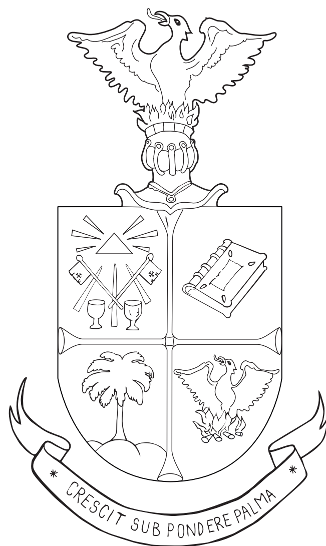
# Karoli Mundus II.

# Karoli Mundus II.

Edited by:
Osztovits, Andras




2022, Budapest

Károli Gáspár University of the Reformed Church in Hungary Faculty of Law

**Tran, Hien[1] - Boóc, Ádám[2]**

# COVID 19 Pandemic – A showcase for Electronic Arbitration to flourish

## Introduction

The year of 2020 witnessed the unprecedented and unpredicted Coronavirus outbreak which put half of the world's population[3] under lockdown. Until May 2021, even when the vaccine came into existence and was put to injection, a number of countries still bore the restrictions at some levels and many activities continued to operate online to mitigate the physical contact among people. However, unlike other fields (trade transactions, administration procedures, etc.), the scepticism on resolving the dispute online persists due to the complication in the management system of the online platform and the statutory legal procedure. With the litigation, these matters are even harder to tackle owing to the country regulations and the possibility to immediately deploy the online operation. On the other hand, the alternative dispute resolution (ADR) mechanisms such as negotiation, mediation, and arbitration *per se* are more flexible and the institutions providing these services have been willing to conduct virtual mediation sessions or arbitral proceedings. The greater adaptation as such has undoubtedly helped the ADR processes work smoother with the least disruption during implementation of social distance methods. For example, during the first wave of the coronavirus pandemic in spring 2020, Hungary applied an extraordinary judicial vacation in respect of civil proceedings[4] according to Section 1 of Governmental Decree 45/2020. (III. 14.) while the arbitration proceeding was not affected (this was confirmed in Information Circular issued by the President of the Permanent Arbitration Court (PAC) on 16th March 2020). The procedural deadlines therefore were still normally running with no interruptions of the proceedings.

---

1 LLM (Budapest), Compliance Associate Outcubator Vietnam (Hanoi Office)

2 University Professor, Head of Department of Civil Law and Roman Law

3 3.9 billion people (Euronews, „*Coronavirus: Half of humanity now on lockdown as 90 countries call for confinement*", 3 April 2020). Available at: https://www.euronews.com/2020/04/02/coronavirus-in-europe-spain-s-death-toll-hits-10-000-after-record-950-new-deaths-in-24-hou (last accessed: 25 May 2021).

4 For the comparative overview of the special measures introduced by the individual states in respect of the coronavirus pandemic see: Ungvári Á. – Hojnyák D.: *Az Európai Unió egyes tagállamainak koronavírus-járványra adott válasza, különös tekintettel a vizsgált* államok által *bevezetett különleges jogrendi szabályozásra*. Miskolci Jogi Szemle 1/2020. 122 – 138.

This article is meant to provide the insights into Electronic Arbitration (E-arbitration) and its rapid growth during the pandemic situation, which has become the lifeline for the contractual parties seeking a solution in the context of country's curfew, travel restrictions, court closures and court delays.

## 1. History

To begin with, a glance into the genesis of Online Dispute Resolution (ODR) and E-arbitration is briefly shown as follows. ODR first appeared in the 1990s following the presence of dispute arising while using Internet[5] in which the Virtual Magistrate (VM)[6] and the CyberTribunal[7] were the most notable projects on E-arbitration. Although both of them ended shortly after, they gave the developers clearer ideas on the application of the online process. After these two "pioneers", other organizations also provided for E-arbitration services, many of which are still operating currently such as Onlinearbitration.net, net-ARBitrationWorks, ADR.eu, etc. Having emerged for more than 20 years ago, and even though ODR has expanded and been involved in the process of resolving the traditional offline disputes, now still it is not fully recognized among the practitioners, the Governments and the businessmen. In 2019, only less than 10% of 195 countries gave access to justice online.[8] The reasons are manifold but mainly come down to the question whether the efficiency of such resolutions, the confidentiality, authenticity of the process is guaranteed without the parties physically meeting. Moreover, the issues of online management platform also raise many concerns. But as we can see, going online have saved the world from being completely shut down creating a once-in-a-lifetime chance for ODR in general and E-arbitration in particular to overcome its inherent challenges, and until just then, we came to the realization and acceptance of

5 in electronic commerce transactions. Only limited number of people used Internet when it appeared in 1969, so few disputes arose. See: Ethan Katsh: ODR: A look at history, in M. Abdel Wahab, E. Katsh, D. Rainey, eds.: Online Dispute Resolution Theory and Practice (Eleven International Publishing, The Hague 2012), p.10.

6 The VM was a pilot project of E-arbitration, sponsored by the National Center for Automated Information Research (NCAIR), first implemented by Villanova University School of Law in 1996, and by Chicago-Kent College of Law at the Illinois Institute of Technology in 1999. (See Mohamed S. Abdel Wahab: "ODR and E-Arbitration, Trends and Challenges" in Wahab, Katsh, Rainey, *op. cit.*, p. 400).

7 supported by the University of Montreal's *Centre de Recherche en Droit Public*. It's rules of procedure mainly based on the international commercial arbitration instruments: UN Commission on International Trade Law ('UNCITRAL') and the International Chamber of Commerce (ICC). The CyberTribunal solved over 100 disputes. (See Wahab, *ibidem* p. 401)

8 Mirèze Philippe: What Does It Take to Bring Justice Online? International Journal of Online Dispute Resolution 2019 (6) 2, p.184.

its numerous interests. Notably, institutions are presently interested in providing such services to adapt to the new realities. The general overview on E-arbitration is shown in the following section.

## 2. Definition & Advantage

It is worth noting that even though ODR's tool and systems are now being employed in any disputes incurred both online and offline, the term "ODR" does not have a unified definition worldwide, neither does online arbitration.

Dating back to the early history of ODR, it was conceived to be the electronic version of traditional ADR (online ADR) in which mediator and arbitrator were given a way to operate remotely through internet. It is said that ODR mimic the traditional mediation and arbitration process using modern technology. However, as an adjudication process, when being conducted online, some elements of traditional arbitration are subject to changes leading to the difference in the procedure itself, such as lack of face-to-face interaction, the involvement of innovative technology which can copy, record and save the information, etc.[9] The proceeding, thus, is not exactly the same as the original one. Many scholars opposed to this first understanding, alleging that it is superficial to construe online arbitration as the duplication of traditional one because *it "would similarly underestimate the transformative power of the technology"*.[10] The invention of internet has been a breakthrough in human civilization and its role in arbitration has brought about the modification in the essence of parties' interaction and the new avenues for them to attain resolutions. It is therefore no longer correct to acknowledge E- arbitration to be the replication of the conventional one.

In modern time, the notion on ODR and electronic arbitration are still in disagreement. Even in the UNCITRAL Technical Notes on ODR, adopted in 2016, the scholars in the field could not agree on a final definition of such method. Regarding arbitration, some authors consider it technology-assisted dispute resolution, while it is perceived by many people as the technology-based dispute resolution schemes.[11] However, in the author's opinion, neither of these approaches alone can fully describe the meaning of online arbitration, instead, both schemes are E-

9 Ethan Katsh, Orna Rabinovich-Einy: Digital Justice_Technology and the Internet of Disputes, Published 2017, Oxford University Press, p.33.

10 Julia Hornle: Cross-Border Internet Dispute Resolution, Cambridge University Press, 2009, at p. 86; See also Farzaneh Badiei: Online Arbitration Definition and Its Distinctive Features, ODR, volume 684 of CEUR Workshop Proceedings, p. 87. CEUR-WS.org, (2010).

11 The idea is applied for the ODR in general. (See Mohamed S. Abdel Wahab: ‚Online Arbitration: Tradition Conceptions and Innovative Trends', in Albert Jan Van den Berg (ed): International Arbitration: The Coming of a New Age?, ICCA Congress Series, Volume 17 (© Kluwer Law International; ICCA & Kluwer Law International 2013), p. 654. See also Wahab, Katsh, D. Rainey, *op. cit.*, references number 3).

arbitration but in the different stages of development. When the traditional process is first moved to online world, ODR is seen by a lot of people as a tool to provide ADR when the direct communication is not feasible (technology-assisted dispute resolution method), which again underrates technology's advanced characteristic and its role. The magnitude of such innovative development in online arbitration and ODR generally was argued by Prof. Katsh* and Rifkin metaphorically to be the "fourth party"[12] in dispute resolution. Rifkin even functioned technology as an ally, collaborator and partner of the arbitrator, in charge of numerous communications between parties and information processing, leading to the implication in many parts of the process.[13] On that ground, technology is an active participant, which assists, enhances, and completes the arbitrator.[14] Therefore, it is equally true that these developments changed the methods by which disputes are being solved, which bring in a new paradigm of dispute resolution.[15] Besides, it should be mentioned that the mere involvement of technology such as using e-mail to communicate while the rest of the procedure are still in physical form would not be enough to call it E-arbitration. According to Professor Wahab*, a procedure qualifies an E-arbitration when the utilization of ICTs is not limited to an information communication tool but it is "*integrated and embedded into the process itself and indispensable for its proper functioning and administration*"[16], meaning that the extensive part or the entire proceeding take place in the virtual world. This would encompass the act of filings, submissions, hearings, and rendering the award online.[17]

On the other hand, the current reality of online arbitration has not yet reached the stage when it is a technology-based mechanism, *where a fully-fledged application*

---

12 *) Ethan Katsh: Professor Emeritus of legal studies, University of Massachusetts Amherst; Director at the National Center for Technology and Dispute Resolution; and 2014-2015 Research Affiliate at Berkman Center for Internet and Society, Harvard University. He is even regarded as the father of online dispute resolution.
Ethan Katsh: Welcome to the Party, The Resolver - The Quarterly Magazine Of The Chartered Institute Of Arbitrators, November 14th, 2014, p. 93. See also E. Katsh, J. Rifkin: Online Dispute Resolution: Resolving Conflicts in Cyberspace (San Francisco: Jossey-Bass, 2001), p. 93.

13 Janet Rifkin: Online Dispute Resolution: Theory and Practice of the Fourth Party; Conflict Resolution Quarterly Journal, Volume 19 2001, Issue 1, p.121.

14 Katsh, *loc. cit.*, p.12.

15 Julia Hörnle: IT Law Unit, CCLS, (Queen Mary, University of London), Online Dispute Resolution-The Emperor's New Clothes? Benefits and Pitfalls of Online Dispute Resolution and its Application to Commercial Arbitration, 17th BILETA Annual Conference 2002, p.1.
*) Mohamed S. Abdel Wahab: Associate Professor of Law, Faculty of Law, Cairo University; Founding Partner and Head of International Arbitration Group, Zulficar & Partners Law Firm; and Vice Chairman, Chartered Institute of Arbitrators (Cairo University)

16 Wahab, Katsh, Rainey, *op. cit.*, p. 400.

17 Ibidem, p. 402.

*of cutting-edge technology is utilized to resolve disputes*.[18] This view alleged that the arbitration procedure can be completely computerized with the application of Artificial Intelligence (AI)[19] playing the role of E-arbitrator supplanting the human nature in decision-making affair. The ongoing question for this approach is whether the arbitration process can be fully automated in which technology absolutely substitutes human arbitrator in the context that this factor has been *pivotal*[20] and *normative*[21]. From the technical point of view, the answer is yes. Technology has already been embodied in many professional services such as journalism or medicine and even in legal sphere. For example, in 2014, an AI system was designed to predict verdicts of the individual justices of the US Supreme Court across 7,700 cases with 70.9% accuracy, compared to leading academics' accuracy rate of 59%.[22] In another project conducted by researchers at UCL, the University of Sheffield and the University of Pennsylvania in October 2016, a machine learning algorithm was developed that predicted verdicts of the European Court of Human Rights with 79% accuracy (461 out of 584 cases).[23] Based on the practical evidences, Ms. Nappert*, Prof. Katsh, and

---

18 Wahab in Albert Jan Van den Berg, *op. cit.,* p. 654. See also Wahab, Katsh, Rainey, eds., *op. cit.*, p. 666.

19 In its communication "Artificial Intelligence for Europe" in April 2018, The European Commission defined AI as the "*systems that display intelligent behaviour by analysing their environment and taking actions – with some degree of autonomy – to achieve specific goals*" (AI for Europe {COM (2018) 237 final}; p.1). AI is said to have the capability to perform cognitive functions and the self-learning ability.

20 Mohamed S. Abdel Wahab, Ethan Katsh (2018): 'Revolutionizing Technologies and the use of Technology in International Arbitration: Innovation, Legitimacy, Prospects And Challenges' in Maud Piers, Christian Aschauer (eds), Arbitration in the Digital Age: The brave new world of Arbitration, Cambridge University Press, p.51.

21 Wahab, *idem*. See also Wahab, Katsh, Rainey, eds., *ibidem*, p. 658.

22 Maud Piers, Christian Aschauer (2018), Conclusion, in Piers, Aschauer (eds), *op. cit.*, p. 291; See also D. M. Katz, M. J. Bommarito II & J. Blackman, Predicting the Behaviour of the Supreme Court of the United States: A General Approach, 2014.

23 *Idem*; See also N. Aletras, et al.: 'Predicting Judicial Decisions of the European Court of Human Rights: A Natural Language Processing Perspective', (2016) 2:e93 Peer J Computer Science; Sophie Nappert presentation in Miami International Arbitration Society's event in February, 2018: The Challenge of Algocracy in Arbitral Decision-Making; Irene Ng (Huang Ying) —Valeria Benedetti del Rio: ‚Chapter 8: When the Tribunal Is an Algorithm: Complexities of Enforcing Orders Determined by a Software under the New York Convention', in Katia Fach Gomez—Ana M. Lopez-Rodriguez (eds), 60 Years of the New York Convention: Key Issues and Future Challenges, (© Kluwer Law International; Kluwer Law International 2019), p.123.

*) Sophie Nappert is an arbitrator in independent practice, based in London. She is dual-qualified as an Advocate of the Bar of Quebec, Canada and as a Solicitor of the Supreme Court of England and Wales, who has been a vocal embracer of the impact of new technologies on arbitration.

Prof. Wahab all supported the idea that in the not-too-distant future, a computer would be able to perform as an arbitrator.

Notwithstanding the strong progress of the technology every day, regulatory laws in general normally fall behind and E-arbitration is not an exception. Almost all existing laws provide that an arbitrator is required to have the necessary impartiality, independence and ability to adjudicate[24] which indicate the human nature. Article 1450 of the French Code of Civil Procedure promulgates that "*Only a natural person having full capacity to exercise his or her rights may act as an arbitrator…*". This provision clearly states that an arbitrator cannot be but a human[25] which can be inferred that French law does not allow an AI to serve as an arbitrator. Approaching from the individual's capacity of civil act in Civil Code applied to human beings only, having full capacity to exercise civil rights and obligations by themselves is the first criterion for being an arbitrator entailed by Vietnamese Arbitration Law 2010. The same idea is adopted by the Arbitration Acts from Peru (Art. 20), Brazil (Art. 10), Ecuador (Art. 19) and Colombia (Art. 7 – domestic arbitration).[26] With a less strict regulation, Hungarian Arbitration Act[27] makes a reference to the nationality, age, professional qualification of the arbitrator when it comes to arbitrators' appointment (paragraphs (1) and (7) of Section 12). Likewise, under the English Arbitration Act 1996, Art. 26 deals with the event of the arbitrator's death. Meaning that these countries' rules undoubtedly admit that an arbitrator is intrinsically a human. More examples of the law implying that arbitrators are human can be found in UNCITRAL Model Law on International Commercial Arbitration 1985, amended in 2006 (Model Law)[28], US Federal Arbitration Act[29] and Swiss Private International Law.[30] The Model Law and the laws of these countries use the pronouns associated to human when regulating on arbitrators. Therefore, it seems to be a universal presumption that the arbitrator or the tribunal is/are human. As a result, while the technology is on the way, the governing law does not yet welcome the service of an E-arbitrator. However, this situation is likely to change in the near future. For instance, the European Parliament made a legislative proposal to the European Commission for a legislative regulation providing civil law rules on the liability of robots and AI in February 2017[31] including creating a specific legal

24 Wahab in Albert Jan Van den Berg*, op. cit.,* p. 654. See also Wahab, Katsh, Rainey, eds., *op. cit.*, p. 658

25 *Ibidem*.

26 José María de la Jara, Daniela Palma, Alejandra Infantes, 'Machine Arbitrator: Are We Ready?', Kluwer Arbitration Blog, May 4 2017, p. 2 (last accessed: 31 May 2021)

27 Act LX of 2017.

28 Article 11

29 Section 50

30 Article 180 (2)

31 Library of Congress, Regulation of Artificial Intelligence: Europe and Central Asia, Available

status for robots in the long run - as electronic persons - who can be held liable for their actions.[32] This is actually a positive and strong step forward from the biggest economic community in the world that made the AI arbitrator and the traditional arbitration process come closer together.

On top of that, one other major problem that the fully-automated arbitration process was/is and probably will be still facing in the future is the distrust from the stakeholders. Despite the superior expertise, fairness (no bias feeling toward one party), rapidity, great enhancement, we did not believe that a computer could decide the outcome of a case as well and as accurately as a human does. It lacks the other intangible values: emotions, empathy and the ability to explain its decision. Hence, parties, especially when a huge amount of money is at stake, still resist to choose this mechanism. Therefore, the author assumes that AI will not be used in the near future, within 5 to 10 years. However, it is highly expected that it will soon be used commonly in the decision-making phase as a tribute to human arbitrators where they can consult with it for supplement in suggesting solutions, or to crosscheck their decision.

To briefly summarize, the writer is of the opinion that electronic arbitration is one form of arbitration and it cannot preserve its validity without the traditional basis with a strict due process following a broad spectrum of principles that must be relied on and met at some levels. Consequently, E-arbitration can be defined as the combination of the traditional procedure and the cutting-edge technology in an equally important way, in which the interaction of human and machine plays a key role. This is also the most intriguing and unique characteristic of it. For now, online arbitration is more applied to dispute resolution in its first period of development, but in the long term it can help to upgrade the offline process to be a more effective method, giving parties flexible options to settle their disputes in the modern world. E-arbitration, therefore, should be construed as an improvement rather than a replacement of traditional arbitration.

Acquiring such special features, E-arbitration offers a great number of advantages over other dispute resolution methods (both online and offline) and over the traditional procedure itself. The first and also the most noticeable pro of this mechanism is the convenience that it gave to the parties of the dispute. With the communication through email or video-conference, etc. the parties can quickly and easily reach the others. Furthermore, the possibility to get access to all the documents anytime, anywhere also contributes to a more efficient and effective procedure, making it not only swifter and more cost-effective (no copy fee and postal charge incurred), but also more environment-friendly (cutback of paper using). In addition to these benefits, video applications have actually made it feasible for the parties to synchronously

at: https://www.loc.gov/law/help/artificial-intelligence/europe-asia.php (last accessed: 22 February 2021).

32 María de la Jara, Palma, Infantes, *loc. cit.,* p.2.

perform their duties (participating in the hearing or witness-examination), even when being in a different part of the world, eliminating schedule-conflict, saving time and cost spent on travel. The substantial/whole online sessions will also facilitate the participation in the proceeding of the parties with special situations such as disability, people with medical problems or from a rural/remote area[33]. This is what Prof. Hörnle*) called the *overcoming distance*[34] advantage, making such processes cheaper, quicker and more accessible.

The second advantage brought by online arbitration relates to the expert aspects of the procedure, since current technological inventions allow the computer to assist the arbitrator in almost all of his/her tasks including the evaluation, explanation, discussion, clarification of the problem; scheduling, assigning, monitoring of hearings; proposing, creating solutions; exchanging, circulating, publishing information; etc.[35] Notably, the high speed of access and processing a large amount of information with greater precision not only helps the arbitrator in fact-finding and situation assessment, but also supplements the adjudicator's decision-making. This indeed shortens the time spent on case study, saves on human labour costs and boosts the efficiency of the procedure.

Armed with these marvellous strengths, E-arbitration actually increases the accessibility to justice. When it becomes a more rapid, less expensive and less complicated-demanding process, the more people with limited resources, who are usually *deterred from seeking dispute resolution due to high costs and geographical distances,*[36] can easily get access to it. This enables the process itself to eradicate any pre-existing imbalance between the parties leading to a fairer arbitral proceeding.[37] Subsequently, it will have positive impacts on the encouragement of E-commerce transactions due to the enhancement of confidence and trust in the online world. All of these are noted as the motivation behind the promotion of ODR scheme by The Organization for Economic Co-operation and Development (OECD) which expects such mechanism to be the "*inexpensive, fair and effective redress.*"[38]

---

33 Philippe, *loc. cit.*, p.187
*) Julia Hörnle, Professor in Internet Law, Queen Mary University of London.

34 Hörnle, *loc. cit.*, p.87.

35 Wahab and Katsh in Piers, Aschauer (eds), *op. cit.*, p.34; See also Katsh, *loc. cit.*, p.12.)

36 Herboczková, Jana. "Certain Aspects Of Online Arbitration." (2008), p.4. Available at: https://www.law.muni.cz/sborniky/dp08/files/pdf/mezinaro/herboczkova.pdf (last accessed: 22 February 2021).

37 Hörnle, *loc. cit.*, p.90

38 Chinthaka Liyanage, Online Arbitration Compared To Offline Arbitration And The Reception Of Online Consumer Arbitration: An Overview Of The Literature, (2010) 22 Sri Lanka Journal of International Law, p.174; See also OECD, Promoting Entrepreneurship and Innovative SMEs in a Global Economy: Towards a More Responsible and Inclusive Globalisation, ADR Online Mechanisms for SME Cross-Border Dispute, 2nd OECD Conference of Ministers Responsible for Small and Medium-Sized Enterprises (SMEs), 2004, at p. 13.

The year of 2020 with the unexpected pandemic has become a showcase for all of these benefits of E-arbitration. The following section will dive into the functioning of online arbitration in the current legal framework, especially its evolution in the current practical world. Electronic Arbitration Agreement (EAA) – the foundation of the process will firstly be presented as follows.

### 3. Electronic Arbitration Agreement.

Playing the role of physical evidence reflecting the true intention of the parties to settle the dispute by arbitration, it comes as no surprise that most international and national instruments on commercial arbitration stipulate that the arbitration agreement shall be in writing. Written requirement was first enshrined in Article II of the Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958 (NYC), in which the term "agreement in writing" "*include an arbitral clause in a contract or an arbitration agreement, signed by the parties or contained in an exchange of letters or telegrams*". Since it is not uncommon that many contracts are now negotiated and closed in virtual world by electronic communication[39], arbitration agreements, included in or attached to the contract as such are also not in paper-based form. An arbitration agreement concluded online by using technology to interact as such can be considered an electronic one. Two opposite views were proposed toward the validity of the EAA. The first idea claimed that only the exclusive list of communication stated under Article II can be deemed in writing[40], meaning that other means of electronic communication such as e-mail or EDI, etc. would not be recognized, leading to the nullity of the arbitration agreement concluded by such means. However, considering the context when the Convention was created[41] as well as the purpose and objective[42] of it ("*contribute to increasing the*

39 The UN Convention on the Use of Electronic Communication in International Contracts (2005) defined electronic communication as "*any communication that the parties make by means of data messages".* And "Data messages" is the *"information generated, sent, received or stored by electronic, magnetic, optical or similar means, including, but not limited to, electronic data interchange, electronic mail, telegram, telex or telecopy."*

40 Prof. Jan van den Berg supported this view. See in Albert Jan van den Berg, The New York Convention: Its Intended Effects, Its Interpretation, Salient Problem Areas, ASA Special Series No. 9 44, (1996), p. 22; See Christian Tautschnig: ‚Chapter I: The Arbitration Agreement and Arbitrability, Legal Challenges and Opportunities for the Next Generation of Online Arbitration', in Christian Klausegger, Peter Klein, et al. (eds), Austrian Yearbook on International Arbitration 2015, Volume 2015 (© Manz'sche Verlags- und Universitätsbuchhandlung; Manz'sche Verlags- und Universitätsbuchhandlung 2015) p.90.

41 11 years before the invention of Internet (1969) and 3 decades before the first Internet Service Provider appeared (1992) (See Wahab, Katsh, Rainey, eds., *op. cit.*, p.22). The legislator did not confront with the online communication and thus could not foresee the future of the Internet age as today when the electronic exchanges have become a new normal.

42 To revert to the purpose and objective of the NYC is an application of analogy from public

*effectiveness of arbitration in the settlement of private law disputes*"[43]), the omission of electronic form in the clarification of "agreement in writing" in Article II (2) was not intentional and therefore the provision should be perceived as the general recommendation of written form leaving the room for the national law to decide based on their observation on what is "in writing". Furthermore, since telegram was the most modern form[44] of communication back then, Prof. Schellekens alleged that NYC "*does take into account the needs of legal practise*" because the inclusion of telegrams in its text was to "*make sure that arbitration could be agreed upon using the most modern means of communication*". It can be inferred that the recognition of telegrams in its text, *de facto* shows the openness of the NYC toward modern technology[45]. This is also the second view, identifying the clause in a non-exclusive manner, which is advocated by many eminent scholars: Prof. Born, Prof. Lew and Prof. Mistelis.[46] Drawing from both logical and legal reasoning, the non-exhaustive explanation of Article II is more plausible and EAA, consequently, should be recognized as in compliance with the requirement of written form.

The broader interpretation of the phrase "in writing" is also supported by UNCITRAL. The amended Model Law in 2006 removed the ambiguities regarding the requirement of written form, with Article 7 providing 2 options for the definition of arbitration agreement. Both of them are open to the electronic form. Notably, in the same year, UNCITRAL issued a Recommendation[47] which suggested the Contracting States should take a liberal approach to interpreting Article II of NYC according to which the requirement of written form for arbitration agreements shall be met by the e-communication. On another note, it is worth stressing that the Guide to Enactment of the UNCITRAL Model Law on Electronic Commerce

---

international law system: Article 31 of The UN Convention on the Law of Treaties, Vienna 1969, UNTS, vol 1155.

43 Section 16 of the Final Act of UN Conference on International Commercial Arbitration.

44 Mohamed S. Abdel Wahab: ‚The Global Information Society and Online Dispute Resolution: A New Dawn for Dispute Resolution', Journal of International Arbitration, (© Kluwer Law International; Kluwer Law International 2004, Volume 21 Issue 2) p.154; See also Gabriela Kubicová: Electronic Form Of Arbitration Agreement, LL.M thesis in International Business Law, Central European University, p.26.

45 M. Schellekens: "Online Arbitration and E-commerce" (2002) 9 Electronic Communication Law Review 113, p.120; See also Morek (R.) (2008), Online Arbitration, Admissibility within the current legal framework, https://www.academia.edu/30536877/Online_Arbitration_Rafal_Morek?email_work_card=view-paper (last accessed: 24 February 2021)

46 See Born, G.: International Commercial Arbitration, Kluwer Law International, Hague, (2009); Julian D. M. Lew—Loukas A. Mistelis: Arbitration Insights: Twenty Years of the Annual Lecture of the School of International Arbitration (2007), p. 130; See also Klausegger, Klein, *et al. (eds)*, *op. cit.*, p. 90

47 The Recommendation regarding the interpretation of Article II, paragraph 2, and Article VII, paragraph 1, of the New York Convention (Recommendation)

(Model Law on E-commerce) suggested that electronic form can be considered as the modern "functional equivalent" of the original one.

To sum up, the international regime tends to stipulate in favour of the EAA. Nonetheless, because most of the instruments are just a soft source without any binding effect on state courts and the interpretation of NYC is still disputed, the recognition of EAA, therefore, much depends on the perspective of national legislation.

The good news is that, over the last few decades, there has been an increasing trend in national laws towards the acceptance of electronic contracts in general and even the abolition of the requirement of written form.[48] On the regional level, it is not an exaggeration to say that the European Union is a proponent of E-agreements. Directive 2000/31/EC obliges the Member States to remove the restrictions on the use of electronic means for the conclusion of contracts.[49] Article 17 specifically addresses the out-of-court dispute settlement, stating that MS' legal system shall not hamper the use of out-of-court schemes for dispute settlement, including appropriate electronic means. That is also the reason why Prof. Schellekens drew a conclusion that "*In Europe little problems are to be expected with regard to [arbitration agreements concluded online and] national legislation on arbitration*".[50] For example Article 1031(1) of the German Code of Civil Procedure (ZPO) leaves room for the acceptance of future developments in communication by including "*other means of telecommunication which provide a record of the agreement*" in the legal form of arbitration agreements. Then paragraph (5) plainly states that electronic form can replace the written form demanded in paragraph (1), section 126a of the Civil Code ("Bürgerliches Gesetzbuch - BGB"). Interestingly enough, under Article 1507 of the French Code of Civil Procedure, the "writing" requirement is even excluded with respect to international arbitration agreements though it is not applied for domestic ones. Although officially left the Union since 2020, it is worth noting that the English Arbitration Act all along gives e-documents the same value as paper-based ones when Section 5(6) defines "writing" as inclusive of "*being recorded by any means*".[51] Notably, in 2014, the England and Wales Court of Appeal (Civil Division) pointed out in the case of *Lombard-Knight v Rainstorm Pictures Inc.*[52] that the communication through email is nowadays *the same as* fax messages and telexes in the early days and it is not rare to find the arbitration agreement in the exchange of emails[53], thus validating the arbitration agreement concluded therein.

48 Wahab, *loc. cit.*, p.155.

49 Art.9 (1).

50 Schellekens, *loc. cit.*, p. 119; See also Morek *loc. cit.*, p. 21.

51 Wahab, Katsh, Rainey, *op. cit.*, p.407.

52 [2014] Bus LR 1196, [2014] 2 Lloyd's Rep 74, [2014] BUS LR 1196, [2014] EWCA Civ 356.

53 Ibid, para.34.

Outside the European area, observing electronic documents as "written" is also commonplace. According to Article 6(a) of US Federal Uniform Arbitration Act, a valid arbitration agreement is the one *contained in a record* which is the *"information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form"*.[54] The more clear-cut view supporting the use of emails can be seen in a case law when the Supreme Court of the State of New York ruled in 2004 in *Rosenfeld v Zerneck*[55] that a contract which is set up by email as the means of communication shall be accepted and validated.[56] Coming to the laws of Asian countries on this matter, the validity of EAAs is sometimes explicitly acknowledged under the law,[57] while in other cases, countries will leave the rule open.[58]

In conclusion, the majority of the global legal framework is becoming more and more open to the requirement of written form of EAAs. Based on the above analysis, a small concern should be raised regarding the validity of such an agreement simply because it was concluded in the virtual world, rather it would be well-accepted as a basis for an arbitration procedure and for serving as evidence of the recognition and enforcement phase. Given the fact that everything has gone online during this unprecedented status of global pandemic, the prosperity of electronic contracts in general and EAAs in particular is highly expected.

## 4. Electronic arbitration proceeding

If the use of technology was optional in the past, the Covid-19 crisis and its consequences have recently made online techniques become indispensable in arbitration proceedings. This section examines the e-proceedings to understand its pertinent concerns, and especially its current working mechanisms adopted and implemented by international institutions.

First of all, it should be noted that despite being an adjudication process, arbitration in general is based on the agreement of the parties. The fundamental principle of party autonomy which is recognized in both international and national legislation allows two parties to a dispute to agree on using electronic means to conduct arbitral proceedings.[59] Therefore, as long as the parties have given their full consent, there

54 Article 1, US Federal Uniform Arbitration Act.

55 4 Misc.3d 193 (2004), 776 N.Y.S.2d 458, 2004 N.Y. Slip Op. 24143.

56 Omar Husain Qouteshat, Kamal Jamal Alawamleh: The enforceability of EAAs before the DIFC Courts and Dubai Courts, Digital Evidence and Electronic Signature Law Review, 14 (2017), p. 56.

57 E.g. Article 19 of Hong Kong Arbitration Ordinance; UAE Federal Law no 6 (2018) on Arbitration, Article 7(2)(a) (More details can be found in Qouteshat, Alawamleh, *idem*).

58 Article 4 (4), 5(5) of Singapore Arbitration Act.

59 E.g. Article 19(1) of the Model Law; Article 182 (1) of Swiss Act on Private International Law 1987.

can be no objection solely to the electronic form of the proceedings. However, being a form of arbitration, a number of principles must be followed when conducting e-proceedings. The most important of which are the requirements of confidentiality (an advantage of arbitration required by the parties' agreement or by the institutions[60]) and due process (vital to the fairness and integrity of the proceeding). To ensure that swiftness and cost-effectiveness achieved by simplifying the procedure do not lead to the violation of the said elements, electronic arbitration must make good use of technology while securing the right of the parties of equal access to all information relating to the proceedings, the right to be heard, to be able to submit evidence and counterclaims in an equal ground, and to be notified about the submission of other parties; safeguarding the security of information flows while communicating through internet due to the fact that online data can easily be *intercepted, monitored, altered, accessed, downloaded or even destroyed*.[61] It is therefore essential that the arbitrator(s) and the rules of international institutions balance these *competing considerations* to create an efficient online arbitration process that ultimately results in an enforceable arbitral award.

It is not an overstatement to say that the Covid-19 situation has a great impact on the arbitral institutions' determination to get rid of any remaining resistance and hesitation about providing online services. Since the parties to the disputes were unwilling or unable to wait for the crisis to subside, the institutions therefore had to take the lead in the arbitration community and take action immediately. In April 2020, together with the International Federation of Commercial Arbitration Institution, 12 arbitral institutes issued a joint statement on *Arbitration and Covid-19* emphasizing that they would work together to resolve pending cases without undue delay and suggesting that the parties and the tribunal should cooperate to find possible solutions, with particular emphasis on the use of digital technologies (including virtual hearings). During the situation as such, numerous international institutions issued a guidance to the parties and the tribunals and even adopted new rules enhancing the role of online techniques in the arbitration procedure.

60 E.g. Article 30.1 of London Court of International Arbitration (LCIA) Arbitration Rules 2014. State Court decisions also supported the confidentiality of the arbitration process: in *Dolling-Baker v. Merrett & Anor* [1 W.L.R. 1205, March 21, 1990]; in *Esso Australia Resources Ltd. v. Plowman* [128 A.L.R. 391, April 7, 1995]; See Klausegger, Klein, *et al. (eds)*, *op. cit.*, p. 101. The 2018 International Arbitration Survey of Queen Mary University of London: The Evolution of International Arbitration revealed that 87% of participants believe that confidentiality in international commercial arbitration is of importance and should rather be an opt-out (p. 3).

61 Wahab in Wahab, Katsh, Rainey, eds., *op. cit.*, p.412.

*4.1. E-communication*

Communication is the backbone of arbitral proceedings ranging from the case-filing to the delivery of the arbitral award, which should normally be done by a courier service or registered mail to ensure that a record of receipt can be presented when needed. The failure to effectively exchange information among parties can create a ground for annulment of the award or for the refusal to recognize and enforce it on the basis that the parties have not been given proper notice of the arbitral proceedings. Since technological communication has developed strongly and rapidly in the last decades, the majority of the arbitration institutions included in their rules the sending of written communications via electronic means such as facsimile, email, etc. provided that a proof of transmission (sending) is generated.[62] In the midst of the lockdown and curfew, the traditional communication is sometimes impossible causing challenges for parties to initiate the arbitration process. Namely, the request could not be submitted in hardcopy due to the parties' wish or, in some cases, the requirements of the institutions.[63] The guidelines and protocols issued by the institutions endorsed the electronic form of any of the parties' submissions. For instance, in the urgent communication and the Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic, ICC *strongly advised that all the communications with the Secretariat of the ICC be conducted by email* including requests for arbitration (Requests) and other related documents. Though both of these are just recommendations as measures in the extraordinary situation, a stronger move was made in October 2020 when ICC unveiled the 2021 ICC Arbitration Rules, entering into force in January 2021. Accordingly, the presumption that the submission must be done by hardcopy[64] was eliminated, instead, no specific form was stipulated and the traditional submission *by delivery against receipt, registered post or courier* now becomes optional when requested by the parties. Likewise, American Arbitration Association-International Center for Dispute Resolution (AAA-ICDR)

62 Article 3 ICC Rules of Arbitration 2017; Article 4 LCIA Arbitration Rules 2014; Article 5 German Arbitration Institute (DIS) Arbitration Rules 2018; Article 2.16 Hong Kong International Arbitration Center (HKIAC) Administered Arbitration Rules; etc. See Erik Schäfer, 'Case Study: The Institutional Perspective' in Pier, Aschauer (eds), *op. cit.*, p.89. See also Article 3, Rules of Procedures of the PAC attached to the Hungarian Chamber of Commerce and Industry (HCCI).

63 E.g. Article 3, Swiss Rules 2012 of Swiss Chambers' Arbitration Institution (SCAI); See also Article 4.3 of Arbitration Rule 2013 of Finland Arbitration Institute (FAI). However, the new 2020 rules taking effects on 1st January 2021 provides that the documents can be submitted in hardcopy or by electronic means provided that a record of the transmission can be presented (Article 4.1); DIS Arbitration Rules 2018, Article 4.2.

64 Article 3 of the 2017 Rules required that documents "*shall be supplied* ***in a number of copies*** *sufficient to provide one copy for sent to each party, plus one for each arbitrator, and one for the Secretariat*"

also expressly asked for the electronic-only submissions of Requests and other initiating documents.[65] Not staying out of this trend, in an effort to response to Covid-19 situation, LCIA also announced that all new Requests should be filed through its online filing system or by email.[66] Notably, an update to LCIA Arbitration Rules has been released, coming into effect on 1st October 2020, demonstrating *the shift to electronic communications as the norm, rather than just an option*[67]. Specifically, Article 4 of the 2020 Rules unequivocally requires the submission of any written communication to be done electronically and the communication in alternative methods are only utilized when permitted by LCIA or by the Arbitral Tribunal. The International Center for Settlement of International Dispute (ICSID) even took a further step to reduce the reliance on paper-filing in their cases by applying the new "*default rules*" since 16th March 2020, requesting electronic-only submission of the documents and any accompanying details.[68] Online filing will be performed by email and secure document sharing platforms (Box)[69] that are available to the parties and Tribunals in ICSID cases. Paper-copies were only required if requested by a party, meanwhile, arbitrators were also encouraged to use electronic filings.

Notwithstanding the acceleration of a more digitalized proceeding, one other extremely useful online technique for arbitration - the electronic file management - is claimed to remain lacking.[70] Online case management can help achieve the security of information exchanged including data confidentiality, integrity (i.e. no unauthorized changes to the documents) and availability (i.e. data are available to authorized persons whenever needed). With this electronic file repository, all the pertaining details of the case will be stored in a systematic order where the parties, arbitrator(s) and administrator can easily view, browse, search, cross-reference, compare, annotate,

65 See https://go.adr.org/covid19-flattening-the-curve.html; (Last accessed: 19 December 2020)

66 See https://www.lcia.org/lcia-services-update-covid-19.aspx (Last accessed: 19 December 2020)

67 Meyerlustenberger Lachenal, Christian Fischer, Urs Boller: The LCIA Updates its Arbitration Rules, Available at: https://www.lexology.com/library/detail.aspx?g=5dc589df-5fe9-41ab-92d1-0f383c90550f&utm_source=Lexology+Daily+Newsfeed&utm_medium=HTML+email+-+Body+-+General+section&utm_campaign=Lexology+subscriber+daily+feed&utm_content=Lexology+Daily+Newsfeed+2020-12-10&utm_term. (Last accessed: 19 December 2020)

68 Available at: https://icsid.worldbank.org/news-and-events/news-releases/icsid-makes-electronic-filing-its-default-procedure?CID=359 (Last accessed: 19 December 2020)

69 The Parties are asked to contact ICSID Secretariat for the creation of a folder on Box and access instructions before sending the Requests via email.

70 Working Group on LegalTech Adoption in International Arbitration, Protocol for Online Case Management in International Arbitration, p.5. Available at: https://protocol.techinarbitration.com/p/1 (Last accessed: 18 June 2021)

retrieve, display or print out the documents.[71] It is handy especially for complex cases with a large number of documents, making it faster when searching for information and also avoiding the need to carry heavy bundles of paper back and forth. Moreover, the authentication of the information sent and received by the parties is better ensured by this tool compared to that of email communication. Though the idea of this tool is not new[72], at present only few providers offer the platform as such. For example, the World Intellectual Property Organization (WIPO) first introduced its Online Case Administration Tools (eADR) in 2005, enabling parties and neutrals (mediators, arbitrators and experts) to share and access case-related information through a single and secure portal. WIPO's eADR system is used in some 30% of WIPO Arbitration and Expedited Arbitration cases.[73] AAA-ICDR also launched a secure online platform where parties and arbitrators were able to file case documents even prior to the pandemic (AAA WebFile). Other notable services that can be mentioned are the digital platform of Arbitration Institute of Stockholm Chamber of Commerce (SCC)[74], and thevdigital case management system of the Russian Arbitration Center at the Russian Institute of Modern Arbitration 2017 (The English version has been instituted in October 2018).[75]

Regarding the deliberations, practice shows that it has already taken place via email, telephone, and even video-conferencing, if needed.[76] For example, Italian Code of Civil Procedure expressly states in Article 837 that *"the award shall be deliberated … in personal conference or in video conference…*". The Swiss Supreme Court also held that arbitrators are free to conduct deliberation by electronic means with certain conditions.

With respect to the delivery of the final award to the parties, the issue of electronic delivery does not pose any complicated challenges toward the procedure since communication by electronic means throughout the process is now welcomed and has become commonplace all over the world.

Broadly speaking, the shown examples indicate that a transition to electronic communication as a norm is now widely adopted by the laws of most countries and the regulations of eminent arbitral institutions. The change in the rules of the

---

71 Hörnle, *loc. cit.*, p.3.

72 This matter has already been analyzed by Prof. Hörnle in 2002, and ICC actually launched its innovative case management product called "NetCase" in 2005 though it is no longer offered.

73 https://www.wipo.int/amc/en/eadr/ (Last accessed: 20 December 2020).

74 From May 2020, SCC provide free Ad hoc Platform during the pandemic

75 Sven Lange, Irina Samodelkina (Busse Disputes), Digital Case Management in International Arbitration, Kluwer Arbitration Blog, August 13, 2019. Available at: http://arbitrationblog.kluwerarbitration.com/2019/08/13/digital-case-management-in-international-arbitration/ (Last accessed: 20 December 2020).

76 Wahab, Katsh (2018) in Piers, Aschauer (eds), *op. cit.*, p.38.

institutes which turn electronic communication from an alternative method to the default one has manifestly demonstrated their strong determination and intention to continue promoting this "green concept". Since the role and advantage of online arbitration have been tested and observed during the time of global crisis, parties now are more open to that method and are increasingly adapting to its use. This fact leads the writer to the conclusion that, even when the pandemic has passed and traditional communication becomes available again, this paradigm shift is likely to remain and flourish in the future. It should be noted that the Working Group on LegalTech Adoption in International Arbitration[77] alleged that the adoption of an electronic case management in an appropriate manner especially in filing and archiving information would further enhance the safety, efficiency and consistence of arbitration procedures. This can give the institutions, service providers, and the state courts plenty intriguing food for thought.

### *4.2. E-hearing*

In this paper, online hearing, virtual hearing or remote hearing and electronic hearing will be used interchangeably, construed as the use of ICTs to simultaneously connect the parties located in different places when conducting arbitral hearings. From a legal point of view, it should be noted that most national laws and the rules of arbitration institutions provide for, in their regulation, the possibility to conduct an online hearing, either in a specific way or in an open way.[78] There is no restriction imposed by the current regulatory framework on conducting E-hearings so it depends on the parties' agreement and the tribunal's decision in individual cases.

One possible situation during the virus outbreak with travel restrictions is when the parties have agreed in advance to hold the hearing offline and insist on doing

77 The Working Group was the collaboration of 6 big law firms including Herbert Smith Freehills, Ashurst, CMS, DLA Piper, Hogan Lovells and Latham & Watkins, the protocol of which issued in the beginning of December 2020 aims at promoting a global comprehensive approach toward online case management.

78 E.g. Article 1071.b(4) of the Dutch Code of Civil Procedure (DCCP) (See also Maxi Scherer (2020), Chapter 4: The Legal Framework of Remote Hearings, in Maxi Scherer, Niuscha Bassiri, Mohamed S. Abdel Wahab (aut[s]; ed[s]), International Arbitration and the COVID-19 Revolution, Kluwer Law International, p.73); Both 2020 and 2014 LCIA's Arbitration Rules explicitly allow the hearing to be held virtually *by conference call, video conference or using other communications technology…* ;See also Article 25.1 of the Arbitration Rules of Vietnam International Arbitration Center; SIAC Rules 2015 does not directly address the remote hearing but it provides the possibility for the Tribunal to hold meetings with parties in any other means. (See Michael Ostrove, et.al., A Review Of Key Developments In Response To Covid-19-Online Arbitration Hearings, DLA Piper, September 2020, p.5. (DLA's second study on virtual hearing)).

so, while the tribunal want to order an online hearing to ensure the efficiency and expedition of the proceedings.[79] It is submitted that in this case, party autonomy prevails and the tribunal should support the preference for no online hearing rather than prioritizing swiftness.[80] On the other hand, more contentious issues arise where there is a lack of agreement between the parties, where one party requests an online hearing and the other party opposes it, alleging that the virtual hearing does not satisfy the requirement of a hearing. This assumption may stem from the wording of the regulation. For example, Section 1047 of ZPO states that the Tribunal shall decide to hold an *oral hearing* subject to the agreement of the parties. Or Section 24 of the Swedish Arbitration Act provides that "*the arbitrators shall afford the parties, to the extent necessary, an opportunity to present their respective cases in writing or orally".* However, a virtual hearing can fulfil the most important factors that a traditional hearing has. During an online hearing, presentations of the cases are also made orally and all the communication including legal arguments, evidence introductions, witness testimonies are performed simultaneously, with the mere difference of the involvement of technology to transfer the messages to the other parties through audio or video.[81] Furthermore, the objecting party may invoke the right to a hearing and to be treated equally to argue that the online hearing would be viable only if all parties agree on it. Yet, would the right to a hearing be understood as a physical hearing? The answer could highly be negative. In September 2020, a study on the subject "*Does a Right to a Physical Hearing Exist in International Arbitration*"[82] was formally launched by Co-editors Giacomo Rojas Elgueta, James Hosking and Yasmine Lahlou, in collaboration with the International Council for Commercial Arbitration (ICCA). The recently released report from Italy[83] and Australia[84] manifestly show that there is no right to a physical hearing in arbitration under their *lex-arbitri* jurisdiction. In the United States, neither the Federal Arbitration Act (FAA) nor the state laws on international arbitration provide for the right to a physical hearing. The same approach was clarified by ICC recently because the wording of its 2017 Rules caused a debate on the need of a physical hearing. Namely, Article 25 (2) regulated that "…*the arbitral tribunal shall hear the parties together in person if any of them so requests or…*". The phrase "*in person*" was used by the opposing party to call for a

79 This duty is imposed on the tribunal in the rules of many institutions. For example: Article 22.1, ICC Rules 2021; Article 14.1 (ii), LCIA Rules 2020; Article 19.1 SIAC Rules 2016; Article 20.2, AAA-ICDR Rules 2014, etc.

80 Scherer (2020) in Scherer, Bassiri, Wahab (aut[s]; ed[s]), *op. cit.*, p.77

81 *Ibidem*, p.75.

82 For more reports from the project which have been updated, see https://www.arbitration-icca.org/right-to-a-physical-hearing-international-arbitration (Last accessed: 28 February 2021).

83 *Ibidem*, Italy report

84 *Ibidem*, Australia report.

physical hearing. ICC Guidance Note confirmed in Section III, paragraph 23 that the language of the provision meant to provide the parties with the opportunities for "*a live, adversarial exchange*" and did not mean to exclude hearings held by virtual means.[85] To avoid any remaining doubt, ICC 2021 Rules on hearings provide that they *will be conducted by physical attendance or remotely by videoconference, telephone or other appropriate means of communication*.[86] Hence, it can be concluded that holding an E-hearing does not violate the right of the parties to be heard.

The remaining question is: can the tribunal order a virtual hearing if the parties have conflicting views on it? At both the international and national levels, without a choice of the parties, an arbitral tribunal has the power to conduct an arbitration in a manner that it considers appropriate.[87] Under the rules of the institutions, a tribunal is typically conferred with wider discretion to ensure the integrity and efficiency of the proceedings without undue delay.[88] Notably, two recent state court decisions have plainly affirmed the courts' jurisdiction to conduct a virtual hearing even if one party opposes it. The first one is the decision of the Austrian Supreme Court (*Oberster Gerichtshof,* "OGH") made on 23th July 2020. The court rejected the respondent's objection to the virtual hearing ordered by the arbitral tribunal holding that the court retained discretion to conduct the hearing and that the virtual hearing was commonplace which satisfied the right stated in Article 6 of ECHR.[89] The court ruled that the provision not only guaranteed the right to be heard but also effective access to justice in order to enforce or defend rights. This decision established the Austrian court's view that due process can undoubtedly be achieved during a virtual hearing, and this case was the first national supreme court decision worldwide to address this issue.[90] The second remarkable case is the one decided by the district court in Illinois, U.S in the case of *Legaspy v. Fin. Indus. Regulatory Auth., Inc*[91], where the respondent opposed to the virtual hearing decided by the

85 ICC Guidance Note, p.5.

86 Article 26.1, ICC 2021 Rules.

87 Article 19.2 Model Law, Article 182.2 of Swiss Private International Law

88 See e.g.: Article 22.2 of ICC 2021 Rules; Article 25.1 of Arbitration Rule of Vietnam International Arbitration Center; Article 19.1 SIAC Rules; Article 21.1 of Australian Centre for International Commercial Arbitration (ACICA) 2016 Rules; Article 19.2 of LCIA Rules 2020 even encourages the tribunal to make the best of technology by giving them the "*fullest authority*" to command a remote or virtual hearing, or a combined form.

89 See Fox Williams LLP - Peter Ashford, Ben Giaretta: Zoom is the new normal! Available at: https://www.foxwilliams.com/2020/10/29/zoom-is-the-new-normal/ (Last accessed: 24 December 2020).

90 Maxi Scherer, et. al.: 'In a 'First' Worldwide, Austrian Supreme Court Confirms Arbitral Tribunal's Power to Hold Remote Hearings Over One Party's Objection and Rejects Due Process Concerns', Kluwer Arbitration Blog, October 24 2020, (last accessed 3 March 2021).

91 No. 20 C 4700, 2020 WL 4696818 (N.D. Ill. Aug. 13, 2020).

court and sought for preliminary injunction from the court. The court overruled its submission and recognized that the court was entitled to decide on procedural matters of the process. Not only in this case, the U.S. Courts have generally held that the arbitrators have broad discretion to decide on the hearing, including the necessity and the form of the hearing, unless otherwise agreed by the parties.[92] In fact, a study showed that 71% of the courts and tribunals questioned upheld procedural fairness during remote hearings.[93] In Hungary, nonetheless, even though some of the hearings were already held online in the spring of 2020, the ongoing valid consistent customary law of the HCCI requires that all of the arbitrators and parties should have given a prior voluntary consent to E-hearings. According to the evolving practice, it is useful to ask the parties already in the procedural order, whether they agree to a potential online hearing in the future.

In addition to the relevant legal framework, some practical issues should also be highlighted. The first issue is the choice of a suitable platform for an E-hearing to be based, which plays a vital role in achieving a safe and efficient outcome. Institutions can provide the parties with the service developed by themselves (SIAC and Maxwell Chamber worked together to create a virtual ADR service) or a wide range of platforms offered by neutral suppliers can also be used. The second issue related to virtual hearings that has appeared so far is the reliance and effectiveness of the witness testimonies. It is alleged that the documents used by the witness are not checked (e.g. Austrian case mentioned above). A spectrum of solutions has been raised to eliminate this issue. For instance, in the Austrian case mentioned above, the OGH suggested that the witness was required to look directly to the camera, to use the wide angle camera showing the entire room and/or keep their hands visible at all times to avoid being coached by the counsel standing in front of the screen. Another possible solution to consider is to send a representative of the parties or a member of the tribunal to the place of the investigation. This can hardly be done under the travel restrictions at the current time but in future cases the parties and the tribunal can take it into consideration since it would still be more economical than having a full team of lawyers come to the venue of the physical hearing. Moreover, it may be a reasonable option to use a neutral facility provided by a trusted third party such as an arbitration institution hearing room, a court room, a law firm or a notary firm.[94] The third issue identified is timing. Since the parties might be in different locations, even on different continents of the world, a difference in time zone may

92 See *supra* note 87, U.S Report, p. 3-4.

93 Jean-Pierre Douglas-Henry, Ben Sanderson: Virtual hearings: Empirical Evidence from our global experience, DLA Piper, 13 May 2020, p.10 (DLA Piper's first study on virtual hearing).

94 Hörnle, *loc. cit.*, p.4.

cause some problems such as the time of the hearing may be too early or too late[95]. This matter entails the tribunal's close attention when establishing a remote hearing to ensure fairness to the parties. In short, E-hearings have some problems but they are not insurmountable. In each case, it requires the cooperation of the parties and the court to come up with the most appropriate method.

## 5. Electronic Arbitral Award

The electronic arbitral award presented in this section is the one that is rendered online and digitally signed. In practice, there is no doubt that an enforceable award is the final and highest goal of the parties when choosing arbitration to solve their dispute. When the losing party does not voluntarily perform its obligations, recourse to state court for the recognition and enforcement of the arbitral award is a must on the understanding that some requirements should be met. The first matter that needs to be considered is the form of the award which is stipulated in the law of the seat of arbitration. A few states leave this matter for the parties to decide,[96] while the laws of most countries require that the award shall be in writing and the signature of the arbitrator(s) must be included[97]. However, since EAA is now widely used and is alleged to be a functional equivalent to the paper-based one, the same liberal approach should apply to arbitral awards and no concerns shall arise with respect to its electronic form. The second condition that has already been mentioned is the signatures of the arbitrators affixed to the award. In the international context, this requirement is enshrined in Article IV (a) of NYC which calls for the *duly authenticated originals or duly certified copies* of the award when a party applies for recognition and enforcement. Though physical signature of the award is not explicitly required, the paper-based form with the signature of the arbitrator(s) is the global norm. The signature of the arbitrators not only meets the requirement of being "original" but also the requirement of being "duly authenticated". It serves as the endorsement of the integrity of the content of the text at the time of signature[98] meaning that the

95 In the Austrian case mentioned above, the respondent claimed that they suffered a significant disadvantage because the hearing took place at an early hour in their time zone.

96 E.g. Section 52(1) of the English Arbitration Act 1996; Article 189(1), Swiss Private International Law Act.

97 See for instance Article 31 (1) of Canadian Commercial Arbitration Act; Article 1057 (2) of DCCP; Article 1054 (2) of ZPO; Art. 823 (incorporated into Title VIII of Book IV of the Italian Code of Civil Procedure by the Italian Arbitration Law (1994)); Art. 43(1) of the Egyptian Arbitration Act (1994); and Art. 31(1) of the Russian Arbitration Act (1993). See also Wahab, *loc. cit.*, p.164. This is also stated in Article 31(1) of Model Law and Article 34(2) of UNCITRAL Arbitration Rules.

98 Schäfer (2020) in Piers, Aschauer (eds), *op. cit.*, p.154.

information stated therein remains complete and unaltered[99]. It also guarantees the authenticity of the award by indicating the identity of the signatory, which is the arbitrator.[100] The question here is whether the electronic arbitral award could fully substitute a physical signature in achieving the goal and purpose that signature was required. The concept of electronic signature is defined in Article 3(10) of the European Union Regulation on electronic identification and trust services for electronic transactions in the internal market[101](e-IDAS) that electronic signature "*means data in electronic form which is attached to or logically associated with other data in electronic form and which is used by the signatory to sign*". Additionally, Article 25.2 manifestly recognizes that "*a qualified electronic signature shall have the equivalent legal effect of a handwritten signature*". Based on these provisions, an electronic signature can verify the authorship of the arbitrators in the same way as a physical one, confirming that the arbitrator decided on the matter specified therein and thus fulfilling the purpose of authentication. In Asia, an electronic signature is also accepted by many countries to have the same legal status as a traditional one (if certain requirements are met). For example, Article 6 of the Hong Kong Electronic Transaction Ordinance provides that an electronic signature satisfies the requirement of a person's signature on a document. [102] As per the requirement of being "original", it should be mentioned that according to Article 8 of the Model Law on E-Commerce, a requirement to present information in its original form *can be met by an electronic data message* if a reliable assurance is provided and it is capable of being displayed to the concerned person. It is submitted that an electronic certificate added by a computer system to the electronic award can be regarded as if it was a stamp certifying the originality of the e-award.[103] Consequently, a digital signature can ensure the originality of an electronic award. In conclusion, an electronic award with the arbitrators' electronic signatures can definitely certify that the content is original and authenticated, thus, fulfilling the requirements of Article IV of NYC. Notwithstanding this, once again, the acknowledgement of the equivalent effect of a digitally signed E-award depends on the jurisdiction where the arbitration is seated and the law of the country of enforcement. In fact, many countries have gone a long way in recognizing digitally signed electronic arbitral awards. For example, the U.S. Federal Arbitration Act provides that "*an arbitrator shall make a record of an award. The record must be signed or*

99 Article 8.3(a) of UNCITRAL Model Law on E-Commerce 1996.

100 Morek, *loc. cit.*, p. 37.

101 Regulation 910/2014/EU of The European Parliament and of The Council, repealing Directive 1999/93/EC.

102 Other examples: Chapter III.5, Indian Technology Act 2000. See also Vietnamese Law on Electronic Transaction 2005, Article 24; Law of The Republic of Indonesia Concerning Electronic Information and Transactions, Article 11; etc.

103 Wahab in Wahab, Katsh, Rainey, eds., *op. cit.*, p. 427.

*otherwise authenticated…*"[104], which affirms the possibility for the use of e-signature. DCCP also states under Article 1072b(3) that the award can be made in electronic form providing that an electronic signature, complying with the conditions of the Civil Code, is included. In addition, ZPO stipulates that the written form can be replaced by the electronic form with a qualified electronic signature. Though it is not explicitly stipulated, this conclusion can be inferred from the provisions of law (Section 1055, Section 130b).[105] Besides, since English law leaves the matter for the parties to decide, the LCIA Rules 2020 also provides in Article 26.2 that "*any award may be signed electronically*". It can be seen that almost all the provisions states that only qualified electronic signature satisfies the conditions stated above. The arbitrator, as a result, must be cautious when using such technology to avoid being denied the validity of the electronic signature.[106] By and large, the use of electronic arbitral awards is expected to become commonplace in the near future, since many jurisdictions have joined the trend to legalize the validity of electronic documents and electronic signatures.

## 6. Conclusion

Discussed throughout the present article, the idea of combining the cutting-edge technology and the dispute settlement methods in general and arbitration in particular was raised a long time ago, but it was not until the sudden appearance of the Covid-19 pandemic that the need for such a mechanism was best demonstrated. During the global crisis, electronic mechanisms have come to our life in a natural way, demonstrating the great benefits that they could bring to the traditional procedures regardless of our wishes and have actually salvaged the operation of the dispute resolution industry. Drawing from practice, the faster the adaptation, the less interruption and the more likely it is that institutions can provide their services as usual without any delay. In addition to the establishment and consolidation of its position, the greatest success that E-arbitration has achieved in the less-than-one-year period is the recognition of the arbitration community and the adoption in arbitration institutions' working system. As discussed above, a number of institutions provided guidelines or protocols regarding online proceedings and even revised their rules officially acknowledging e-communication, virtual hearing, etc. On the

104 Section 19.1 of U.S. Federal Arbitration Act, intended to be compatible with the Electronic Signatures in Global and National Commerce Act, 15 U.S.C.A. § 7001 (Wahab, *ibidem*, p. 426; See also Reinmar Wolff (2018), 'E-Arbitration Agreements and E-Awards: Arbitration Agreements Concluded in an Electronic Environment and Digital Arbitral Awards' in Piers, Aschauer (eds), *op. cit.*, p.169.)

105 *Ibidem,* p.158

106 E.g. Article 32 of e-IDAS regulates the requirements for the validation of qualified electronic signatures.

other hand, this is also a great opportunity for institutions, parties and arbitrators to explore, examine and be accustomed to E-proceedings. By sharing information and finding solutions, all the stakeholders have gained experience, confirming the possibility of conducting online arbitration procedures. Moreover, it encourages them to continue taking advantage of the power of technology to manage and promote the efficiency of arbitration.

Since the interest in utilizing ICTs in arbitration proceedings is increasing, the digitalization of the method will undoubtedly continue. In fact, when asked, almost all the eminent institutions noted that the arbitration practice is *not likely to return to pre-pandemic state* but the issued policies and procedures will *remain in place*.[107] In Hungary, the pandemic situation has already contributed a lot to the development of the application of several online techniques and tools in Hungarian arbitration, and the President of the PAC has also underlined that during the state of emergency, the preparatory rehearsals, and the online case management conferences, the experiences are *generally good*, therefore he suggested that these measures should be maintained for the sake of *the faster conduct of procedures*. This leads to the conclusion that electronic arbitration is expected to flourish and become a new normal in both wholly online and hybrid mechanisms everywhere.

107 Patricia Louise Shaughnessy (2020), Chapter 2: Initiating and Administering Arbitration Remotely, in Scherer, Bassiri, Wahab, *op. cit.*, p.46.