

**CIVIL-LEGAL ASPECTS OF THE USE OF SMART CONTRACTS IN REAL ESTATE  
PURCHASE AND SALE CONTRACTS**

**Azirbaev Salamat Kuanishbaevich**  
Karakalpak State University  
(Republic of Karakalpakstan, Nukus)  
+998907006862  
[azerbaevsalamat947@gmail.com](mailto:azerbaevsalamat947@gmail.com)

**Abstract**

This article analyzes the civil-legal basis for the use of smart contracts in real estate purchase and sale agreements. In the context of the digital economy, the fact that smart contracts based on blockchain technologies are manifested as an alternative form of traditional contracts, their legal nature, advantages and practical problems are scientifically illuminated. Also, the role of smart contracts in ensuring reliability, transparency and security in real estate transactions is evaluated. The article will formulate international legal documents in the field of e-commerce and electronic documents, including sample laws adopted by the United Nations Commission on International Trade Law and conclusions based on scientific sources.

**Keywords**

Smart Contract, real estate, purchase and sale contract, blockchain, civil law, electronic contract, digital economy, property law, state register, legal regulation.

**Introduction:** The development of Information Technology has a significant impact on Civil Law relations. Contractual relations are increasingly moving into electronic form, replacing traditional written agreements with digital documents. Of particular importance is the issue of ensuring speed, security and transparency in high-value real estate purchase and sale transactions.

The concept of Smart contract was first introduced into scientific circulation by Nick Szabo, which was interpreted as a software protocol that automatically enforces the terms of the contract. Today, smart contracts work mainly on blockchain technology and ensure that obligations between parties are fulfilled without human intervention.

Real estate buying and selling contracts, on the other hand, are one of the most important and complex types of civil circulation. Such agreements are usually concluded in writing, in some cases requiring notarial approval and state registration. This process is multi-stage and time-consuming, and in some cases also poses legal risks. Therefore, it is considered necessary to study the possibilities of using smart contracts in real estate on a scientific basis.

**Methods:** Smart contracts in their essence are a new technological form of Civil Law contract. They preserve the main elements of the traditional contract – the agreement of the parties, the accuracy of the subject, the presence of rights and obligations, as well as responsibility. But their peculiarity is that the text of the contract is expressed in the form of software code, and not in ordinary legal language. When the condition included in the code is met, the system will automatically perform the next action.

The use of smart contracts in real estate purchase and sale transactions can be manifested in several directions. First of all, it is important that the object of the property is recorded in the digital register. It will be almost impossible to change or falsify the information entered in the blockchain-based register. This prevents violations such as the double sale of one object.

Secondly, there is an opportunity to automate the payment process. For example, after the transfer of the amount established by the buyer, the system automatically records the passage of



property rights. As a result, the level of trust between the parties increases, and the transaction accelerates.

Third, costs are reduced. In the case of the need for the participation of intermediaries, notaries and other organizations in the traditional procedure, many operations are automated in the smart contract system. This ensures economic efficiency.

However, there are a number of legal challenges in the implementation of smart contracts. First of all, the issue of recognizing an agreement in the form of a software code as a written contract is relevant.

International documents in the field of e-commerce and e-signature, including the Model E-Commerce Act (1996) passed by the United Nations Commission on International Trade Law, and the Model electronic signatures Act (2001) provide the basis for the legal recognition of electronic documents. However, the full legal status of smart contracts has not yet been clearly defined in many states.

Another important issue is responsibility. Who will be responsible for the damage if the smart contract goes wrong or a software error occurs? Developer, platform owner or contract parties? This question can create complex legal disputes in practice.

At the same time, there is a need for integration with the state registration system. In order for the right to real estate to be recognized by the state, the blockchain system must be associated with the official Cadastral or registry authorities. Otherwise, the smart contract will remain only as a technical tool.

In general, smart contracts can increase transparency in the real estate market, reduce corruption factors, and simplify transactions. However, in order to fully introduce them, it is necessary to improve the legal framework, adapt regulatory legal acts and form judicial practice.

**Conclusion:** The use of smart contracts in real estate purchase and sale agreements is an important stage in the development of Civil Law relations. This technology allows you to automate transactions, ensure security and increase economic efficiency. At the same time, smart contracts do not fully take the place of traditional contracts, but are manifested as their modern form.

To effectively introduce them, it is necessary to expand the regulatory framework recognizing electronic documents and digital identity, clearly define the issue of software responsibility and ensure technological integration with state registers. Only then can smart contracts become a reliable and legally robust means of real estate circulation.

## References:

- 1) De Filippi, P., Hassan, S. "Blockchain Technology as a Regulatory Technology: From Code is Law to Law is Code." 2018.
- 2) Wendland, M. von. "Smart Contracts that are Smart and can Function as Legal Contracts." 2018.
- 3) Clack, C., McGonagle, C. "Smart Derivatives Contracts: the ISDA Master Agreement and the Automation of Payments and Deliveries." 2019. Smart contracts and blockchain: legal implications for business and governance. – Academic research review, 2020.
- 4) Legal aspects of distributed ledger technologies and smart contracts. – International legal studies journal, 2019.

