DIGITAL ARBITRATION IS A NEW WAY OF DISPUTE RESOLUTION FOR THE UNIFIED DIGITAL SPACE OF THE EAEU: POLITICAL, PHILOSOPHICAL AND LEGAL ASPECT

Elena ERMAKOVA 1 | Olga PROTOPOPOVA 1,*

1 Law Institute, Peoples’ Friendship University of Russia (RUDN University), Moscow, Russia

* Correspondence
Olga PROTOPOPOVA, Miklukho-Maklaya st., 6, 117198 Moscow, Russia
E-mail: protopopova_ov@rudn.ru

Abstract: The article discusses the theoretical legal foundations of a new type of arbitration – digital arbitration (or blockchain arbitration). The author formulated the concept of digital arbitration and analyzed the differences between digital arbitration and traditional arbitration from the point of view of theories about the legal nature of arbitration. In particular, the author believes that the term digital arbitration (blockchain arbitration) is used in three meanings. Firstly, the term digital arbitration refers to a way to protect the rights arising from smart contracts. This method is considered as an alternative to those methods that imply the need to seek judicial protection from the State or traditional arbitration. Secondly, digital arbitration refers to the body that organizes the digital trial of a legal dispute. And, thirdly, this concept denotes an artificial intelligence agent (robot), which considered the dispute submitted for its resolution. The author believes that due to its features, digital arbitration can be recommended as an alternative way to resolve disputes in the digital space of the EAEU.

Keywords: digital arbitration, blockchain arbitration, legal nature of digital arbitration, digital space of the EAEU.

Introduction

The digital revolution has radically changed public relations. The global economy is changing rapidly and requires a new regulatory framework to ensure the security of transactions, including transnational ones, also concluded in electronic form and smart contracts. A smart contract is a computer protocol that independently conducts transactions based on the use of mathematical algorithms and monitors their execution (Szabo, 1996). Smart contracts are smart enough to be executed independently, as prescribed in their code, but they cannot resolve situations that are open to interpretation by the parties. Smart contracts also have limitations: they cannot independently check the quality of the goods, find out whether the service is well rendered, whether the counterparty is acting in good faith, etc. Litigation over smart contracts reduces the speed and automation of transaction execution, which leads to high legal uncertainty and high transac-
tion costs, losing all the benefits created by smart contracts (Aouidef et al., 2021; Savage, 2020; Sinitsyn et al., 2021, pp. 40-50).

Over the years, smart contracts have played a significant role in the transformation of blockchain technology, creating a decentralized system. With the help of smart contracts, it is possible to ensure the fulfillment of fully automated legal obligations without the participation of third parties (Rusakova et al., 2019, p. 696). Like regular contracts, smart contracts on the blockchain are subject to a variety of problems, including non-transaction disputes, off-network management issues, and on-network disputes. The online dispute resolution system is still in its infancy. Thus, it becomes necessary to introduce a dispute resolution mechanism regulating digital relations set out in such smart contracts (Advani et al., 2022).

This leads to radical changes in legal practice. Traditional dispute resolution methods, such as state court and international arbitration, are ineffective for dealing with a large volume of disputes in a digital environment (Rusakova & Frolova, 2022, p. 366). We fully share the opinion of the English artificial intelligence theorist Richard Susskind, who stated in 2008 that the legal industry will change in the next 20 years more than in the previous two centuries. All of the above leads us to the idea that in order to settle disputes in the digital environment, new forms of dispute resolution are needed, one of which may be digital arbitration. Undoubtedly, digital arbitration is different from traditional arbitration. To date, digital arbitration uses blockchain, metaverse and NFT technologies, but its legal nature remains controversial. Many authors do not consider digital arbitration to be international commercial arbitration for various reasons.

In our article, we want to reveal the concept and essence of a new form of dispute resolution – digital arbitration, to show the main differences between digital arbitration and proceedings in a state court and traditional arbitration, as well as to outline the way for digitalization of international commercial arbitration as a platform for resolving digital disputes for the Eurasian Economic Union (EAEU). It should be noted that the EAEU was created in order to comprehensively modernize, cooperate and increase the competitiveness of national economies and create conditions for stable development in the interests of improving the living standards of the population of the member states.

Methodology

Modern legal science is replete with approaches to the problem of the concept and legal nature of arbitration in the modern world. In the classical theoretical and legal interpretation, the term arbitration is understood in various meanings.

In the textbook of V. Musin, O. Skvortsov, etc. the authors pointed out that “the term arbitration (arbitration court) is used in three meanings. Firstly, the term “arbitration court” denotes a way to protect civil rights. This method is considered as an alternative to those methods that imply the need to seek judicial protection from state jurisdictional authorities. Secondly, the arbitration court means the body organizing the arbitration of a legal dispute. And, thirdly, this concept denotes the specific composition of the arbitration court, which considered the dispute submitted for its resolution” (Skvortsov & Musin, 2012, p. 19). N. Erpyleva wrote that “in the last two cases, the additional term “arbitration tribunal” is often used. In this context, the broad freedom and flexibility of the actions of the arbitration tribunal, allowed by the laws governing the arbitration procedure and the arbitration rules, in respect of which the parties can agree, are of particular importance (Erpyleva, 2013, pp. 5-6).

To identify the legal essence of arbitration, many authors in Russia and abroad have tried to formulate the main differences between dispute resolution in traditional arbitration and state court. For example, N. Erpyleva formulated three differences between arbitration and the court – 1) the possibility of choosing arbitrators; 2) the finality of the arbitration award; 3) confidentiality of the arbitration procedure (Erpyleva, 2013, pp. 7-8). Many Russian and foreign researchers find other differences between arbitration and a state court, such as the ease of application of arbitration, procedural and jurisdictional certainty of arbitration, procedural flexibility of arbitration, lower cost and speed of arbitration procedure (Davydenko, 2013, p. 10; Skvortsov, 2017, pp. 57-58).

We share the approach of Loukas Mistelis, who emphasized that the main differences be-
Digital Arbitration Is a New Way of Dispute Resolution for the Unified Digital Space of the EAEU: Political, Philosophical and Legal Aspect

tween arbitration and proceedings in a state court are as follows (Lew et al., 2003, p. 10). First, by concluding an agreement on arbitration, the parties withdraw their dispute from the jurisdiction of state courts, transferring its for the permission of an alternative body – arbitration. Secondly, arbitration is a private dispute resolution mechanism (Just as each contract is a private matter of the persons who concluded it; and an arbitration agreement is a private matter of the parties. Accordingly, in case of disagreement, the dispute must be resolved in a private manner determined in advance by the parties: the procedure for electing arbitrators, the procedure for their activities and their decision-making). Third, arbitrators are elected by the parties, the activities of arbitrators for the consideration and resolution of the dispute (procedure, place, timing, choice of applicable law) are also controlled by the parties. Fourth, the arbitration decision is final and binding on the parties (since the parties have agreed on this in advance).

We should especially note that in paragraph A of Article 1 of The English Arbitration Act of 1996 it is established: “the object of arbitration is to obtain a fair resolution of the dispute by an impartial court without unnecessary delays or costs”.

The existing theories of the ICA, revealing its legal nature, are also of great theoretical importance. The question of the legal nature of arbitration, as well as the arbitration agreement, remains controversial in the theory and practice of international civil procedure. Legal scholars have been trying to determine the nature of arbitration from a legal point of view for over 150 years. A proper interpretation of the nature of the ICA actually reflects its role in the legal system and contributes to the reform of national legislation on arbitration.

It should be noted that there are several views on clarifying the legal essence of arbitration in general and arbitration agreement in particular - contractual, procedural, mixed and autonomous theories. Within the framework of the contractual theory of the legal nature of arbitration, the consideration of a case by arbitration is qualified as a civil contract. According to proponents of procedural theory, arbitration is a special form of administration of justice. The conduct of legal proceedings is the function of the State, and if it allows the parties to resort to arbitration and agrees to terminate the activities of its judicial bodies in such cases, this means that the content of arbitration is the exercise of a public legal function. Proponents of the mixed theory believe that arbitration as a whole is a complex combined phenomenon that originates in a civil contract and will become procedurally effective on the basis of specific national legislation (Kravtsov, 2012, pp. 282-284).

Main Study

First, let us define the objective process of changing public relations and the emergence of new dispute resolution technologies in arbitration. 2022 was the year of the introduction of Metaverse technologies into dispute resolution systems. In July 2022, the Guangzhou Arbitration Commission of China (GZAC) announced that it had established the first arbitration court of the Metaverse, the Meta City Arbitration Court (Yuanbang). And in November 2022, this court considered the first arbitration dispute using metaverse technologies (Du, 2022).

The case concerned the creation of virtual avatars in the Metaverse community and the trading of non-interchangeable tokens (NFT). Having received a digital image from the NFT developer company, the party used it to print clothes offline and planned to sell the corresponding clothes in the real world. This behavior led to a copyright dispute, which was considered by the Guangzhou Arbitration Commission (GZAC). According to the arbitration agreement reached by mutual consent, the parties submitted their disputes to the Meta-City Arbitration Court (Yuanbang) through the electronic filing channel of the Guangzhou Arbitration Commission in Metaverse. In the end, the NFT developer company granted the other party the right to use the digital image and offered to share the profits. Thus, for the first time in the history of arbitration, the arbitration tribunal considered a dispute concerning the actions of the parties carried out both in the metaverse (creation of virtual avatars) and outside it in the real world (offline printing of clothing and sale of appropriate clothing). The dispute ended with a settlement agreement. But there are questions about what would have happened if an arbitration decision had been made? Would the winning party be able to execute the
What are metaverses and what technologies are used in them? In 2021, the term “metaverse” became widely known: if previously it was used mainly by computer game developers and philosophers interested in cosmology, then after the announcement of work on the creation of prototypes of digital universes of such IT giants as Meta, Google, Microsoft, Amazon, Nvidia, metaverses became a technological trend to discuss which more and more economists, sociologists and lawyers from different countries are joining. The metaverse (parallel digital universe) is a virtual world of the future that will exist alongside the physical world, “populated” by digital avatars of real people. So far, the existing virtual worlds are fragmented, independent and unrelated, interacting only when necessary (Filipova, 2023, p. 8).

The Russian authors argued that the metaverse is a convergence of physical, augmented and virtual reality in a common online space. According to English lawyers, the metaverse includes the creation and development of large-scale, permanent and functionally compatible virtual spaces that allow people to interact with each other using new technologies: 3D software; AI; blockchain; augmented, virtual and augmented reality, etc. The metaverse is a new arena for people where they can make deals, collaborate and create.

The term “metaverse” originated 30 years ago in Neil Stevenson’s novel “The Snow Disaster” (Stiehl, 2022). The novel presents important images that help to understand why the problems of the metaverse are actually not so different from existing legal problems. Following Stevenson’s images, you can imagine the metaverse as a main street. You can open a store, advertise products, share ideas and participate in any form of real trading - only virtually. Here you do not necessarily move linearly, as you would in the real world. You can instantly move down a side street, attend a virtual conference, or simply disconnect from the network and disappear.

It should be noted that in the first six months of 2021, prices for digital real estate jumped by 3,000 percent. Also, the statements of technology giants make us think about a new virtual future. Global giants Twitter and YouTube have begun to master web 3.0 and NFT technologies in particular. Facebook has turned into Meta, and is creating its own meta universe along with other startups. In these realities, each person can have digital property and their own capabilities that allow them to work in the virtual world and receive real resources.

The metaverse is inextricably linked with blockchain technologies and NFT tokens. Blockchain technology originated from a branch of mathematics called cryptography. At the basic level, blockchain is a decentralized, shared digital registry, whose work is based on the consensus of a global peer-to-peer network. As pointed out by American scientists Grasky and P. Embley, blockchain is a set of technologies that creates an encrypted, distributed registry. Probably the most famous application of blockchain is the digital currency Bitcoin (Graski & Embley, 2018).

According to the definitions of Russian programmers, an “NFT”, or non-interchangeable token, is a unit of accounting with which a digital impression is created for any unique item. Among them may be: paintings, photographs, videos, music, gifs, etc. NFT tokens became popular in 2021 after in March the auction house Christie’s sold the work of the artist M. Winkelmann in the form of NFT for 69.3 million US dollars. For the first time in history, the State Hermitage Museum has sold a limited collection of museum NFTs at an open auction. In September 2021, the Hermitage collected $440,000. USA at the Binance NFT auction. Five NFT copies were put up for auction, including “Composition VI” by V. Kandinsky, “Judith” by Gior- gione, “Madonna Litta” by Da Vinci (150 thousand US dollars), “Corner of the Garden in Montgeron” by Claude Monet and “Lilac Bush” by Van Gogh (Partz, 2021).

Secondly, we will distinguish digital arbitration from traditional arbitration. The resolution of disputes in the metaverse, the use of blockchain and “NFT” technologies raises the question of what digital arbitration is, what is its legal nature, can we put an equal sign between traditional commercial arbitration, online arbitration and digital arbitration (blockchain arbitration)? Which arbitration was held in November 2022 in the Chinese arbitration court of the Metaverse – traditional with the use of a blockchain element or digital?

Taking into account the above, let’s try to distinguish between digital arbitration (or block-
Digital Arbitration Is a New Way of Dispute Resolution for the Unified Digital Space of the EAEU: Political, Philosophical and Legal Aspect

chain arbitration) and traditional arbitration. First, it should be noted that blockchain arbitration can be divided into two categories: “on-chain” and “off-chain”. “On-chain” arbitration involves the use of a smart contract in the dispute resolution mechanism. Off-chain arbitration involves traditional arbitration dispute resolution, but with automation of certain elements of the procedure (Advani et al., 2022).

Examples of “off-chain” arbitration using elements of blockchain technologies can be found in China. Back in October 2016, the Arbitration Cloud Platform 1.0 system was released in China. This system used blockchain technologies in registering cases, delivering materials, approving the composition of the tribunal, conducting hearings, examining evidence, drafting and ruling decisions, etc. In 2018, the Guangzhou Arbitration Commission reviewed 166,634 online arbitrations totaling US$ 1.4 billion. In addition, the regulations of online arbitration were adopted in China by the Commission CIETAC in 2009 and Shenzhen international court of arbitration in 2019 (Evans & Dang, 2022).

Thus, the first arbitration court in the Metaverse, which took place in November 2022 in China, meets all the signs of “off-chain” arbitration using elements of blockchain technologies, since the dispute was considered by arbitrators-people who attended the meeting online using their avatars.

The on-chain arbitration process (or digital arbitration process) is well described in the Digital Dispute Resolution Rules, published in the UK on April 22, 2021. The Rules were created by the UK Jurisdiction Task Force (UKJT) after extensive public and private consultations with lawyers, technical experts, financial services and commercial parties. The rules of the Regulations should be used for digital on-chain relationships and smart contracts and included in them.

“Digital Dispute Resolution Rules” defines a smart contract as a digital asset. To include this Regulation in a blockchain smart contract, the following text must be included in the blockchain contract: “any dispute must be resolved in accordance with the “Digital Dispute Resolution Rules” of the UK Jurisdiction Task Force (UKJT). “Digital Dispute Resolution Rules” allows you to include these words in the codes. Since the blockchain is programmed in the form of codes, these words can be included in the en-coded form.

In accordance with the “Digital Dispute Resolution Rules”, disputes related to smart contracts can be resolved without the intervention of human arbitrators using an artificial intelligence agent. So, disputes in accordance with the “Digital Dispute Resolution Rules” can be resolved using an automatic dispute resolution process. Alternatively, such disputes may also be referred to an arbitrator or expert. The Regulation provides a unique mechanism for automatic dispute resolution, which allows the parties to choose a person, a commission or an artificial intelligence agent for automatic dispute resolution. The solution is then immediately applied to the digital asset system, that is, to the platform on which the digital asset exists. Thus, the decision of the digital arbitration is also executed automatically. Rule 8 of the said Regulations makes the results of automatic dispute resolution legally binding for the parties.

Thus, digital arbitration (blockchain arbitration) assumes the following features. First, by concluding an agreement on the consideration of a dispute by digital arbitration, the parties withdraw their dispute from the jurisdiction of state courts, transferring it to the resolution of an alternative body - digital arbitration. Secondly, digital arbitration is a private dispute resolution mechanism. Third, a dispute regarding smart contracts is resolved automatically, i.e. by an artificial intelligence agent (not human arbitrators!). Fourth, the arbitration decision is final, binding on the parties (since the parties have agreed on this in advance), and is executed immediately.

Speaking about such features of traditional arbitration as ease of application, procedural and jurisdictional certainty of arbitration, procedural flexibility of arbitration, lower cost and speed of arbitration procedure, all of them can be applied to digital arbitration to an even greater extent.

J. Tirado and G. Casio argued that due process is a fundamental element of international arbitration. This concept is enshrined in the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards. Article V(1)(b) of the New York Convention may authorize the absence of due process by denying recognition and enforcement of an arbitral award. However, such a sanction is useless in the case of decisions issued using self-executing
smart contracts, since enforcement is carried out automatically (Tirado & Cosio, 2022).

Having made a comparison with traditional arbitration, it should be concluded that the main difference between digital arbitration is point three - a dispute regarding smart contracts is resolved not by arbitrators appointed to the parties, but automatically, i.e. by an agent of artificial intelligence. How serious is this question should be answered by the national legislation of every country in the world. It is no coincidence that one of the first “Digital Dispute Resolution Rules” appeared in England. We have already mentioned that Article 1 of the English Law on Arbitration stipulates that “the object of arbitration is to obtain a fair resolution of a dispute by an impartial court without unnecessary delays or costs.” Can an artificial intelligence agent be considered an impartial court? We believe that – yes.

From the point of view of theories about the legal nature of traditional arbitration, we believe that digital arbitration fits perfectly into any of the concepts mentioned above. Indeed, if we are talking about the contractual theory of arbitration, then digital arbitration is a digital contract, or a smart contract. If we talk about the procedural theory of arbitration, then digital arbitration is the implementation of the public law function of the state to resolve disputes in the field of smart contracts. The mixed theory of arbitration also applicable to digital arbitration as a complex combined phenomenon that originates in a digital contract (smart contract) contract and may become procedurally effective on the basis of specific national legislation. There is no such legislation yet, but this does not mean that such laws on the possibility of digital arbitration will not appear in the next 2-3 years.

Thirdly, we will outline the possibilities of introducing digital arbitration in the EAEU. The Eurasian Economic Union (EAEU) is an international organization of regional economic integration established by the Treaty on the Eurasian Economic Union of May 29, 2014. The EAEU was created in order to comprehensively modernize, cooperate and increase the competitiveness of national economies and create conditions for stable development in the interests of improving the living standards of the population of the member states. Currently, the EAEU consists of five countries: the Republic of Armenia, the Republic of Belarus, the Republic of Kazakhstan, the Kyrgyz Republic and the Russian Federation.

It should be noted that a successful digitalization process acts as a prerequisite for effective integration. The EAEU Digital Agenda is a range of issues relevant to the EAEU member states on digital transformation within the framework of the development of integration, strengthening of the common Economic space and deepening cooperation of the member states, reflected in the statement on the EAEU Digital Agenda (signed by the heads of the EAEU member States on December 26, 2016) (Korovnikova, 2022, p. 156).

Each EAEU country strives to develop digital technologies, including new technologies in the field of international commercial arbitration. Thus, Uzbek jurists F. Otakhonov and A. Rasulev noted that it is necessary to increase the effectiveness of the institute of arbitration in Uzbekistan as one of the most important institutions of civil society, to ensure a reduction in the time and costs of business entities and foreign investors when considering disputes, to ensure an increase in the reputation of the country in the region in the consideration of controversial issues in international transactions (Otakhonov & Rasulev, 2020). Belarusian author V. Pavlovskaya wrote that in 2017 the President of the Republic of Belarus announced a general course on building an “IT country”. First of all, this concerns the goal of broad support for technology companies in Belarus. The new “Silicon Valley of Eastern Europe” will soon begin to develop its legislation on technology and innovation. The first step is Presidential Decree No. 8 “On the development of the digital Economy” dated December 21, 2017 (Pavlovskaya, 2019). All this is impossible without the introduction of the latest technologies in the theory and practice of dispute resolution. Digital arbitration can become one of such new technologies in dispute resolution.

Conclusion

1. The term digital arbitration (blockchain arbitration) is used in three meanings. Firstly, the term digital arbitration refers to a way to protect the rights arising from smart contracts. This method is considered as an alternative to
those methods that imply the need to seek judicial protection from the State or traditional arbitration. Secondly, digital arbitration refers to the body that organizes the digital trial of a legal dispute. And, thirdly, this concept denotes an artificial intelligence agent (robot), which considered the dispute submitted for its resolution.

2. Digital arbitration (blockchain arbitration) assumes the following features. First, by concluding an agreement on the consideration of a dispute by digital arbitration, the parties withdraw their dispute from the jurisdiction of state courts, transferring it to the resolution of an alternative body - digital arbitration. Secondly, digital arbitration is a private dispute resolution mechanism. Third, a dispute regarding smart contracts is resolved automatically, i.e. by an artificial intelligence agent (not human arbitrators). Fourth, the arbitration decision is final, binding on the parties (since the parties have agreed on this in advance), and is executed immediately.

Digital arbitration is also characterized by ease of application, procedural and jurisdictional certainty, procedural flexibility, low cost and speed of the arbitration procedure.

3. Due to the features listed above, digital arbitration can be recommended as an alternative way to resolve disputes in the digital space of the EAEU.

Acknowledgement

This publication has been supported by the RUDN University Scientific Projects Grant System, project “Development of the concept and models of digital dispute resolution in the context of creating a common information area of Eurasian Economic Union countries” (Supervisor: Frolova E.E.)

References


018/14913/blockchaininthecourts.pdf