

Blockchain in Arbitration Development

Multi-Signature Wallet Showcase

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1. The Promise of Blockchain Technologies

The flexibility of arbitration impeccably suits the needs of fast-developing relations in the sphere of blockchain economy. Proceedings are tailored by the parties and accommodate the needs of different types of relationships. At the moment, most national regulators are not able to keep up with the pace of development in the use of technology in this sphere. Arbitration, on the contrary, can be adapted to the demands of the specific situation. At the same time, flexibility of proceedings, when used improperly, may not lead to the desired legal outcome. In turn, that can taint arbitration as an unreliable dispute resolution method unable to provide access to justice.

The pseudonymous nature of relations in many cryptocurrency-based transactions provides a challenging ground to establish trust between participants to relations. Arbitration can aid this sphere by establishing a mechanism of redress for rights violation and providing a layer of trust between the parties.

One of the instruments that the use of blockchain technology provides to aid this problem is a 'multi-signature wallet' technology. Authorizing a transaction from such wallet requires two or more keys whereby each party and an arbitrator hold keys to the wallet. The underlying nature of relations in using this technology resonates considerably with establishing an escrow. The 'wallet' serves as an escrow account. The difference from traditional escrow is that the role of an escrow agent is shifted towards that of an adjudicator: the agent (arbitrator) does not take an active role in the execution of transactions. Multi-signature wallet allows an arbitrator to remain dormant when the contract is performed by the parties without disagreements. Parties use their keys to authorize a transaction from the multi-signature wallet. It is only when a dispute occurs and one of the parties does not use the key to authorize a transaction, an arbitrator steps in to resolve the altercation. After rendering an award, an arbitrator, jointly with a prevailing party in arbitration, authorizes a transaction of favour of such party.

Party receives a redress for rights' violation without the need to seek the assistance of national courts. The award made by an arbitrator is consequently performed by an arbitrator and a winning party. The award is performed even if the losing party in arbitration disagrees with an award and is not willing to voluntarily perform it. The described nature of multi-signature wallet relations is

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advantageous for cross-border relations where difficulties in award enforcement may be foreseen.

2. Problems in Implementation

Following is a more specific consideration of the difficulties that may arise in the implementation of this technology. Beyond the scope of the commentary are the problems in connection with entering into an arbitration agreement in such relations. A closer look at the way that parties enter into such relationship would reveal that the validity of an arbitration agreement can be questioned. These considerations are left aside because technically parties are able to enter into a legally binding arbitration agreement in relations that utilize multi-signature wallets. The technology is not the problem in this case. It is only unawareness of the parties and the lack of required legal knowledge that can create problems of validity.

One of the major limitations in the use of multi-signature wallet technology lies in the nature of relations where it can be utilized. To use multi-signature wallets, parties must perform a transaction in the confines of cryptocurrency. For the majority of industries, the use of cryptocurrency remains an uncharted territory. Cryptocurrencies are extremely volatile and transacting in them is a big risk for many businesses, except for some specific industries. The use of escrow itself, even if there is no need to actively engage an escrow agent, may prove inflexible for anything bigger than a low-value consumer-type transaction. Using escrow accounts, despite all its potential benefits, requires freezing assets for a certain amount of time. With this being said, the multi-signature wallet technology still may find its way into commercial relationships. The technology may be used in an implementation of a part of a bigger contract to regulate and provide a safety mechanism in a sphere that welcomes this technical solution.

For those who do enter into such relations and use the arbitration mechanism, it is crucial to ensure that parties to a dispute are given access to justice. At the moment, the majority of arbitrators acting in these relations are technical experts and not lawyers. This is dictated by the lack of the required technical awareness that prevents lawyers from taking a part in these relations, as well as the low value of transactions in question.

If the said technical experts are not able to provide access to justice to the parties, that will have a negative reputational effect on arbitration as an alternative dispute resolution method. Similar to other arbitration agreements, when parties transacting through a multi-signature wallet choose to arbitrate their disputes, they waive the right to seek redress in national courts. The need for taking the extra care is emphasized by the fact that parties, if they use a multi-signature wallet, will not need to seek the assistance of national courts in enforcing an arbitral award.

The flexible nature of arbitration may offer technical experts-arbitrators more freedom and autonomy than they are trained to handle. Acting in good faith and having the intention to help the blockchain economy grow could be insufficient to provide all the required procedural guarantees in resolving a dispute, and

to organize and lead the proceedings in a way that would provide parties with an opportunity to present their case.

A similar problem can be evidenced when considering the applicable rules of law in this form of arbitration. Arbitrators resolve disputes following what they seem fair and without clear rules on what law to apply to a dispute. This form of adjudication closely resonates with resolving a dispute *ex aequo et bono* in commercial arbitration. In commercial arbitration, arbitrators may assume the powers of an *amiable compositeur* but only if both parties expressly agree to have a dispute resolved in this way.¹ In a multi-signature wallet arbitration, parties do not express any desire to vest arbitrators with the powers to apply the principles deriving from *ex aequo et bono*. Yet, due to the lack of any procedural rules governing the resolution of a dispute, a substantial number of arbitrators act as *amiable compositeurs*. Despite all the novelties that blockchain brings to the market, resolution of disputes needs to follow the existing legal framework to provide parties with predictable and reliable results.

1 ICC Rules of Arbitration, Art. 21(3); Arbitration Rules of the Arbitration Institute of the Stockholm Chamber of Commerce, Art. 22(3); LCIA Arbitration Rules, Art. 22.4.