

LEGAL ASPECTS OF THE RESOLUTION OF CONTRACTUAL DISPUTES ARISING FROM THE CROSS-BORDER USE OF ARTIFICIAL INTELLIGENCE, AUTOMATED DECISION MAKING AND SMART CONTRACTS

Master's student of Tashkent State University of Law in International
Arbitration and Disputes Resolution, senior specialist of Tashkent city
department of Justice Sharapova Rayhon Bekbergen qizi
e-mail: raykhonsharapova@gmail.com

Abstract. This article analyzes the role of artificial intelligence technologies and smart contracts in legal relations, and the legal mechanisms for resolving disputes that arise during their use. Proposals for improving national legislation in this area have also been developed.

Keywords: Artificial intelligence, smart contracts, ADR, ODR, contractual dispute resolution, cross-border transactions, automated decision-making, justice, privacy, data protection, jurisdiction, legal consequences.

Annotatsiya. Ushbu maqolada sun'iy intellekt texnologiyalari va smart kontraktlarning huquqiy munosabatlardagi o'rnini, ulardan foydalanish jarayonida yuzaga keladigan nizolarni hal etishning huquqiy mexanizmlari tahlil qilinadi. Shuningdek, ushbu sohada milliy qonunchilikni takomillashtirish bo'yicha takliflar ishlab chiqilgan.

Kalit so'zlar: Sun'iy intellekt, aqli shartnomalar, ADR, ODR, shartnomaviy nizolarni hal qilish, transchegaraviy bitimlar, avtomatlashtirilgan qarorlar qabul qilish, adolat, maxfiylik, ma'lumotlarni himoya qilish, yurisdiksiya, huquqiy oqibatlar.

Аннотация. В данной статье анализируется роль технологий искусственного интеллекта и смарт-контрактов в правоотношениях, а также правовые механизмы разрешения споров, возникающих при их использовании. Также разработаны предложения по совершенствованию национального законодательства в этой сфере.

Ключевые слова: искусственный интеллект, смарт-контракты, ADR, ODR, разрешение договорных споров, трансграничные транзакции,

автоматизированное принятие решений, правосудие, конфиденциальность, защита данных, юрисдикция, правовые последствия.

Background. Along with the development of modern technologies, artificial intelligence and smart contracts are increasingly widely used in civil-legal relations. This, in turn, leads to the emergence of new types of legal disputes. This article examines the legal aspects of contractual dispute resolution, analyzes the implications of the use of artificial intelligence-based systems, and presents possible solutions to resolve conflicts arising on issues of fairness, privacy, data protection, and jurisdiction.

Methodology. In order to study the legal aspects of the resolution of contractual disputes arising from the use of artificial intelligence, automated decision-making and smart contracts across borders, this research paper uses several types of methods. The analysis of the latest achievements and results in the field of scientific literature, international law, artificial intelligence and smart contracts is the main foundation for the introduction to this scientific study and for its further study and research in the future.

Discussion. Before entering this topic, it is necessary to touch on concepts such as artificial intelligence, smart contract, and blockchain technologies and learn them in depth.

What is artificial intelligence (AI)? AI is computer systems that simulate human mental activity, and these systems perform tasks using machine learning, deep learning, and neural networks. AI has the ability to analyze data, make decisions, and solve problems. In Uzbekistan, the legal status of AI is determined by a number of normative legal documents. In particular, Presidential Decree No. 4996 dated 02.17.2021 “*On measures to create conditions for the rapid introduction of artificial intelligence technologies*”, PD No. 4699 dated 04.28.2020 – “*On digital economy and electronic government*” PD No. 358 “*On approval of the strategy for the development of artificial intelligence technologies until 2030*” and the “*Digital Uzbekistan – 2030*” strategy.

Smart contracts are self-executing digital contracts. A smart contract is an automated and enforceable contract. Although automated by a computer, some parts

may require human intervention and supervision. Rights and obligations can be enforced by law or by not changing the computer code¹.

Smart contracts are typically used to automate the execution of an agreement so that all parties involved can get immediate results without any intermediary involvement or loss of time. They can also automate the workflow to trigger the next action when predefined conditions are met².

Artificial intelligence (AI) and smart contracts are recognized as new objects of civil law. A smart contract is self-executing software based on blockchain technology that converts contract terms into digital code and executes automatically.

When talking about smart contracts, the term Blockchain should also be mentioned. **Blockchain** is a database of transactions consisting of a chain of sequential digital blocks and *a system in which all smart contracts are stored*. Anyone can see the information in the blockchain, but cannot change it. In blockchain technology, it is automatically executed based on programmed conditions, and it reduces intermediaries, helping to automate processes.

Here we will focus on the advantages of a smart contract over conventional contracts:

- ✓ *Immediate performance: After the condition is fulfilled, the contract is performed immediately;*
- ✓ *No paper document: no manual work or time spent comparing errors;*
- ✓ *Transparency: Encrypted records distributed among participants prevent changes;*
- ✓ *Security: blockchain records are difficult to break due to encryption and interdependence;*
- ✓ *No intermediaries: Smart contracts eliminate the need for intermediaries, reducing delays and fees.*

The Law “*On Electronic Commerce*”, the Law “*On Electronic Document Circulation*” and the norms of the *Civil Code of Uzbekistan* on electronic transactions serve as the legal basis for the regulation of Smart contracts.

¹ “Smart Contract Templates: foundations, design landscape and research directions”, Dr. C. Clack, V. Bakshi, Dr. Lee Braine (4 Aug 2016), available at <https://arxiv.org/pdf/1608.00771.pdf> v3 [cs.CY] 15 Mar 2017

² <https://www.ibm.com/topics/smart-contracts>

Legislation in the field of AI and smart contracts is developing rapidly in the world. Therefore, a number of problems arise in this area. The following main conflicts may arise when using smart contracts:

- ✓ *Disputes caused by software code errors,*
- ✓ *Disputes due to misunderstanding of the contract,*
- ✓ *Disputes caused by technical malfunctions,*
- ✓ *Disputes related to data security.*

As for the US experience with AI and smart contracts, **the Uniform Commercial Code (UCC), the Federal Arbitration Act,** and each state’s own laws on AI and smart contracts are regulated, where disputes are mostly settled through ADR resolution and ODR – Online Dispute Resolution platforms are common. In the US judicial system, disputes in the field of AI and smart contracts can be appealed to federal courts, state courts, and courts for special technological disputes.

Here, let’s talk about the ODR system. **Online Dispute Resolution (ODR)** is a modern method of dispute resolution, which is implemented using the Internet and digital technologies. Let’s consider its main aspects. Main features:

- *Remote – the parties do not have to be in the same place (there are no geographical restrictions),*
- *Time savings – faster than traditional court proceedings,*
- *Costs are lower – court costs and transport costs are saved,*
- *24/7 access,*
- *Documents are stored in electronic format.*

ODR can be in the form of online negotiation platforms, electronic mediation, online arbitration, automated negotiations.

The ODR system is developing day by day, and many countries are introducing it into their legislation. The ODR system is currently under development in Uzbekistan. By analyzing some cases, you can find the elements of ODR. Including

- “E-sud” electronic system – provides an opportunity to submit and monitor applications for civil cases online,

- *The Law on Mediation* allows the use of electronic means in the mediation process, although not completely online.

Summarizing the above, we believe that it is necessary to establish the ODR system in Uzbekistan, expand the digital court system, including the digitalization of mediation processes, and the introduction of electronic arbitration mechanisms.

The use of smart contracts, which we saw above, is becoming more and more widespread in the market of Uzbekistan. However, none of the legal documents mentioned above covers the regulation of disputes arising in smart contracts. Therefore, *our second proposal* is that it is necessary to form a special legislative framework coordinating the field of artificial intelligence and smart contracts. It is necessary to make additions and amendments to the Law “*On Electronic Commerce*” related to smart contracts and/or to adopt a separate law on the legal regulation of smart contracts.

In addition, it is necessary to establish procedures for resolving disputes regarding smart contracts and to develop mechanisms to ensure the legal force of smart contracts. *Thirdly*, it is necessary to develop a mediation institute for smart contracts and establish special arbitration courts or arbitration – “*Smart contract arbitration*”. Even if the workload in civil courts increases, it is natural to call arbitration courts under smart contracts when inter-district courts remain, not in each district. But the field of artificial intelligence and smart contracts is an area where a huge revolution will take place in the next 10 years in the world market and in the conditions of Uzbekistan. Therefore, disputes will increase in the field of demand.

Fourthly, we believe that a system of training specialists in the field should be established in the country.

Also, the legal status of contracts concluded by means of artificial intelligence and automated systems still does not exist in the world, issues of ensuring their validity and enforceability are one of the tasks facing international law. In addition, it is necessary to clearly define the issues of legislation and jurisdiction used in cross-border operations, and to develop international legal standards.

In conclusion, it should be noted that as digital technologies continue to develop, the legal system must also adapt to these changes and develop appropriate regulatory mechanisms. This, in turn, creates an opportunity to ensure the stability of contractual relations and effectively resolve disputes.

Artificial intelligence, automated decision-making systems and smart contracts are important advances in modern technology that are fundamentally changing contractual relationships. However, the use of these innovative technologies across borders creates a number of legal problems. To summarize the situations analyzed above, in order to regulate AI and smart contract legislation, it is first necessary to adapt national legislation to international standards, form a special legal framework in the field of artificial intelligence and smart contracts, and develop modern dispute resolution mechanisms (ODR, electronic arbitration).



Research Science and
Innovation House

REFERENCES/IQTIBOSLAR/CHOCKKI:

1. Savelyev A.I. Smart-kontrakty i avtomatizatsiya dogovornyx otnosheniy // Zakon. 2017. №8,
2. Szabo N. Smart Contracts: Building Blocks for Digital Markets, 1996,
3. 4. Wright A., De Filippi P. Decentralized Blockchain Technology and the Rise of Lex Cryptographia, 2015,
4. “Smart Contract Templates: foundations, design landscape and research directions”, Dr. C. Clack, V. Bakshi, Dr. Lee Braine (4 Aug 2016), available at <https://arxiv.org/pdf/1608.00771.pdf> v3 [cs.CY] 15 Mar 2017¹
<https://www.ibm.com/topics/smart-contracts>,
5. The Law of Uzbekistan “On Mediation”,
6. The Law of Uzbekistan “On Electronic Commerce”,
7. “Regulation on Electronic Document Circulation”,
8. Presidential Decree “On measures to create conditions for the rapid introduction of artificial intelligence technologies”,
9. Presidential Decree “On digital economy and electronic government”,
10. Presidential Decree “On approval of the strategy for the development of artificial intelligence technologies until 2030”,
11. Uniform Commercial Code (UCC) AQSH,
12. Federal Arbitration Act (AQSH),
13. <http://www.lex.uz/>
14. <https://www.international-arbitration-attorney.com/ru>

Research Science and
Innovation House