

## **PROBLEMS AND PROSPECTS OF PRACTICAL APPLICATION OF SMART - CONTRACT TECHNOLOGY**

*Abstract.* The necessity of using the technology of smart contracts in the conditions of digitalization of the world economy is investigated in the work. The aim of the study is to determine the essence of a smart contract, its relationship with the digital economy, blockchain technology and legal legislation. The definition of the basic economic concepts of digital economy is given, and also the basic advantages and lacks of use of smart - contracts in the conditions of modern economy and legal legislation are defined.

*Key words.* smart contract, blockchain technology, cryptographic security, transaction, algorithm, counterparty, final beneficiary.

In the literature, a smart contract is understood differently. Most often, only the software and transactional aspects of the smart contract are taken as a basis. If we approach the concept from a legal point of view, it should be understood as a smart - contract means contracts set out by coding, which are automatically executed in accordance with the algorithms established in them. [5]. Based on the general understanding of the "contract", a smart contract should be a civil contract in electronic form and, thus, should be subject to appropriate regulation of national law.

As noted, the use of smart contracts ensures the automatic execution of agreements between the parties in exact accordance with their original intentions and allows in the same automatic mode to respond effectively to cases of breach of contract by the parties. Instead of simply relying on the honesty of our counterparties, we implement technological systems with properties that will provide the necessary guarantees even if many of our partners behave dishonestly [2].

Among the pros and cons of smart contracts, the developers include the following:

- freedom from bureaucratic procedures inherent in traditional contracts and reduction of operating costs, including for intermediaries;
- simplification of the procedure for concluding contracts and the possibility of their use regardless of the residence and location of contractors;
- ensuring security and minimizing the risks of ambiguous interpretations of contract terms or making unfair decisions;
- the ability to avoid control by the authorities over the amounts, items and final beneficiaries of certain agreements;
- reduction of transaction costs, tax evasion and anonymity, which ensures confidentiality, etc. [5]

The problem with the application of the concept of smart - contract is that they are used on the basis of distributed registry technology (blockchain). This implies the presence of a database of digital elements and assets, distributed across different geographical areas among data centers or individuals. Each of these network members has its own copy of the registry, identical to all other copies. If changes are made to the register, they are immediately reflected in the copies of all participants.

This means that the use of smart contracts is appropriate only in situations where a public database is used, changes to which are made by users themselves, without the participation of an intermediary. [7]

Among the main disadvantages of smart contracts are the following:

- anonymity of the probable fraudster - the contractor of the smart contract;
- the impossibility of using the evidence base to prove the very fact of concluding a smart contract and conducting a transaction on it;
- difficulties with recovery and compensation for other costs under the smart contract, etc.

Thus, the effective use of smart contracts without the occurrence of negative legal consequences requires their legislative regulation. But the problem is the lack of a global consolidated position on the settlement of legal relations arising from the smart contract. [3]

Also, another aspect of the implementation of smart contracts is extremely important - the use of a private key, which is used to access digital assets. If the need to use such a key in a particular case does not arise, it directly indicates that the use of a smart contract is meaningless.

The following problems of practical application of smart contracts should be singled out:

- lack of legal regulation;
- lack of binding to a particular territory and jurisdiction;
- use of cryptocurrency as a unit of account;
- problems related to the legal construction of traditional contracts as a basis for programming smart contracts;
- lack of necessary infrastructure and broad user support;
- definition of the language of programming of smart contracts. [4]

Complicating the work with smart - contracts is the fact that it is impossible to determine in which country the smart - contract was concluded. This makes it impossible for a legal body to operate, as a contract could be concluded under the laws of one state, and a lawsuit for non-compliance with the terms of the contract could be filed in another country.

But given that the contract is executed and controlled automatically, we can conclude that the contract will be executed automatically thanks to a program that has an algorithm and no jurisdiction and world government can prevent it. [1]

It is assumed that the execution of smart contracts will require some information from external sources, such as air temperature, etc.

Given the above, we currently see the following benefits of smart contracts:

1. reducing the cost of drafting and executing contracts by eliminating intermediaries;
2. simplification of contract implementation;
3. practical impossibility of unilateral change of the text of agreements;
4. unambiguous interpretation of the contract, consisting of predefined blocks of codes;
5. facilitating the creation of evidence in court or arbitration;
6. facilitating the process of execution of decisions made by the court or arbitration;
7. security of information channels and the ability to restrict access to information depending on the level of access.

Automation of processes in smart - contracts not only potentially, but already really becomes the essential help in those cases when there are risks of proper execution of the contract, and also court and arbitration decisions.

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