

Legitimation of digital law in russia

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Abstract —The article contains an analysis of the innovations of Russian civil law that come into force on October 1, 2019 and the regulatory institution of digital rights.

Understanding the meaning, content and legal basis of a smart contract is the most important condition for implementing the national strategy for digitization of the Russian economy.

Analysis of theoretical views on the nature and prospects of the application of smart contracts, set out in the article, takes into account the main aspects of the development of the information society in the Russian Federation, taking into account the peculiarities of the modern economic and legal development of our country.

The authors emphasize the importance of understanding that the success of the implementation of legislative initiatives can be guaranteed if they meet not only the economic interest of the state, but also all subjects of economic relations.

The article concludes that it is necessary to study Western experience in securing basic digital rights and unifying the existing legal framework in order to increase the effectiveness of government regulation of digital legal relations.

Keywords — *blockchain, digitalization, implementation, observability of the contract, smart contracts.*

Issues of digitalization of the Russian economy are of genuine interest, both from the subjects of economic activity and from the side of civilists. In modern the society, there is an active transformation of economic relations into a digital form. This necessitated the legal consolidation of new models of economic behavior in the legislation. It requires a scientific understanding of the ongoing processes, the development of proposals for reconfiguring the legal system. The field of scientific research has swept the stream of publications on various aspects of the legal regulation of the emerging digital economy.

In most economically developed countries, the usage of digital technology is a natural process that has been around for decades. The Russian Federation, unfortunately, has a very significant lag from these countries, but at the same time, realizing the importance of applying digital technologies, it is trying to catch up and create a holistic legal field conducive to this process.

Initially, Decree of the President of the Russian Federation of 05/09/2017 No. 203 "On the Strategy for the Development of the Information Society in the Russian Federation for 2017–

2030" developed the basic principles of digitalization and assessed Russia's place in the modern digital world. Further, the speaker of the State Duma of the Russian Federation Vyacheslav Volodin and the head of the Committee on State Construction and Legislation Pavel Krasheninnikov proposed a draft law on the legal consolidation of the institution of information law in the Civil Code of the Russian Federation.

In February 2019, the President of the Russian Federation, in his annual message to the Federal Assembly, supported the development of the digital economy as a priority for the development of the state for the near term. On March 12, 2019, the law on amending the Civil Code of the Russian Federation was adopted in the third final reading, which can be considered as the beginning of the legitimization of digital law in Russia.

Such concepts as "digital economy", new digital objects of economic relations and the possibility of applying the digital form of a transaction along with the written form of fixing legal relations are introduced by law. Now the Civil Code of the Russian Federation will enshrine the basic concept of "digital law", which will allow determining its legal nature, content and place in the system of legal regulation.

To use electronic and other technical means as a form of expression of a person's will, two conditions are necessary:

- the devices used at the conclusion of such a "transaction" must allow "to reproduce the contents of the transaction on a tangible medium";

- it is necessary to reliably determine the person who has expressed her will. For example, for this it will be possible to use biometric identification.

In the amendments to the Civil Code of the Russian Federation, special attention is paid to a very common form of implementation of economic relations - smart contracts, i.e. contracts concluded in one "mouse click".

A smart contract is a document that can immediately respond to changing market conditions, the conditions of interaction between counterparties using a complex series of coding rules.

The idea of applying the smart contract was expressed by American cryptographer Nick Sabo, who defined it as a "computerized transaction protocol that complies with the terms of the contract" [1].

The first international example of legislative consolidation of the definitions of a “smart contract” was Decree No. 8 “On the Development of the Digital Economy” of the Republic of Belarus, where a smart contract is a program code designed to operate in the register of transaction blocks (blockchain), a different distributed information system for automated performance and (or) execution of transactions or other legally significant actions[2]. Thus, the smart contract performs the functions of a “technical device”, where the code parameters (smart contract) are determined by the terms of the transaction itself.

Smart contracts can be concluded at various sites and have wide application. The most rational and suitable for today is the Ethereum platform created in 2015 for smart contracts. At its core, this is a database of storing digital transactions with unlimited access. No key management systems are required to use it. It turns out that it is nothing more than a secured and unprotected transaction system of an unlimited number of people.

The established practice of concluding and implementing smart contracts indicates a significant interest on the part of subjects of trust, insurance and inheritance relations. In the opinion of London-based lawyer Richard Howlett, who in partnership with the Texas startup Stash created a platform for implementing smart contracts in 2015, smart contracts can automate individual sales cycles within supply chains, and interconnected transactions can be managed through the blockchain[3].

Russian examples of the implementation of smart contracts are the format of the work of the companies Uber and Yandex Taxi.

In accordance with the Analytical Review of the Central Bank of Russia for 2018 on the topic “Smart Contracts”, modern smart contracts have the following characteristics:

- smart contracts consist of “if ..., then ...” conditions, as a result of which the information is recorded into the distributed registry, leading to a change in its state. For example, when winning tenders, a smart contract determines the number of subjects acting as executor of state and municipal contracts according to the pre-established conditions;

- rules for the implementation of smart contracts can not be changed after agreement with all participants. For example, a smart contract that provides an ICO will provide an investment-attracting company with access to investor funds only when a certain total investment is reached;

- smart contracts are created using programming languages, as a result of which the potential for misunderstandings is minimized, and the range of possible contract rules is limited by the logic that is hard to algorithmize at the level of program code;

- the environment for launching and supporting the execution of smart contracts provides a reliable verification mechanism that guarantees transparency in terms of confirming the correctness and authenticity of accounting operations, while minimizing the disclosure of data to the verifier and other third parties[4].

It can be stated that consumers of services using smart contracts receive the following benefits:

- 1) Observability of the contract is the ability to monitor the performance of the contract at all stages and independently verify that the counterparty has completed its part of the transaction. The absence of observability at the stage of concluding a transaction generates the risk of “hidden knowledge” (hidden knowledge), where one of the parties may

enter into a transaction that is obviously disadvantageous for the second party. The lack of observability at the stage of execution of the transaction leads to the risk of “hidden behavior” (hidden action). The risk of “hidden behavior” arises when one of the parties hides a conflict of interest with obligations - for example, if the same event leads to a breach of contract terms and an insured event, while the insurance benefit is greater than the contract compensation.

The use of smart contracts in retail products and services may require a form of visualization of significant transactional positions, which is similar to the labeling of nutritional facts. Professional work with smart contracts that carry material risk above a certain value may require a professional certification scheme similar to that of auditors, investors, and financial engineers. Such a certificate of belonging to the professional community in the creation and operation of smart contracts will guarantee a level of technical and economic knowledge sufficient to adequately assess the possible behavior of a smart contract. One example of such certification is that consulting companies conduct an audit of ICO projects, which includes an assessment of both the business component of the proposed project and the corresponding technological infrastructure, including the assessment of the correctness and security of the smart contract code.

- 2) The verifiability and the existence of a mechanism for enforcing the provisions of the smart contract. The verifiability allows you to determine the participant of a smart contract and the chronological sequence of its actions, thereby forming an audit trail.

- 3) Security of conditions and data of a smart contract from third parties. The protection of a smart contract implies the restriction of any actions of third parties in relation to the contract. The restriction applies to the processing of data about the contract, the monitoring of the content and execution of the contract, as well as active intervention in the formation, signing or execution of the contract. The contract’s privacy isolates it from external influence, and liability is limited to the parties that are members of the smart contract.

The term “smart contract” is not perceived from a single position, but implies its use in technological and legal terms. Importantly, in the technological sense, some smart contracts are not related to legal contracts and are only computer programs. In this regard, most disputes over the concept of a smart contract are often associated with a mixture of the legal and technological components of this phenomenon. Most Western digital technology experts point to the need for two approaches to reviewing smart contracts[5].

Researchers of the legal nature of smart contracts indicate the possibility of identifying with this concept all legal contracts or elements of legal contracts concluded in electronic form, where the fulfillment of the obligation is automated and provided by a computer program.

Thus, an agreement between two or more people on establishing, changing or terminating legal rights and obligations, where part or all of the conditions are recorded and executed (or secured) automatically with the help of a special program, is a smart contract. At the same time, we consider it necessary to agree with the position of researchers of the nature of “smart contracts” who believe that not all automation of individual obligations of the parties under the contract can be qualified as a smart contract, and that which is understood in the technical environment as a smart contract will not always be a smart contract in a legal sense, understood as an agreement of the parties governed by civil law[6].

On the other hand, since the consideration of a smart contract as an agreement (and even more so a contract) is very controversial, from a legal point of view, smart contracts can be considered as computer protocols that emulate the logic of contractual provisions, which are a way of implementing the agreements between the parties by executing pledged algorithm that eliminates the human factor.

Experts in the field of information technology of smart contracts are considered as computer programs that are located at a specific address in the blockchain or a cryptographically protected program code containing certain specified conditions for execution.

In our opinion, the definition proposed by the legislation of Malta, including the legal and technological content of this phenomenon most accurately reveals its essence and content. Thus, a smart contract and similar software (including decentralized autonomous organizations) refers to a technological solution that includes a computer protocol and (or) an agreement, fully or partially concluded electronically, which can be automated and enforced in accordance with the computer code and allowing the execution of parts of the agreement with the participation (intervention) of other subjects. Thus, a smart contract is considered as a technological solution that includes a computer protocol and (or) an agreement in electronic form, which has legal force[7].

In Russia, it is proposed to consider the smart contract as a new type of contract concluded in electronic form. In the draft Law on Digital Financial Assets, a smart contract is a contract in an electronic form, the rights and obligations of which are fulfilled by performing automatically digital transactions in a distributed register of digital transactions in a sequence strictly defined by such an agreement and upon occurrence of certain circumstances. Therefore, in the draft law, a smart contract is a type of contract. However, such an approach to the definition of a smart contract does not fit the classical ideas about the contract. So, from the point of view of the traditional for Russian civil law understanding of a contract as a contract-transaction, a contract-legal relationship, a contract-document, such a definition is very controversial.

Thus, the position of the legislator, aimed at dispersing the legal characteristics of the basic terms that reveal the features of digitalization of the Russian economy, in various sources of law will cause another wave of inconsistencies and problems in law enforcement.

Also at the legislative level, the issue of premature use and regulation of civil circulation of digital money (cryptocurrency) was resolved. Legislative bodies, apparently, want to introduce them into commercial circulation (turnover for banks, large investment companies or other separate categories and parties of new legal relations), which is characterized by greater control and transparency of operations. Thus, the commercial turnover of cryptocurrency should serve as a litmus paper, which allows to identify all the pros and cons of the turnover of digital money.

Thus, it can be argued that the Russian business is on the verge of another experiment on the use of tools of the digital economy in order to minimize the risks and costs in the implementation of various operations. The introduction of "smart contracts" should create a more favorable environment for interaction between all entities and counterparties.

Obviously, at present, finally, a legal framework is being formed in Russia that defines the legal and technological conditions for the introduction of digital economy tools. We have picked up the global trend towards the digitization of

society in general and the economy in particular, which can become one of the fundamental drivers for the development of our state.

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