UDK 347.919.3:621.397

*Matija Kontak**

MODERN TOOLS TO LOWER THE COSTS OF DISPUTES: DIGITALISATION AND THE NEW VENUES OF ONLINE DISPUTE RESOLUTION

This paper analyses emerging online dispute resolution platforms. The definition of online dispute resolution is discussed together with the problems raised by resolution of disputes by online means. Online dispute resolution platforms are trying to establish themselves in two areas of dispute resolution. First, as alternatives for resolution of small claims that are often not efficiently resolved by national courts. Second, certain online dispute resolution platforms are developing digital avenues for commercial arbitration. This is a potential challenge to the established commercial arbitration institutions. In regards to commercial arbitration, digital platforms are primarily focused on competing by having lower costs of arbitration by using the internet, blockchain and other digital technologies. The paper examines the potential of these platforms and highlights the obstacles they would have to overcome.

Key words: *Online dispute resolution. – Alternative dispute resolution. – Wisdom of the crowds. – Small claims disputes. – Commercial arbitration.*

1. INTRODUCTION

The rise of cryptocurrencies technology has spurred the development of thousands of blockchain related projects, including a certain number of legal tech start-ups. Some types of disputes, such as low-value disputes and disputes stemming from online transactions, are on the rise.[1] These disputes are a challenge for the national courts to

* The author holds an LLB degree from University of Zagreb and an LLM degree from Radboud University (the Netherlands), *kontakmatija@gmail.com* (Republic of Croatia).

1 United Nations Commission on International Trade Law (UNCITRAL) Technical Notes on Online Dispute Resolution, 2017, iii.

deal with efficiently. This has caused the appearance of online dispute resolution (ODR) as an umbrella of methods that would allow faster, cost-efficient way of resolving disputes. [2] The aim of the paper is to examine what is meant by online dispute resolution and to evaluate the potentials of such a dispute resolution method.

2. DEFINITION OF ONLINE DISPUTE RESOLUTION (ODR)

Online dispute resolution (hereinafter: ODR) can be considered as a method of alternative dispute resolution that is conducted online.[3] However, ODR can be also defined as a tool that national courts can use to manage and resolve cases.[4] In that instance, we are considering so-called 'court-ODR'.[5] Examples of court-ODR digital methods include procedural tools, such as providing communication channels with dispute administrators, creating virtual meetings, submission of e-evidence, storing data and managing courts schedule.[6] Moreover, substantive use of ODR methods in courts means, for example, using digital technologies to predict judicial outcomes, assessing evidence or identifying relevant case law and statutes.[7] United Kingdom and China already have functioning online courts.[8]

UNCITRAL Technical Notes on Online Dispute Resolution (hereinafter: UNCITRAL Notes on ODR) define ODR as a 'mechanism for resolving disputes through the use of electronic communications and other information and communication technology'.[9] UNCITRAL

2 The author participated in testing of an online platform developed by a legal tech start-up. Afterwards, the author has collaborated with the legaltech start-up developing a digital commercial arbitration platform. The paper represents solely the opinions of the author.

3 G. Strikaitė, "Online dispute resolution: quo vadis, Europe?" *Vilnius University Open Series*, (6) 2020, 218–226, 219.

4 N. Ebner, E. E. Greenberg, "Strengthening Online Dispute Resolution Justice", *Washington University Journal of Law & Policy*, 6 2020, 69.

5 *Ibid.*

6 *Ibid.*, 71.

7 *Ibid.*

8 A discussion of these online courts can be found in N. Ebner, E. E. Greenberg, *op. cit.*, 77–81.

9 United Nations Commission on International Trade Law (UNCITRAL) Technical Notes on Online Dispute Resolution (2017), 4.

Notes on ODR elaborate that ODR requires a technology-based intermediary, which means it cannot be conducted 'offline'. Further, an ODR process requires 'a system for generating, sending, receiving, storing, exchanging or otherwise processing communications in a manner that ensures data security. Such a system is referred to herein as an "ODR platform"'.[10] The concept of an ODR 'platform' will be in the focus of the paper.

Thus, ODR can be a method applied by the courts in their proceedings. However, we can define ODR differently, as a particular subset of alternative dispute resolution.[11] Commercial arbitration is a method of alternative dispute resolution (hereinafter: ADR) between private parties arising out of commercial agreements with legally binding decisions. Commercial arbitration can also be fully or partially conducted online, and in those instances such online commercial arbitration can be considered an example of ODR.

3. LEGAL PROBLEMS RAISED BY ONLINE DISPUTE RESOLUTION: POTENTIAL PROS AND CONS

ODR can be particularly well suited for low-value cases of litigation.[12] By lowering the costs of litigation and shortening the time to resolve disputes, ODR can be seen as a partial answer to the problem of access to justice.[13] With an appropriately simple design, ODR process can be a more accessible alternative for dispute resolution, especially for traditionally disempowered groups.[14] Despite these repeated positive sides of ODR, many legal commentators naturally try to critically analyse and find potential faults of various ODR systems.

For example, some ODR platforms require that claims are defined in fixed component parts (*e.g.* from a dropdown menu) which

10 *Ibid.*

11 G. Strikaitė, *op. cit.*, 218–226, 219.

12 N. Ebner, E. E. Greenberg, *op. cit.*, 67.

13 R. Condlin, "Online Dispute Resolution: Stinky, Repugnant, or Drab", *University of Maryland Legal Studies Research Paper 2019-40*, 718.

14 O. Rabinovich-Einy, E. Katsch, "Blockchain and the Inevitability of Disputes: The Role for Online Dispute Resolution", *Journal of Dispute Resolution*, 2019, 58.

may not capture all the aspects of the claim.[15] Further, ODR programs may limit the chance to argue substantive merits of the claim,[16] especially those ODR programs that are text-based.[17] The standards required by due process may be in danger because of the limits on a reasonable and fair opportunity to be heard.[18] Text-based communication, however, does have a number of advantages. Textual communication allows the use of charts, graphs or pictures to convey information and is furthermore asynchronous, meaning that the other side has time to think out (and write) their response.[19] On the other side, potential issue of a textual or video ODR is that electronic communication makes people less sociable and more prone to being harsh, which is a consequence of communicating behind the veil of a computer screen.[20]

ODR can be enhanced by blockchain technology or so-called smart contracts. Blockchain technology and smart contracts enable private parties to create dispute resolution that is self-enforcing and thus bypass the recognition and enforcement through State courts, in particular Article V of the New York Convention.[21] Ortolani develops this argument further, stating that the blockchain technology requires individuals to develop their own adjudication mechanisms, as there are no State courts to secure trustworthiness of transactions on the blockchain. In that regard, Ortolani continues, blockchain is a return to an ancient past, where jurisdiction was not a State-provided institution, but a private service largely based on the consent of parties.[22] Despite these uncertainties, a number of law firms have started to cater services for smart contracts based on blockchain technology.[23]

15 R. Condlin, *op. cit.*, 722.

16 *Ibid.*

17 *Ibid.*, 738.

18 *Ibid.*

19 *Ibid.,* 740–742.

20 *Ibid.,* 752.

21 P. Ortolani, "The impact of blockchain technologies and smart contracts on dispute resolution: arbitration and court litigation at the crossroads", *Uniform Law Review*, Volume 24, Issue 2, 2019, 430–448. 6; The Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958 (hereinafter: New York Arbitration Convention) *https://www.newyorkconvention.org/english*, last visited 8 September 2021.

22 P. Ortolani, *op. cit.*, 430–448.

23 A. J. Schmitz, C. Rule, "Online Dispute Resolution for Smart Contracts", *Journal of Dispute Resolution* 103, 2019, 109.

Strikaite raises the potential conflict of the principle of rules of law with an online procedure. In particular, this is because the ODR process is usually conducted online, which creates an emphasis on the (impersonal) algorithms rather than on law.[24] Further, in an ODR process, the roles of judge can be severely reduced or altered, and this can also cause a strain on the principle of rule of law[25] (and, we might add, endanger due process). Nevertheless, Strikaite stipulates the need to make decisions using ODR systems produce mandatory effect. Otherwise, ODR platforms, such as those provided by the EU Regulation on consumer ODR,[26] cannot effectively function.[27]

According to Ebner and Greenberg, it is the legal professionals, such as lawyers, that are the least inclined to accept changes in the sphere of litigation, while both judges and clients are more interested in the potential of ODR.[28] One possible reason could be that lawyers in an ODR-infused system will need a new set of skills, such as being able to assess the possible outcome of an ODR process in view of their clients' interests.[29] This means that lawyers will be required to understand the details of how an ODR system functions, in the same way as they might today understand the intricacies of a live courtroom. 'Thinking like a lawyer' might mean something different than it does today.[30]

Contrary to the view that an ODR process should produce mandatory decisions, an older paper examining the 'pros and cons' of ODR stressed the potential of online mediation.[31] Mediation, by its essence, does not produce mandatory decisions. Online mediation might be particularly attractive as a cheaper and simplified procedure compared to court litigation. However, an ODR process is no substitute for a face-to-face conversation and limits the ability of the mediator to convey his demeanour, including his charisma, that might be beneficial for the process of dispute resolution.[32]

24 G. Strikaitė, *op. cit.*, 218–226, 221.

25 *Ibid.*

26 Discussed in Chapter 5 of this paper.

27 G. Strikaitė, *op. cit.*, 218–226, 223.

28 N. Ebner, E. E. Greenberg, *op. cit.*, 98.

29 *Ibid.*, 104.

30 *Ibid.*, 113.

31 J. W. Goodman, "The Pros and Cons of Online Dispute Resolution: An Assessment of Cyber-Mediation Websites", 2 *Duke Law & Technology Review* 1-[illegible] 2003.

32 *Ibid.*

4. THE EXISTING AND EMERGING ODR PLATFORMS

Many dispute resolution platforms that promise blockchain and other digital capacities are still in various stages of development. However, there are a number of online dispute resolution systems that are already well established. One example of a functioning ODR system is online arbitration used for internet domain name disputes, governed by the Uniform Domain Name Dispute Resolution Policy (hereinafter: UDRP) of the Internet Corporation for Assigned Names and Numbers.[33] This ODR is designed and administered by The World Intellectual Property Organization.[34] The decisions reached through UDRP are not binding. However, they are effective.[35] Namely, the decisions are not challenged before national courts because it is too costly or cumbersome for the parties to engage in litigation – that is why they opted for the ODR in the first place. In this way, these decisions are similar to how the ODR platforms, such as one of Jur,[36] would like to produce decisions which may not be legally binding, but are nevertheless enforced. Hong Kong International Arbitration Centre administers the Hong Kong Domain Name Dispute Resolution Policy (hereinafter: HKDRP), another example of a functioning ODR. Moreover, the decisions of the HKDRP are legally binding.[37]

Kleros, a legal tech project, has a working online and blockchain dispute resolution platform.[38] There may be doubts about the legal nature of its decisions, but Kleros seems to be a successful cryptocurrency project already, with a 'market value' of its tokens of almost 100 million

33 UDRP, *https://www.icann.org/resources/pages/help/dndr/udrp-en*, last visited 8 September 2021.

34 World Intellectual Property Organization *https://www.wipo.int/amc/en/domains/*, last visited 8 September 2021.

35 T. Schultz, "Private Legal Systems: What Cyberspace Might Teach Legal Theorists", *Yale Journal of Law and Technology*, 10/2007, 151.

36 Jur AG is a Swiss legaltech start-up. The company is developing ODR for small claims and for commercial arbitration, *https://jur.io/*, last visited 10 September 2021.

37 Art. 4 HKDRP Rules *https://www.hkirc.hk/en/our_support/domain_dispute_policies_and_procedures/rules_of_procedures,* last visited 8 September 2021.

38 Information about Kleros, including its 'white papers' explaining the platform, can be found on the website *https://kleros.io/*, last visited 8 September 2021.

USD.[39] The EU's European Innovation Council has awarded Kleros as one of the winners of its Prize on Blockchains for Social Good.[40]

A number of factors have contributed to the development of new ODR platforms that are in the focus of the paper. These factors include the spread of blockchain technology, which allows for a safe and decentralized[41] way of sharing information. Blockchain, as a method of cryptography, can facilitate safe deposition of documents, random choice of arbitrators[42] or of 'jurors'[43] as well as confidential voting. Another factor that facilitates changes in the legal sphere is the coronavirus pandemic. Perceptions have changed so that collaborating fully online is now closer to the experience of most people.

A unifying principle of most of the emerging platforms[44] is that they are developed by profit-oriented companies. Whether their model is based on selling their blockchain token, or if they are a company seeking to earn income from fees of the dispute, these new platforms see a monetary opportunity to offer more efficient administration of dispute resolution.

5. SMALL CLAIMS ODR

The problem of resolving small claims by the judicial system is that it is often too costly and time-consuming in proportion to the value of the dispute. An online platform that would offer a fast and cost-efficient way of resolving small claims could benefit both the consumers and the sellers of a good or a service. In particular, since commerce is increasingly moving online, it makes sense to also offer online dispute resolution for such transactions.

39 According to cryptocurrency tracker CoinMarketCap *https://coinmarketcap.com/currencies/kleros/*, last visited 8 September 2021.

40 European Innovation Council, *https://digital-strategy.ec.europa.eu/en/news/commissions-european-innovation-council-awards-eu5-million-blockchain-solutions-social-innovations*, last visited 8 September 2021.

41 Decentralized meaning that there is no need for a central authority to make sure the information transfer is not corrupted. A legal perspective on decentralization of blockchain is given in O. Rabinovich-Einy, E. Katsch, *op. cit*.

42 Jur White paper Version 3.0.0 March 2021 (hereinafter: Jur White paper 3), *https://jur.io/wp-content/uploads/2021/03/jur-white-paper-v.3.0.0.pdf*, 8 9. 2021.

43 Kleros Yellow paper, 9, *https://kleros.io/yellowpaper.pdf,* last visited 8 September 2021.

44 Such as Jur and Kleros.

5.1. Legislative framework for small claims and ODR in the EU

Within the EU, the legal framework concerning ODR consists of the EU Directive on consumer ADR[45] and the Regulation on Consumer ODR.[46] The consequence of the Regulation on Consumer ODR is the establishment of the ODR platform that should facilitate 'simple, efficient, fast and low-cost out-of-court solution to disputes arising from online transactions.'[47] This ODR platform does not resolve disputes, but links the consumer with an appropriate dispute resolution body or provides a direct contact with the trader for a settlement of the dispute.[48] The EU ODR system is operating on the basis of consent of both parties. Whether the decision produced by the ADR system which the EU ODR referred to is legally binding depends on the rules of the ADR system that handled the dispute as well as other rules applicable to the dispute.

Further, the Regulation for a European Small Claims Procedure (hereinafter: ESCP) concerns resolving small claims of up to 5000 euro arising from multiple EU countries, all in a timely manner and without a need for a mutual recognition of judgements (exequatur).[49] ESCP is an alternative to the procedures existing under the laws of the Member States.[50] To make a claim, there is a 'small claims form' for submitting

45 Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC *OJ L 165, 18.6.2013*, 63–79 (hereinafter: Directive on consumer ADR).

46 Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC *OJ L 165, 18.6.2013*, 1–12 (hereinafter: Regulation on consumer ODR).

47 Recital (8), Regulation on consumer ODR.

48 Art. 5 Regulation on consumer ODR.

49 Regulation (EC) No 861/2007 of the European Parliament and of the Council of 11 July 2007 establishing a European Small Claims Procedure *OJ L 199, 31.7.2007, p. 1–22* (hereinafter: ESCP Regulation); Regulation (EU) 2015/2421 of the European Parliament and of the Council of 16 December 2015 amending Regulation (EC) No 861/2007 establishing a European Small Claims Procedure and Regulation (EC) No 1896/2006 creating a European order for payment procedure *OJ L 341, 24.12.2015,* 1–13.

50 Art. 1 ESCP Regulation.

to the court with jurisdiction. The procedure is mostly written, with a possibility of an oral hearing.[51] If one takes an example of a small dispute in the value of 200 EUR, the court fees to make the claim would be 100 HRK (approximately 13.5 EUR) before a Croatian court,[52] or 81 EUR before a Dutch court.[53] Naturally, the costs are reimbursed if the party is successful. For a digital platform to be successful, it would have to offer lower fees, faster resolution, greater ease of use, or some other factor to make it a viable alternative to the procedure before national courts. The ODR platforms seem to focus their efforts exactly on the (online) ease of use and also by creating novel ways to reach decisions and choose arbitrators.

5.2. How do the ODR platforms operate?

A number of legal tech companies are developing an ODR system for resolving (small) disputes as a business model. Often, those companies hope that their platform will generate income by either the fees from dispute resolution or from the selling of their tokens, a form of cryptocurrency, that are needed to operate a dispute on the platform. A significant difference from the court system is that the platform has to generate more income from administering disputes than it incurred costs, something that a national legal system does not have to pursue strictly.

First, it is essential that parties freely choose to have their dispute resolved by ODR. Some ODR platforms, such as Kleros platform, further require that parties commit to resolve their dispute on the platform by putting the payment on an escrow account that can distribute the sum automatically to the party that has prevailed in the dispute.[54] The concept of escrow is important because it allows the platform to enforce the decision at once. Without the prior deposit of funds, any

51 ESCP portal *https://europa.eu/youreurope/business/dealing-with-customers/solving-disputes/european-small-claims-procedure/index_en.htm*, 8. 9. 2021.

52 Uredba o Tarifi sudskih pristojbi, *NN 53/19 and 92/21.*

53 For a natural person as claimant: *https://e-justice.europa.eu/306/EN/court_fees_concerning_small_claims_procedure?NETHERLANDS&member*=1, last visited 8 September 2021.

54 Kleros Yellow paper, 51, *https://kleros.io/yellowpaper.pdf*, last visited 8 September 2021.

platform has to rely on other ways, including using the court system, to have its decision enforced.[55]

In the case of the platforms of Jur and Kleros, the decision is made by voters who are motivated with the possibility of earning money, often in the form of tokens or cryptocurrency. What they can earn may depend on how fast they voted, have they voted for the winning side or other factors.[56] Even if the resulting decision is not legally binding, the losing party is not expected to start a court procedure because it would be too costly. Escrow with the previously deposited sum could then be used to enforce the decision.

Some platforms try to create their own 'ecosystems'[57] where the parties are forced to use a particular token as a currency to fund their dispute.[58] The downside is the unpracticality of having multiple currencies or cryptocurrencies,[59] one to conduct a transaction and another to initiate a dispute on the platform.

In the case of Jur and Kleros, the platform enables the parties to monitor their contract, even before any dispute. In the case of a dispute, each side can present its arguments (with uploading documents to the blockchain). It is important that those who vote on the platform have made a certain stake with their vote, as this prevents frivolous voting and forces those who decide to vote to the best of their knowledge.[60] The disputes are thus resolved by (mostly random)[61] people who can get a small fee by voting over disputes on the platform.[62] Resolving disputes by votes of a large number of people is related to the concept

55 Jur in its White paper 3 claims that its arbitration procedure will conform with the UNCITRAL Model Law on International Commercial Arbitration and the New York Arbitration Convention.

56 See Whitepapers of Jur and Kleros for the details on how voters are motivated to vote quickly or fairly.

57 For example, the Jur White paper 3 uses the word 'ecosystem' 11 times.

58 Prominent ODR platform developers that have their own tokens are Jur and Kleros.

59 The paper does not insist on a distinction between cryptocurrencies as coins or as tokens.

60 Both Kleros and Jur employ game theory to explain and ensure that voting is efficient.

61 The people voting may need to satisfy certain requirements imposed by the platform.

62 The subsequent observations stem from the workings of Kleros and Jur.

of the wisdom of crowds with interesting legal consequences for the decision-making process.

5.2.1. The wisdom of crowds

The wisdom of crowds[63] describes a phenomenon for reaching a decision by a collective answer. If we imagine a large glass jar filled with marbles, and ask a large number of people to guess how many marbles there are in the jar, their average answer is surprisingly close to the correct number.[64] However, here can be seen the first problem with applying such a concept to law. Law is not a numerical exercise. Reaching a just result does not necessarily mean the average result.[65] On the other hand, the wisdom-of-crowds decision making does not require highly specialized individuals to resolve cases. Furthermore, small claims disputes are mostly simple and often require making a certain numerical decision. Also, by a decision reached with a large number of votes the individual bias should be eliminated.

Many people have moral or legal qualms about making decisions in disputes by a vote of a large number of people or by voting with the monetary incentive. One problem is that wisdom-of-crowds decision making may appear similar to gambling. People are invited to stake tokens on the side of the proposal which they think will prevail. The system, as envisaged by the platforms, encourages fast voting or it penalizes those voters that take a minority view.[66] People might be attracted to such a platform as a form of earning a little money while betting on various proposals, which is absolutely removed from the vision of adjudicating justice as a solemn and honourable profession.

---

63 The concept of the wisdom of crowds was explicitly used by Jur in its 2019 white paper for a platform for small claims. Other platforms, such as that of Kleros, use the term 'crowdsourcing': Jur White paper V.2. *https://jur.io/wp-content/uploads/2019/05/jur-whitepaper-v.2.0.2.pdf*; *https://kleros.io/yellowpaper.pdf* last visited 8 September 2021.

64 A phenomenon observed by Francis Galton in 1906. Galton had asked almost 800 people to guess the weight of an ox. The average result was within 1 percent of the correct weight.

65 Jur proposes that the average result prevails, that between the extremes of two parties, while Kleros has a system where one party with the higher number of votes prevails completely.

66 Jur White paper 3, 9.

Another problem that the ODR platforms might have is their negative perception. People might perceive ODR as an inferior way to settle disputes than through the courts. Moreover, people may be especially reluctant to allow their disputes to be settled by 'the crowd'. If the process is perceived as not fair, it will not matter that it actually produces just results. As the adage goes, it is not enough that the law is just, the law must also be perceived to be just. In an assessment of the legal repercussions of the 'wisdom of the crowds', Robert. J. Condlin states that it may be possible to determine how people decided in the past, or in the present, but that may not indicate a just outcome.[67]

There is also a paradox that profit-driven ODR platforms may entail. Namely, the job of these platforms is to efficiently resolve disputes. On the other hand, it is in their interest to have as many disputes as possible to generate revenue. This is an iteration of the problem known as the principal-agent problem. Simply put, the platforms might be in a conflict of interests: they have an interest in resolving disputes efficiently, but on the other hand they have an interest in there being plenty of disputes. A court-based legal system does not have this problem, because it is not motivated to generate disputes for profit. Financing dispute resolution by the number of decisions made may be equally unwise as paying the police by the number of arrests. On the other hand, weakening the incentive to reach decisions can lead to delays and lack of financial resources.

Yet a different problem which appeared during testing of an ODR platform[68] is related to the nature of blockchain. Namely, as with all software, certain bugs, or unintended mistakes in the software code may emerge. For example, the voting by tokens may not be properly registered. Also, the documents uploaded may be hard to read due to low resolution (or may not be uploaded at all). Finally, the entire blockchain upon which the ODR is based may be in difficulties.[69] The problem with a blockchain platform is that if there is a software bug, it

67 R. Condlin, "Dispute Resolution: Stinky, Repugnant, or Drab", *University of Maryland Legal Studies Research Paper*, 40/2016, 750.

68 Certain problems were noted by the author during testing an ODR platform. See fn. 2.

69 For example, Jur's platform utilizes Vechain blockchain, while the Kleros uses the Ethereum blockchain. A general problem in the blockchain network would create a problem for any dispute that is being resolved on the blockchain.

may be impossible to correct it. Blockchain is immutable, meaning that whatever information is written on it cannot be retroactively changed. Someone might exploit a bug and the system may have no possibility of redress (expressed by the adage 'code is law'). In that way, blockchain dispute resolution may resemble an extremely formalistic judiciary system, such as in the early period of ancient Rome.[70]

The general concept of decisions made by crowds might be unacceptable to some people, or even to most people. However, crowd-based decisions govern democratic societies through elections and referenda.[71] Thus, we should not completely write off the possibility of a large number of voters making decisions in the context of small claims' disputes. The developments in certain aspects of ODR, such as the security of blockchain voting, could be applied to voting in the political process in the future.[72]

6. ONLINE COMMERCIAL ARBITRATION

First, the paper will analyse how costs are defined in traditional commercial arbitration. Then, the paper will comment on the developments regarding ODR commercial arbitration and how these platforms plan to compete with traditional commercial arbitration administrators. The greatest challenge for any ODR platform that would like to offer an online international commercial arbitration is to ensure that such an arbitral award satisfies the conditions of the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Arbitration Convention).[73]

---

70 In the early period of ancient Rome, even a slight departure from the exact form could lead to the nullity of a legal action. See *e.g.* M. Šarac, Z. Lučić, *Rimsko privatno pravo,* Split 2011.

71 Galton in his 1907 paper also connected the wisdom of the crowds (calling it the *vox populi*) to the area of political decision-making. F. Galton, Vox Populi, *Nature*, 75 1907, 450–451 *https://doi.org/10.1038/075450a0* accessed 8 September 2021 last visited 8 September 2021.

72 Estonia has had e-voting (non-blockchain), including for parliamentary elections for more than a decade. *https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/2019/07/29/Estonian+Internet+voting,* last visited 8 September 2021.

73 The Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958.

6.1. The costs of commercial arbitration

The law governing the arbitration is commonly the law of the seat of the arbitration. Besides the law governing the arbitration, the arbitration procedure is regulated by the arbitration rules which the parties can choose or refer to in their agreement.[74] This section is a short overview of costs of arbitration according to rules of commercial arbitration in two prominent arbitration centres. The rules on costs of arbitration can account for a broader or narrower definition of costs. The paper takes the examples of cost rules of two prominent centres of international commercial arbitration: The International Chamber of Commerce (hereinafter: ICC) and Singapore International Arbitration Centre (hereinafter: SIAC).

6.1.1. ICC and SIAC: an overview of rules on costs

The ICC Rules define the costs of arbitration as: the fees and expenses of the arbitrators, the ICC administrative expenses, the fees and expenses of any experts appointed by the arbitral tribunal and the reasonable legal and other costs incurred by the parties for the arbitration.[75] The first two categories (fees and expenses of arbitrators as well as ICC administrative fees) are determined by the administrative body of the ICC, known as the Court.[76] The Court determines these costs in proportion to the value of the dispute, using scales.[77] The Court may fix the fees of arbitrators, 'in exceptional circumstances', differently than would result from the application of the relevant scales with costs.[78] The fees and expenses of experts as well as legal costs incurred by the parties are determined by the arbitral tribunal in the final award, or at any time during the proceedings.[79] The arbitral tribunal, when deciding

74 See e. g. Art. 2 Zakon o Arbitraži, *Narodne novine* 88/01; Article 19, UNCITRAL Model Law on International Commercial Arbitration 1985 with amendments as adopted in 2006.

75 Art. 38 (1) of ICC Arbitration Rules (2021) *https://iccwbo.org/dispute-resolution-services/arbitration/rules-of-arbitration/* last visited 8 September 2021.

76 Art. 1, ICC Arbitration Rules (2021).

77 Scales, or tables with costs, guide the Court in determining these costs: Art. 1 of ICC Arbitration Rules (2021); Appendix III of ICC Arbitration Rules (2021); SIAC Schedule of Fees *https://www.siac.org.sg/fees/siac-schedule-of-fees,* last visited 8 September 2021.

78 Art. 38 (2) ICC Arbitration Rules (2021).

79 Art. 38 (3) and 38 (4) ICC Arbitration Rules (2021).

on costs, can take into account 'such circumstances as it considers relevant, including the extent to which each party has conducted the arbitration in an expeditious and cost-effective manner.'[80] Arbitral tribunal thus has discretion when deciding on costs.

SIAC Rules define 'costs of arbitration' as consisting of the fees and expenses of the arbitral tribunal, administrative costs and costs of experts.[81] Thus, SIAC does not include legal costs of the parties as part of these costs of arbitration. However, the arbitral tribunal has the authority to decide on these costs and how are the costs divided between the parties, including the legal costs.[82]

There are a number of principles used to settle the issue of costs in commercial arbitration. One is the principle of 'costs follow the event', according to which the losing party pays the costs of both parties. Second principle is that each party bears its own costs. Further, tribunals may decide that the costs are to be divided equally between the parties. Finally, a combination of these general principles may be used by the arbitral tribunal when deciding on costs.[83] Legal costs (including lawyers' fees and expenses) make up the bulk (about 80 per cent) of the overall costs of the proceedings. Fees of arbitrators and administrative fees are much lower.[84]

The most important insight is that the legal fees, meaning primarily the fees paid to the lawyers, make up the vast majority of total costs of arbitration. Therefore, any ODR platform that would want to compete on costs must primarily reduce the legal fees, as those have the biggest effect on overall costs for the parties. The challenge is in the fact that the legal fees are the ones that the administrator of arbitration can influence the least. ODR platforms can reduce legal fees perhaps only indirectly, by making the proceedings shorter and thereby reduc-

80 Art. 38 (5) ICC Arbitration Rules (2021).

81 Art. 35 (2) SIAC 2016 Rules *https://siac.org.sg/our-rules/rules/siac-rules-2016#siac_rule35,* last visited 8 September 2021.

82 Art. 35 (1) SIAC 2016 Rules; Art. 37 SIAC 2016 Rules.

83 J. Y. Gotanda, "Awarding Costs and Attorneys' Fees in International Commercial Arbitrations", *Michigan Journal of International Law*, 21 (1)/1999, 18–20.

84 Commission on arbitration and ADR, Decisions on Costs in International Arbitration – ICC Arbitration and ADR Commission Report, *ICC Dispute Resolution Bulletin 2015*, Issue 2 *https://iccwbo.org/publication/decisions-on-costs-in-international-arbitration-icc-arbitration-and-adr-commission-report/,* last visited 8 September 2021.

ing the billable hours of the parties' lawyers. Reducing administration fees would have only a modest impact on overall costs of arbitration, while reducing the arbitrator's fees could decrease the quality and the number of potential arbitrators.

6.2. ODR Commercial Arbitration

Jur ODR platform regarding commercial arbitration[85] intends to use a completely digital procedure in order to reduce costs but also the time of arbitration,[86] which should lower the legal costs. Jur claims that its arbitral awards would satisfy the New York Arbitration Convention as well as the 'minimum requirements of UNCITRAL Model Law on International Commercial Arbitration.'[87] Since Jur claims to require less experience from its arbitrators than the 'industry standard arbitrator providers'[88] one can assume that the fees payable to those arbitrators would be lower than fees paid according to the rules of traditional commercial arbitration centres, such as ICC or SIAC. Jur intends its commercial arbitration for disputes of up to one million USD, the very lower end of disputes in commercial arbitration.[89]

Jur differentiates so-called layers, so that one layer, or a type of ODR, is employed for small claims, and a different one for larger claims appropriate for commercial arbitration. Small claim layer would utilize the wisdom of crowds, while the layer intended for commercial arbitration would use professional arbitrators.[90] One can assume that the reasons for using professional arbitrators instead of crowdsourced decisions are: first, because of greater complexity of the disputes in commercial arbitration, and secondly, to try to achieve the standards required for a legally binding commercial arbitration.

Kleros, the other prominent legal tech and cryptocurrency project, does have a functioning ODR platform,[91] which uses blockchain

85 Jur is developing solutions both for small claims and for commercial arbitration with different characteristics, thus it makes an interesting case study.

86 Jur White paper 3, 8.

87 Jur White paper 3, 7.

88 As shown at *https://hi.jur.io/roster/,* last visited 7 September 2021.

89 Jur White paper 3, 7.

90 Jur White paper 3.

91 Kleros claims to have paid over 350 ether as fee to its jurors, *https://kleros.io/,* last visited 7 September 2021.

and smart contracts.[92] However, its 'procedural provisions', namely – computer code, might not satisfy, *inter alia*, the requirements for enforcement of arbitral awards stipulated by the New York Arbitration Convention.[93] One specific problem is that Kleros arbitration does not allow for hearing the arguments of the parties, but the 'jurors' decide according to the evidence uploaded to the blockchain. Such an arbitral award may not be recognized and enforced under Art. V(1)(b) of the New York Arbitration Convention for not giving the party the opportunity to present its case.[94] There might be further problems to recognition and enforcement of such an award. Any party with an appropriate number of tokens and an opened account could conclude a (smart) contract and subsequently open a dispute. However, such party may not have had capacity to enter into the contractual relationship under the law applicable to the issue of capacity. Consequently, such an arbitral award may have been refused.[95]

If a simple and successful ODR platform in the realm of commercial arbitration emerges, it is likely to be, indeed, on the lower end of the value of disputes.[96] This is because the higher the value of the dispute, the lower the proportion of it is paid towards the costs of arbitration.[97] In other words, costs become relatively less burdensome the higher the value of the dispute. Also, prestige is probably an important factor in disputes of high value, where companies prefer tried-and-tested arbitration centres for administering their valuable disputes.

92 Smart contracts are those that are written in a computer code, not a natural language.

93 Kleros argues otherwise: *https://blog.kleros.io/is-kleros-legally-valid-as-arbitration/,* last visited 8 September 2021.

94 D. Yeoh, Is Online Dispute Resolution the Future of Alternative Dispute Resolution? *http://arbitrationblog.kluwerarbitration.com/2018/03/29/online-dispute-resolution-future-alternative-dispute-resolution/,* last visited 7 September 2021.

95 Art. V(1)(a) of the New York Arbitration Convention.

96 Other ODR platforms include: Resolve Disputes Online, a software that arbitrators or dispute resolution platform may use *https://resolvedisputes.online/;* Moria, which claims to had created ODR systems of eBay and PayPal with over 60 million disputes per year *https://www.fairwayresolution.com/our-services/online-dispute-resolution*; ODR Arbitration, administrator for smaller value disputes: *https://www.arbresolutions.com/odr-services/,* last visited 8 September 2021.

97 We can observe that, *inter alia*, from the scales of ICC or the schedules of costs of SIAC.

However, an efficient platform for smaller claims in commercial arbitration could produce a significant effect. One can imagine that the 'market' for commercial arbitration would be greatly expanded because smaller disputes between commercial parties, that were previously handled by courts, could become viable to be solved by commercial arbitration.[98]

However, it is also possible that digital platforms could increase software related costs even as they reduce legal and other fees. Thus, decreased fees for lawyers would be partially offset with increased fees for software experts. Final threat to the emerging ODR platforms is that the traditional centres for commercial arbitration may themselves integrate digital and other innovations. For example, ICC has put in place an 'Expedited procedure', for disputes of lower value, which radically simplifies the procedure by, *inter alia*, resolving the dispute with only one arbitrator, even if an agreement of the parties stipulated a different number.[99] To take another example, the Arbitration Institute of the Stockholm Chamber of Commerce has developed a so-called SCC Platform, 'a secure digital platform for communication and file sharing between the SCC, the parties and the tribunal.'[100] In this manner, traditional commercial arbitration venues could take the wind out of ODR platforms' sails even before the emerging ODR platforms have truly started.

7. CONCLUSION

ODR platforms for resolving small claims as well as those for commercial arbitration are merely emerging. The concept of ODR can take many shapes and forms by influencing both alternative dispute resolution as well as court litigation. The greatest potential the ODR platforms might have is in the area of small claims, especially from disputes arising from internet transactions. The consumers might be the least hesitant to entrust their disputes to new methods of dispute resolution if their dispute is of small value and has stemmed from an online transaction.

98 An example is Arb Resolutions Services Inc *https://www.arbresolutions.com/odr-services/*, last visited 8 September 2021.

99 Art. 30(1) ICC Arbitration Rules (2021).

100 Stockholm Chamber of Commerce Arbitration Institute *https://sccinstitute.com/case-management/*, last visited 7 September 2021.

Traditional commercial arbitration centres do not have any immediate cause for concern as ODR platforms are still far from challenging them. Blockchain technology has shown potential, but as in many other areas, the practical use cases are still not quite visible. The costs for parties in commercial arbitration can be prohibitively high, especially in lower value disputes. The main task for ODR platforms would be to utilize digital technologies to lower the time it takes to resolve a dispute, as that would have the greatest impact on costs. Despite the obstacles, ODR methods have the potential to reduce the costs and time of resolving disputes.

LIST OF REFERENCES

Condlin R., "Online Dispute Resolution: Stinky, Repugnant, or Drab", *University of Maryland Legal Studies Research Paper* 40/2016.

Ebner N., Greenberg E. E., 'Strengthening Online Dispute Resolution Justice', *Washington University Journal of Law & Policy,* 63, 2020.

Galton F. , Vox Populi, *Nature*, 75 1907, *https://doi.org/10.1038/075450a0, last visited* 8 September 2021.

Goodman J. W., "The Pros and Cons of Online Dispute Resolution: An Assessment of Cyber-Mediation Websites", *Duke Law & Technology Review* 2003, 1–16.

Gotanda J. Y., Awarding Costs and Attorneys' Fees in International Commercial Arbitrations, *Michigan Journal of International Law*, 21 (1)/1999.

Ortolani P., "The impact of blockchain technologies and smart contracts on dispute resolution: arbitration and court litigation at the crossroads", *Uniform Law Review* 24 (2)/2019.

Rabinovich-Einy O., Katsch E., 'Blockchain and the Inevitability of Disputes: The Role for Online Dispute Resolution', *Journal of Dispute Resolution*, 2019.

Schmitz A. J., Rule C., "Online Dispute Resolution for Smart Contracts", *Journal of Dispute Resolution* 103 2019.

Shaanan C. *et al*., Coin-Operated Capitalism, *Columbia Law Review*, 119, 2019.

Sklaroff J., "Smart Contracts and the Cost of Inflexibility", *University of Pennsylvania Law Review*, 166, 2017.

Strikaitė G., "Online dispute resolution: quo vadis, Europe?", *Vilnius University Open Series*, 6/2020.

Šarac M., Lučić Z., *Rimsko privatno pravo,* Split 2011.