные сделки. Сформулированы проблемы правового регулирования, обусловленные использованием информационных технологий, а также предложены правовые конструкции для их решения.

Практическая значимость: сделанные выводы и предложения могут быть использованы как в договорной практике участниками гражданского оборота, так и для нормативного закрепления понятия и признаков «дистанционного договора», «дистанционной сделки», создания специального правового режима с учётом специфики, порождаемой использованием цифровых технологий.

Для цитирования

Савельева, Т. А. (2023). Дистанционные способы совершения сделок с использованием цифровых технологий. *Journal of Digital Technologies and Law*, 1(4), 1058–1086. <https://doi.org/10.21202/jdtl.2023.46>

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Конфликт интересов

Автор сообщает об отсутствии конфликта интересов.

Финансирование

Исследование не имело спонсорской поддержки.

Тематические рубрики

Рубрика OECD: 5.05 / Law

Рубрика ASJC: 3308 / Law

Рубрика WoS: OM / Law

Рубрика ГРНТИ: 10.27.41 / Сделки

Специальность ВАК: 5.1.3 / Частно-правовые (цивилистические) науки

История статьи

Дата поступления – 31 июля 2023 г.

Дата одобрения после рецензирования – 21 августа 2023 г.

Дата принятия к опубликованию – 30 ноября 2023 г.

Дата онлайн-размещения – 15 декабря 2023 г.