KLEROS FELLOWSHIP OF JUSTICE PROGRAM: DECENTRALIZED JUSTICE IN INTERNATIONAL ARBITRATION

Diana Itzel Santana Galindo

Kleros Fellowship of Justice: Third Generation.
2020.

Abstract

New, challenging issues have arisen from the present technological-era within e-commerce disputes, specifically regarding establishing localization of the jurisdictions involved and laws. Contemporary trade involves a large amount of daily purchase-sales that brings a bigger flow of data and therefore, more difficulty in establishing locality. Within Kleros, the attempt to localize the issues mentioned above can generate greater disadvantages for the speed that e-commerce requires.
Hence, this research will analyze the advantages and disadvantages of delocalizing Kleros Justice as an alternative in the context of online international arbitration, in order to protect the effectiveness and validity of an arbitration agreement.

1. Introduction

International arbitration has been considered for a while to be the preferable method of resolving multinational commercial disputes. In recent times, with the emergence of new technologies such as blockchain, the international arbitration community has started to encounter new types of electronic commercial disputes. As a result, some courts and arbitration institutions are actively exploring these new technologies to create dispute resolution mechanisms suitable for them. Compared with traditional dispute resolution mechanisms, blockchain arbitration, such as Kleros Justice, has been demonstrated to be a pioneer in addressing these emerging types of disputes.[1]

Blockchain technology encompasses two essential characteristics: a decentralized record of transactions, and the automatic enforcement of decisions from peer to peer. Thus, as a standalone tool it has been considered to be able to streamline existing processes in managing arbitration proceedings.[2]

A blockchain arbitration can start through an arbitration clause translated into a block of code and stored on the blockchain. However, the first question that arises is whether such a coded arbitration agreement meets the requirements established under the Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958 the (the New York Convention).[3]

A key feature of blockchain arbitration is having a coded arbitration agreement and a coded arbitral award. This research aims to examine how to increase the effectiveness and validity of such coded entities. In this regard, it is important to analyze the relevance of the seat of arbitration, as well as the place where the award is sought to be enforced. There is case law in which a coded arbitration agreement and a coded arbitral award were not deemed to be valid as they did not follow national laws' formal requirements. Further, there have been coded arbitral awards that could not be enforced as they did not allow for judicial review in cases where there was evident fraud, corruption or a fundamental breach of natural justice. Blockchain-based dispute resolution platforms, therefore, could be accused of being created to exclude the participation of arbitrators, and further, to attempt to avoid the participation of national courts.

To counter these accusations, blockchain arbitration should look at the international arbitration process' nature and find ways to enable the same outcome in a blockchain-based platform. In other words, blockchain arbitration should follow the minimum standards established under international and national arbitration laws to procure a fair process.

At least initially, national legislatures are not likely to enact entirely new statutory schemes to adapt to new technologies such as blockchain technology. Instead, national courts will conversely want to adapt these new technologies to traditional

---

[1] The Kleros "arbitration" system is mainly designed to address smart contract-related disputes. In this sense, Kleros' particular dispute resolution system is not aligned with traditional international arbitration.

[2] M. Tang and J. Liu, 'Annual Review on International Trade Dispute Resolution in China', *Commercial Dispute Resolution in China: An Annual Review and Preview*, Kluwer Law International, 2019, pp. 223 - 258.

[3] N. Jevremović, 'In Review: Blockchain Technology and Arbitration', Kluwer Arbitration Blog, 2019.

legal rules. Kleros is a new platform with the opportunity to shape the direction of blockchain arbitration by effectively combining international arbitration with blockchain technology. The present research paper thus seeks to propose a realistic approach that combines the decentralized Kleros Justice with the existing territorial international arbitration legal framework.

2. The importance of the seat of arbitration in Kleros justice

In international arbitration, the term "seat of arbitration" refers to the legal locus where the arbitration is conducted. This location will mainly determine: a) the applicable law for the arbitration proceedings, also known as "lex arbitri"; b) the gap-filling role the local competent authority will have within the proceedings; c) the arbitrability of the subject matter of the dispute; and d) if an award is invalid according to the lex arbitri.[4]
The arbitration proceedings are therefore governed by the law of the seat of arbitration as recognized in international conventions and national arbitration laws. The 1923 Geneva Protocol states that: "the arbitral procedure, including the constitution of the arbitral tribunal, shall be governed by the will of the parties and by the law of the country in whose territory the arbitration takes place". The seat of arbitration thus, underpins the legal framework of the arbitral process.[5]
In this context, therefore, it is important to consider that some jurisdictions are not blockchain arbitration-friendly. Several countries do not have the required infrastructure and legal framework to regulate blockchain arbitration platforms. Further, some states prioritize their own mandatory national laws over the party autonomy principle, allowing state authorities to intervene extensively in an arbitration process.
Notwithstanding this, there are other jurisdictions that are more permissive and pro-arbitration, allowing the relevant parties a high degree of procedural autonomy. Such open jurisdictions can help facilitate smart contract disputes that involve codified awards or electronic awards, as well as other particularities important to consider to protect an arbitration process within a jurisdiction.[6]

---

[4] N. Blackaby *et al.*, 'Redfern and Hunter on International Arbitration', Volume 82, Issue 4, Oxford: Oxford University Press, *Arbitration: The International Journal of Arbitration, Mediation and Dispute Management*, 6th edn., 2016, pp. 475-476.
[5] A. Meissner, 'Chapter III: The Award and the Courts, Enforcement of a CIETAC Arbitral Award with Vienna as Place of Oral Hearing', in C. Klausegger *et al., Austrian Yearbook on International Arbitration*, 2020, pp. 341 - 353.
[6] I. Shehata, 'Arbitration of Smart Contracts Part 3 – Issues to Consider When Choosing Arbitration to Resolve Smart Contracts Disputes', Kluwer Arbitration Blog, 2018.

2.1 The difference between the delocalization characteristic in blockchain technology and the transnational theory in international arbitration

When the Geneva Protocol was published, it caused considerable discontent due to its harsh territorial approach. As a response, the International Chamber of Commerce (the ICC) drafted the 1953 Report and Preliminary Draft Convention, which eventually provided the basis for the New York Convention.[7] The ICC proposed detaching international arbitral proceedings entirely from the national law of the arbitral seat, and leaving the arbitral procedure to be agreed entirely by the parties.[8]
The ICC drafters' proposal for an "a-national" arbitration,[9] was thereafter itself subject to considerable criticism. Thus, the final negotiations of the New York Convention resulted in the formula requiring recognition of a foreign award only "to the extent that the parties' agreement was lawful under the law applicable to the arbitration".[10]
In this context, the outdated theory of transnational or a-national arbitration has been retaken and boosted by the popularization of new electronic means of transactions.[11]
Blockchain technology is popularly known for its inherent decentralization platform, as stated above, which enables the development of smart contracts without the necessity of a trusted institutional third party. The decentralized concept within new blockchain technologies, however, does not affect the localization and the requirement of having a seat of arbitration for valid arbitration proceedings. This is especially pertinent in the enforcement of arbitral awards, in which the dominant opinion of commentators is that the territoriality principle in the New York Convention is still predominant.
Contemporary international arbitration has, nevertheless, been more notably independent from state intervention due to far-reaching limitations of judicial review provided for by the New York Convention. Some national arbitration laws have invested arbitrators and institutional arbitration centers with broad discretionary powers in regard to the determination of procedural rules.[12] Consequently, a number of rival venues have been created, accompanied by a diversity of procedural rules adopted by these different arbitral centers. Thus, the parties have the opportunity to choose a specific arbitration center, suitable to their preferences with regard to the procedural

---

[7] Briner, Hamilton, 'The History and General Purpose of the Convention: The Creation of An International Standard to Ensure the Effectiveness of Arbitration Agreements and Foreign Arbitral Awards', in E. Gaillard, '*Enforcement of Arbitration Agreements and International Arbitral Awards: The New York Convention in Practice 3, 5*', di Pietro (eds.), 2008.
[8] International Chambers of Commerce, *Report and Preliminary Draft Convention Adopted by the Committee on International Commercial Arbitration*, at its Meeting of 13 March 1953, reprinted in 9(1) ICC Ct. Bull. 32, 32, 1998.
[9] *Report of the Committee on the Enforcement of International Arbitral Awards,* U.N. Doc. E/2704, 43 et seq., 1955.
[10] *Record of the Seventeenth Meeting of the United Nations Conference on International Commercial Arbitration*, U.N. Doc. E/CONF.26/SR.17, 4., 1958.
[11] R. Morek, '*The Regulatory Framework for Dispute Resolution: A Critical View*', 38 U. Tol. L. Rev, Hein Online, 2006.
[12] J. Jemielniak, 'Comparative Analysis as an Autonomization Strategy in International Commercial Arbitration', Volume 31, Issue 1, *International Journal for the Semiotics of Law*, 2018, pp. 155-173.

standards offered by a particular institution.[13]
The foundation of modern international arbitration is the importance placed on the principle of party autonomy.[14] This fundamental role of the agreement between parties in constituting a tailored arbitration cannot be overlooked.
The arbitration agreement functions as a specialized kind of forum-selection clause, by which the parties consent to authorize the national court of the seat to control the arbitration process according to its laws.[15] In doing so, the application of the understanding of party autonomy principle to arbitration emphasizes the importance of the protection of the seat. Parties in disputes involving blockchain technology are therefore encouraged to select the seat of arbitration and arbitrator most suitable to a blockchain-related arbitration.

3. Enforcement of Kleros arbitration awards

Having established the importance of the seat of arbitration for Kleros, this chapter will analyze key aspects of blockchain arbitration in order to seek for an enforceable coded-award, as well as discuss the challenges presented for coded agreements in the existing international arbitration legal framework.
One of the principal features of international arbitration remains the global enforceability of arbitral awards under the New York Convention. Nonetheless, when the Convention was drafted, no-one foresaw coded agreements. In respect to Smart Contracts, the requirements that i) an arbitration agreement must be made in writing and, ii) the original arbitration agreement must be submitted, are problematic. While some argue that Article II of the New York Convention[16] should be interpreted in such a way as to include electronic agreements, many disagree.[17]
The idea of making amendments was discussed, however, given the number of signatories and their interests, most participants agreed that such a project could be problematic, and could potentially even threaten the hard-fought achievement of the almost universal recognition and enforceability of arbitral awards under the

[13] M. Kaczmarczyk and J. Lam, 'Sociology of Commercial Arbitration: Tools for the New Times', Volume 36, Issue 6, *Journal of International Arbitration*, Maxi Scherer ed., Kluwer Law International, 2019, pp. 693 - 726.
[14] N. Blackaby *et al.*, 'Redfern and Hunter on International Arbitration', Volume 82, Issue 4, Oxford: Oxford University Press, *Arbitration: The International Journal of Arbitration, Mediation and Dispute Management*, 6th edn., 2016, pp. 475-476.
[15] N. Teramura, '*Ex Aequo et Bono as a Response to the 'OverJudicialisation' of International Commercial Arbitration*', Volume 54, International Arbitration Law Library, Kluwer Law International, 2020, pp. 153 - 182.
[16] Article II. 2 "*The term "agreement in writing" shall include an arbitral clause in a contract or an arbitration agreement, signed by the parties or contained in an exchange of letters or telegrams.*" Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958.
[17] United Nations Conference on Trade and Development (UNCTAD), Course on Dispute Settlement in International Trade, Investment and Intellectual Property; Electronic Arbitration, 2003, available for download at *https://unctad.org/en/Docs/edmmisc232add20_en.pdf*, last visited on October, 2020.

Convention.[18]
In this context, a discussed alternative option for electronic arbitration agreements in online dispute resolution (ODR) platforms was to seek for monitored enforcement via their platforms. However, if the online decision is not complied with by the parties, the corresponding platform will need to proceed to use alternative mechanisms such as conciliation with the parties to achieve enforcement of the award. These platforms thus will need to take into consideration all possible post-resolution services that should be provided after the resolution has been rendered.[19]

3.1 Achieving validity of Kleros coded arbitration agreements and coded arbitral awards

One problem identified with the validation of blockchain arbitration awards is the lack of enforceability of the coded agreement itself. As referenced in the previous section, Article II of the New York Convention requires arbitration agreements to be in writing, despite Article III instructing the courts of the country where enforcement is sought to simply recognize awards as binding due to the presumption of validity.[20] Consequently, Article II of the Convention often leads to the premature death of arbitration because most coded agreements do not meet the "in writing" requirement.[21]
Pieter Sanders, the founding father of the New York Convention, created the allocation of the burden of proof in Articles IV and V. A court can grant the enforcement if the applicant has complied with the requirements listed in Article IV[22], and a refusal can only take place on the basis of the grounds listed in Article V[23]. The aim is that

[18] M. Boronkay and P. Exenberger, 'F. Blockchain, Smart Contracts and Arbitration Overrated Hype or Chance for the Arbitration Community?' in C. Klausegger *et al.*, *Austrian Yearbook on International Arbitration*, 2020, pp. 411 - 418.
[19] Z. Loebl, '*Designing Online Courts: The Future of Justice is Open to All*', Chapter 2: First Online Civil Courts, Kluwer Law International, 2019, pp. 25 - 54.
[20] Article III. '*Each Contracting State shall recognize arbitral awards as binding and enforce them in accordance with the rules of procedure of the territory where the award is relied upon, under the conditions laid down in the following articles. There shall not be imposed substantially more onerous conditions or higher fees or charges on the recognition or enforcement of arbitral awards to which this Convention applies than are imposed on the recognition or enforcement of domestic arbitral awards.*' Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958.
[21] M. Paulsson, 'The Blockchain ADR: Bringing International Arbitration to the New Age', Kluwer Arbitration Blog, 2018.
[22] Article IV.1 '*To obtain the recognition and enforcement mentioned in the preceding article, the party applying for recognition and enforcement shall, at the time of the application, supply: (a) The duly authenticated original award or a duly certified copy thereof; (b) The original agreement referred to in article II or a duly certified copy thereof.*' Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958.
[23] Article V.1 '*Recognition and enforcement of the award may be refused, at the request of the party against whom it is invoked, only if that party furnishes to the competent authority where the recognition and enforcement is sought, proof that: (a) The parties to the agreement referred to in article II were, under the law applicable to them, under some incapacity, or the said agreement is not valid under the law to which the parties have subjected it or, failing any indication thereon, under the law of the country where the award was made; or (b) The party against whom the award is invoked was not given proper notice of the appointment of the arbitrator or of the arbitration proceedings or was otherwise unable to present his case; or (c) The award deals with a difference not contemplated by or not falling within the terms of the submission to arbitration, or it*

enforcement of an award by the successful party in the arbitration should be "almost a matter of administrative procedure".[24]

Some of the unresolved dilemmas refer exactly to Articles IV and V of the Convention. Article IV requires the arbitral agreement to be certified with an authenticated physical signature. Yet, there is no further guidance issued with regards to the form this signature must take. Further, in Article V(1) the use of the word "may" has led to considerable debate amongst authorities who could not agree whether the enforcement court has a duty to or the discretion to accept the challenge if all the conditions are fulfilled.[25] In practice, these uncertainties are left to the local judges to interpret. It is expected that the state members approach these in alignment with the pro-enforcement and pro-arbitration spirit of the Convention.

This is important to consider for Kleros to which, as a platform for international arbitration, many of the unresolved dilemmas previously explained under the New York Convention could be applicable. The Convention does not contemplate the possibility of a blockchain-related process. Yet, in 2006 the The United Nations Commission on International Trade Law (the "UNCITRAL") issued recommendations in the usage of electronic communications in international arbitration.[26] These recommendations, however, are considered soft law and hence, insufficient to be enforced by formal legal means.

The notion of online arbitration, nonetheless, has been present in the legal literature for a few decades now. Further, some jurisdictions have already started to develop the adequate legislation to regulate these new emerging technologies. In India, for example, Section 10A of its Information Technology Act 2000[27], gives validity to contracts which are formed through electronic means. Section 2(1)(t) of the Act defines an electronic mean as a "data, record or data generated, image or sound stored, received or sent in an electronic form or micro film or computer generated micro fiche". As such, it has been argued that, under the mentioned Act, India considers blockchain arbitration agreements to be valid under their amended Arbitration and Conciliation Act[28] [29].

Blockchain arbitration is a platform capable of holding all documents related to an

---

contains decisions on matters beyond the scope of the submission to arbitration, provided that, if the decisions on matters submitted to arbitration can be separated from those not so submitted, that part of the award which contains decisions on matters submitted to arbitration may be recognized and enforced; or (d) The composition of the arbitral authority or the arbitral procedure was not in accordance with the agreement of the parties, or, failing such agreement, was not in accordance with the law of the country where the arbitration took place; or (e) The award has not yet become binding on the parties, or has been set aside or suspended by a competent authority of the country in which, or under the law of which, that award was made.' Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958.

[24] *Re PetroChina International (Hong Kong) Corp Ltd, 4 HKLRD 604, 2011.*

[25] P. Wiliński, 'Should the Miami Draft be given a second chance? The New York Convention 2.0', Spain Arbitration Review | *Revista del Club Español del Arbitraje*, Issue 34, Kluwer Law International, 2020, pp.77-90.

[26] The United Nations Commission on International Trade Law (UNCITRAL), 'United Nations Convention on the Use of Electronic Communications in International Contracts', 2007, available for download at *https://www.uncitral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf*, last visited on October, 2020.

[27] Ministry of Electronics and Information Technology, Government of India, 'Information Technology Act', 2000, Amendment Act, 2008.

[28] Government of India, 'The Arbitration & Conciliation Act', 1996, Amendment Act, 2019.

[29] R. Bansal, 'Enforceability of Awards from Blockchain Arbitrations in India', Kluwer Arbitration Blog, 2019.

arbitration process, from the beginning to the end. Thus, the party requesting the enforcement of the coded award under Article IV of the New York Convention can simply access the blockchain server with its unique key to find the original coded arbitration agreement.[30] In this sense, the UNCITRAL 2006 Model Law on International Commercial Arbitration establishes that the requirement of a written arbitration agreement could be "met by an electronic communication if the information contained therein is accessible so as to be usable for subsequent reference".[31] National courts, however, would need to amend their laws accordingly to contemplate blockchain awards that do not require paper-based authentication.

Click-wrap arbitration agreements, similarly, fall far from the outdated language of the New York Convention. However, these agreements are expected to be eventually covered as an exchange of declarations, and as such, be possible to be subsumed under Article II(2) of the Convention.[32]

In practice, nonetheless, the New York Convention leaves this issue largely to the national courts. It seems inevitable that in order for a coded agreement to be considered valid, it must be reproduced, or at least certified, in paper form. Blockchain technology, Marike explains, is a platform that allows transfer of digital assets and documents.[33] Equally, it provides identification of an original document and verification that no further copies of this particular original document exist. In this line, international arbitration laws, by relying on this technology, could validate coded agreements. Wahab et al., alternatively propose that an e-award and an e-agreement can ultimately comply with Article II, IV and V of the New York Convention by simply producing them "in writing".[34] This would be considered valid as long as the documents are accessible in the blockchain process and usable for subsequent reference.

Participants in a blockchain are, in principle, anonymous, with the possibility to choose to disclose their identity. However, if the identification of a contract-party is not known, enforcement of the arbitral award would be impossible.

Thus, a handwritten signature, or an electronic signature where the seat of arbitration recognizes it, is essential for a valid arbitral award. This will ensure that all members of the tribunal have stated their participation in the deliberations, as well as suffice as

---

[30] R. Wolff, 'E-Arbitration Agreements and E-Awards – Arbitration Agreements Concluded in an Electronic Environment and Digital Arbitral Awards' in *Arbitration in the Digital Age: The Brave New World of Arbitration*, Piers & Aschauer eds., 2018.

[31] Article 7.4 '*The requirement that an arbitration agreement be in writing is met by an electronic communication if the information contained therein is accessible so as to be useable for subsequent reference; "electronic communication" means any communication that the parties make by means of data messages; "data message" means information generated, sent, received or stored by electronic, magnetic, optical or similar means, including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy.*' UNCITRAL Model Law on International Commercial Arbitration, 1985, amendments adopted in 2006.

[32] R. Wolff, 'E-Arbitration Agreements and E-Awards – Arbitration Agreements Concluded in an Electronic Environment and Digital Arbitral Awards' in *Arbitration in the Digital Age: The Brave New World of Arbitration*, Piers & Aschauer eds., 2018.

[33] M. Paulsson, 'The Blockchain ADR: Bringing International Arbitration to the New Age', Kluwer Arbitration Blog, 2018.

[34] M. Wahab *et al.*, 'Online Dispute Resolution: Theory and Practice: A Treatise on Technology and Dispute Resolution', Eleven International Publishing, 2012.

proof of parties' consent.[35]

3.2 Protecting the enforcement of Kleros arbitral awards

One characteristic of blockchain technology is to be immutable. It provides a transparent record of transactions which are self-authenticated and self-executed. In this regard, enforcement of awards would be expedited if the arbitration agreement is uploaded to a blockchain platform. Since the information stored in a blockchain is self-authenticated, a party seeking for enforcement would just require key access to a blockchain located in the place where enforcement is sought.[36]
This proposal is, nonetheless, not entirely accurate about its realistic practice. As discussed above, Article IV of the New York Convention states that the party seeking enforcement of the award needs to present the original copy of the award and the original copy of the arbitration agreement. Article II of the New York Convention then requires that arbitration agreements must be in writing to be enforced.[37]
The Convention, however, requires the member-states to use no more barriers than their domestic enforcement procedures entail. In general, thus, Article III establishes recognition of foreign awards except where one of Article V's grounds applies.[38]
In this sense, a bigger challenge is faced under Article V of the New York Convention when seeking enforcement of a blockchain-arbitration-award. After a party presents an arbitral award before a national court seeking enforcement, the counter-party has the option to oppose enforcement based on the grounds stated in Article V. In this line, a second judicial review by the enforcement court could place the blockchain-arbitration award back in danger. It can then be considered invalid for not complying with the formal requirements of "in writing" and "signed".[39]

3.3 The self-execution characteristic in blockchain arbitration

The concept of blockchain-arbitration is very recent. It seeks to use the advantages of the technology in dispute resolution. One important issue to consider, as mentioned above, is whether awards rendered through such a process can be enforceable in the first place.[40]

Blockchain contracts or smart contracts have the characteristic of being

[35] M. Boronkay and P. Exenberger, 'F. Blockchain, Smart Contracts and Arbitration Overrated Hype or Chance for the Arbitration Community?' in C. Klausegger *et al.*, *Austrian Yearbook on International Arbitration*, 2020, pp. 411 - 418.
[36] S. Rodríguez, 'The what, the why, and the how: Blockchain as a solution for Institutional Arbitration', Spain Arbitration Review | *Revista del Club Español del Arbitraje*, Issue 37, Kluwer Law International, 2020, pp. 77-97.
[37] M. Duarte, 'Could Blockchain Help the Recognition of International Arbitration Awards?', Kluwer Arbitration Blog, 2018.
[38] *Ibidem*.
[39] S. Rodríguez, 'The what, the why, and the how: Blockchain as a solution for Institutional Arbitration', Spain Arbitration Review | *Revista del Club Español del Arbitraje*, Issue 37, Kluwer Law International, 2020, pp. 77-97.
[40] R. Bansal, 'Enforceability of Awards from Blockchain Arbitrations in India', Kluwer Arbitration Blog, 2019.

self-enforceable when all conditions are met. Enforcement is, hence, considered instant. Under this modern conception of blockchain in arbitration, in principle, enforcement of an arbitral award could be rendered by the blockchain itself anywhere. An isolated arbitration process in a blockchain technology, however, could jeopardize the basic protection of procedural fairness. Moreover, when the execution of the blockchain award requires the assistance of a national court to access physical assets, more complicated problems arise. It would be necessary to develop a fully automated court system connected to automated governmental portals.[41] As such, the auto-enforcement characteristic seems to be just a theoretical possibility.

4. Judicial review in decentralized Kleros Justice

In principle, blockchain arbitration is based on a usually anonymous private court. Parties cannot be identified and the arbitration process cannot be heard by state courts. If the parties are identifiable and the dispute is heard by the national courts, the process is known as "first blockchain-related court disputes".[42]
Contrarily, isolated blockchain arbitration, developed by applications such as Kleros, uses a network of anonymous human jurors. The decision-making is monetarily incentivized to resolve with the majority decision, in accordance with pre-programmed outcomes. Thus, jurors who vote with the majority receive a bonus, while jurors voting against the prevailing decision lose virtual currency. Kleros Justice's approach, as noted, cuts down on many features of conventional arbitration. To begin with, parties cannot nominate arbitrators to its process. Further, there is no option for judicial review before national courts.
Decentralized justice, as one of the characteristics of Kleros arbitration, is based on the principle that the process is not linked to a jurisdiction. The arbitration, on the contrary, is resolved by peers known as decentralized jurors.
In this sense, even though a blockchain arbitration has the opportunity to hold enclosed proceedings, Article II (3) of the New York Convention states the possibility of judicial intervention under an evident null and void agreement[43]. In a prima facie analysis, thus, the automation of a blockchain award would not hinder courts' intervention.
A blockchain arbitration resolution is self-executed, and in principle, it will not require the physical enforcement-recognition established under the New York Convention. Allowing it to automatically escape from any court's supervision, nonetheless, might in

[41] M. Wahab, 'Online Arbitration: Tradition Conceptions and Innovative Trends' in Van den Berg A, *International Arbitration: The Coming of a New Age?,* Kluwer Law International, 2013, pp. 664.
[42] Z. Loebl, '*Designing Online Courts: The Future of Justice is Open to All*', Chapter 2: First Online Civil Courts, Kluwer Law International, 2019, pp. 25 - 54.
[43] Article II.3 '*The court of a Contracting State, when seized of an action in a matter in respect of which the parties have made an agreement within the meaning of this article, shall, at the request of one of the parties, refer the parties to arbitration, unless it finds that the said agreement is null and void, inoperative or incapable of being performed.*' Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958.

turn trigger doubts as to a fair trial.[44]
Following Wahab's suggestion, Kleros arbitration should ensure that the process is accessible to the national courts, due to the risk that, when seeking for enforcement, Kleros arbitrators could put their award at risk by rendering it far from court's intervention.

4.1 Mandatory laws and the protection of the fundamental procedural fairness principle

Whilst, as a private agreement, arbitration's nature derives from a contract, judicial review does not. National courts have the power to review an arbitral award, if necessary. In this sense, it is argued that the waiver of post-award review decreases the role that courts play in promoting the legitimacy of arbitration. It jeopardizes both the protection designed by the parties and the protections given by the legal system itself.[45] Blockchain arbitration thus, as a private-decentralized-justice platform, could be analyzed analogously as a waiver of post-award review.
In this line, in the name of public policy some jurisdictions do not allow the avoidance of judicial review from their national courts. In the case Popack v Lipszyc the Canadian court decided that parties cannot contract out of the set-aside mechanism established under Article 34 of the UNCITRAL Model Law.[46] It explained that the purported exclusion conflicted with the mandatory provisions of the Model Law itself and/or national public policy.[47] Conversely, in Noble China Inc. v Lei, the Ontario court suggested that Article 34 was not a mandatory provision of the Model Law as the language was "shall". Further, the court observed that the Analytical Commentary contained in the Report of the Secretary General to the Eighteenth Session of the UNCITRAL[48] establishes that Article 34 is not amongst the list of mandatory provisions from which parties may not derogate.[49] In the Popack case, however, the decision clarified that this Report did not mean parties can contractually exclude Article 34 in all circumstances. In other words, if parties agreed to an arbitral procedure that conflicts with other mandatory provisions of the Model Law or public policy, then, such an agreement would be ineffective.[50]
In a similar manner, in the case Methanex Motonui v Joseph Spellman & Ors, the New Zealand court reiterated the importance of balancing the finality principle with avoiding

---

[44] P. Wiliński, 'Should the Miami Draft be given a second chance? The New York Convention 2.0', Spain Arbitration Review | *Revista del Club Español del Arbitraje*, Issue 34, Kluwer Law International, 2020, pp. 77-90.
[45] W. Tan, 'Allowing the Exclusion of Set-Aside Proceedings: An Innovative Means of Enhancing Singapore's Position as an Arbitration Hub' in L. Boo and G. Born ed., *Asian International Arbitration Journal*, Volume 15, Issue 2, Kluwer Law International, 2019, pp. 92.
[46] Article 34.1 '*Recourse to a court against an arbitral award may be made only by an application for setting aside in accordance with paragraphs (2) and (3) of this article.*' UNCITRAL Model Law on International Commercial Arbitration, 1985, amendments adopted in 2006.
[47] Popack v. Lipszyc, 2015, ONSC3460.
[48] The United Nations Commission on International Trade Law (UNCITRAL) on the work of its eighteenth session, 1985.
[49] Noble ChinaInc.v. Lei, 1998, 42O.R. (3d) 69; 42B.L.R. (2d) 262.
[50] Popack v. Lipszyc, 2015, ONSC3460.

judicial review and party autonomy against the principle that parties should be afforded minimum standards of procedural protection in arbitration.[51]
Parties who submit their dispute to an arbitration process manifest their intention to have their dispute judicially resolved, with the natural justice that this entails. It requires a minimum procedural fairness protection in arbitration, which encompasses inter alia, the right to parties to be afforded an equal opportunity to present their respective arguments, and the rule against bias, which requires tribunals to act impartially.[52]
Accordingly, the safeguards of natural justice incorporated in international and national arbitration laws provide for national court intervention in circumstances where natural justice principles have been breached. These minimum safeguards cannot be contractually excluded, and overcome the parties' intention for finality in an award.[53]

4.1.1 Party autonomy in blockchain arbitration

One of the main characteristics of international arbitration, as an alternative dispute mechanism, is the flexibility and freedom given to the parties in the process. This includes, amongst others, the freedom to choose the law of the dispute and the direction of its interpretation. If it is agreed by the parties, the arbitral decision-making allows the arbitral tribunal to decide, by the means of ex aequo et bono,[54] their own rules to resolve a conflict. Alternatively, in voie directe competence, arbitrators can choose between two national laws in order to avoid ambivalence.[55]
The power of the arbitrator derives from the parties' agreement. The arbitral tribunals' intervention is limited to such agreement. Thus, while the power of national judges comes from the basic law of a respective jurisdiction, the power of an arbitrator derives directly from the parties' agreement.[56]
The party autonomy principle, nonetheless, also derives from national and international arbitration within a state. The arbitrator, consequently, does not only have a duty to the parties but also to the umbrella law from the seat of the arbitration constrained to the arbitration process.
The arbitrator is therefore expected to align the parties' agreement to the national applicable laws. In this sense, the arbitrator steers a middle course between the national courts and the parties' decisions. This obligation constitutes the arbitrator's responsibility to protect a fair trial and natural justice to the parties within a private dispute resolution mechanism. By using it, the arbitral tribunal is expected to balance a tailored private blockchain arbitration platform to the national applicable laws.
Contrary to what the transnational theory claims, there is not a unified international set

[51] Methanex Motonui Ltdv. Joseph Spellman & Ors, 2004, 1NZLR95.
[52] R. Thakur, 'Arbitration Proceedings and Principles of Natural Justice', SSRN, Electronic Journal, DOI: 10.2139/ssrn. 1955451, 2011.
[53] A. Pulle, 'Securing Natural Justice in Arbitration Proceedings', 20 Asia Pac. L. Rev. 63, 2012.
[54] W. W. Park, 'Arbitration of International Contract Disputes', 39 Bus. Law. 1785 (1983); M. Rubino-Sammartano, International Arbitration Law and Practice, 2001.
[55] Y. Dezalay, B. Garth, '*Dealing in Virtue. International Commercial Arbitration and the Construction of a Transnational Legal Order*', The University of Chicago Press, 1996, pp. 33–63.
[56] *Ibidem*.

of norms, but instead the existence of multiple legal systems with overlaps; "the growing trend of international commerce and social differentiation leaves no doubt about the plurality of law".[57] In this context, it is the professional responsibility of the arbitrators in Kleros Justice to inform the parties of the different legal systems and guide parties' expectations with regards to them.

4.2 Contractual exclusion of set-aside proceedings or delocalized justice in self-executed ad-hoc arbitration

Switzerland was one of the first countries to enact legislation providing for the possibility to exclude set-aside proceedings in international arbitration. Article 192 of the Swiss Private International Law Act (PIL Act) states that parties who do not have their domicile, ordinary residence or a business establishment in Switzerland (i.e. foreign parties) may exclude any action to set aside the arbitral award by an explicit declaration in the arbitration agreement.[58] This is contrary to the Arbitration Rules of the International Chamber of Commerce ('ICC Rules'), which provides that parties shall be deemed to have waived their right to any form of appeal insofar as such a waiver can validly be made.[59] The Swiss Supreme Court, in this sense, stated that it will not be sufficient to constitute an exclusion of set-aside proceedings if parties have not included clear language in their contracts that reflect parties' intentions to waive this right.
Similarly, in France, Article 1522 of the French Code of Civil Procedure provides that parties in international arbitration may waive their right to set-aside proceedings in international arbitration.[60] Akin to Swiss law, the French provision requires a specific and explicit agreement on the waiver of set-aside proceedings.

4.2.1 Delocalized justice: enforcement of blockchain awards that have been annulled in the country of origin

Article V(1)(e) of the New York Convention provides that recognition and enforcement of an award may be refused if it has been set aside by a court of the arbitral seat. Not all countries which are members of the New York Convention, however, would refuse enforcement of an award that has been set aside in this context. The laws of

---

[57] P. Berman, '*Global Legal Pluralism: A Jurisprudence of Law Beyond Borders*', Cambridge University Press, 2012.
[58] Article 192. '*1. If none of the parties have their domicile, their habitual residence, or a business establishment in Switzerland, they may, by an express statement in the arbitration agreement or by a subsequent written agreement, waive fully the action for annulment or they may limit it to one or several of the grounds listed in Art. 190(2).*', Federal Statute on Private International Law, Chapter 12: International Arbitration, 1989.
[59] Article 35.6 '*Every award shall be binding on the parties. By submitting the dispute to arbitration under the Rules, the parties undertake to carry out any award without delay and shall be deemed to have waived their right to any form of recourse insofar as such waiver can validly be made.*', International Court of Arbitration Rules of Arbitration, version 2017.
[60] Article 1522. 'By way of a specific agreement the parties may, at any time, expressly waive their right to bring an action to set aside.' French Code of Civil Procedure, Book IV – Arbitration, 1981.

Switzerland, France, Russia and Belgium are examples of systems that recognize the validity of exclusion agreements. Switzerland and Belgium, however, allow this mechanism only for foreign parties in international arbitration. On the other hand, in Russia, the option is available for both domestic and international arbitration, with the condition that the arbitration must be administered by an institution.

In this vein, the French Supreme Court in the case Société Hilmarton Ltd v. Société Omnium de traitement et de valorisation (OTV) established that:

> *"the arbitral award rendered in Switzerland is an international award which is not integrated in the legal system of that State, so that it remains in existence even if set aside, and its recognition in France is not contrary to international public policy."*[61]

The rationale developed in Hilmarton was that an international arbitration process is not limited to or exclusive to the law of the arbitral seat. The aim is to free arbitration up as much as possible from the national laws.

The transnational theory in arbitration aims to detach an arbitration process from this control, stating that an international arbitral award is not anchored to any legal system, including the country of the place of arbitration. Consequently, according to this theory, any national court can establish jurisdiction over an arbitral award.

The prevailing theory of the seat of arbitration, however, establishes a legal link between the arbitration proceedings and the *legal locus* of the arbitration. The national court of the seat thus plays a crucial role, and is granted with the exclusive jurisdiction to set aside or annul an arbitral award. In conclusion, if the court of the seat annuls the arbitral award, the general rule is that it may not be enforceable in another country under the New York Convention.[62]

4.2.2 Judicial review survive in enforcement proceedings

Article V of the New York Convention states that under the enforcement stage, the courts where the enforcement is sought can make a judicial review in deciding whether to enforce the award or not. If enforcement is sought in a state member of the New York Convention, it is expected that the enforcing court will apply the same grounds established under Article V of the Convention. Therefore, waivers of set-aside proceedings do not eliminate all judicial oversight of arbitration awards. Instead, it transfers the forum for control of the award to the enforcement judge.[63]
A party who has legitimate grounds to challenge an award does not suffer a disadvantage if they have excluded the set-aside mechanism. The said party can

[61] OTV v. Hilmarton, Cour de Cassation, Cass. Civ.1, 1997, 1997 Rev. Arb. 376.
[62] W. Tan, 'Allowing the Exclusion of Set-Aside Proceedings: An Innovative Means of Enhancing Singapore's Position as an Arbitration Hub' in L. Boo and G. Born ed., *Asian International Arbitration Journal*, Volume 15, Issue 2, Kluwer Law International, 2019, pp. 92.
[63] *Ibidem*.

ultimately raise the same five grounds in resisting the enforcement of the award.[64] In this sense, judicial review of an arbitral award is exercised on limited grounds for the purpose of preserving the integrity of the arbitration proceedings.
In the case Dallah Real Estate and Tourism Holding Company v. The Ministry of Religious Affairs, Government of Pakistan, parties were engaged in set-aside proceedings before the Court of Appeal of Paris and enforcement proceedings before the Supreme Court of the United Kingdom. Here, the Supreme Court of the United Kingdom refused to enforce the award on grounds that there was insufficient evidence of a consent to arbitrate, as opposed to the findings of the Court of Appeal of Paris, which upheld the award.[65]
The overlapping grounds that are considered for set-aside and enforcement proceedings aim to preserve the integrity of arbitration. Likewise, judicial review will thus not be lost merely because parties contractually agreed on a delocalized and auto-contained process. Consequently, depending on the strategy adopted by the parties, the award may be subject to scrutiny only by the courts of the seat of arbitration or by in addition by the courts of the place of enforcement.

4.2.3 Should a blockchain arbitration attempt for decentralized justice?

Contractual exclusion of set-aside proceedings could be considered an attractive boost for Kleros, as a stand-alone decentralized justice platform. In this sense, it is assumed that as a self-regulated and self-executed process, it will not require any court intervention.
The exclusion of set-aside proceedings does not preclude judicial review entirely as the award may still be challenged at the enforcement stage, as explained before. Further, any attempt to exclude court intervention may raise questions of a breach of natural justice.
One of the main driving forces behind national laws that permit the waiver of set-aside proceedings is the encouragement of party autonomy. In this sense, parties choose arbitration, inter alia, to design their dispute resolution process. Party autonomy, however, is the recognition of the power of parties to choose international arbitration exclusively under national laws.[66]
In this context, it is questionable as to whether or not a self-contained process grants the ability to parties to fully decide on their dispute resolution process. A challenge in national courts may subvert parties' expectations of the benefits associated with a purely private blockchain process. A self-contained blockchain arbitration, thus, may give rise to speculations regarding the confidentiality and accessibility of the

[64] *Ibidem*.
[65] Dallah Real Estate and Tourism Holding Company v. The Ministry of Religious Affairs, Government of Pakistan, 2010, UKSC 46; Gouvernement du Pakistan v. Société Dallah Real Estate & Tourism Holding Co, Cour d'appel de Paris, Pôle 1 – Ch. 1, no. 09/28533, 2011.
[66] M. S. Sattar, '*Can or Should Parties Waive the Right to Set Aside and Arbitral Award?*', Volume 21, Issue 3, Int'l A.L.R., 2018, pp. 55–57.

proceedings. National laws, in this sense, provide for minimum safeguards in the form of exceptions.
If Kleros were to allow the contractual self-executing option, it should allow relevant national courts to retain a residual power to deal with Kleros arbitration. National courts should intervene when evident serious breaches such as fraud, corruption or a fundamental breach of natural justice have been done. In applying these exceptions, Kleros can ensure that judicial review is only exercised in deserving cases involving genuine and serious breaches.
Court intervention might not be an ideal topic of discussion during the early stage of negotiations of a contract, as future disputes appear as a remote possibility. However, parties should be guided to consider the issue before a blockchain arbitration process begins. At this early stage, parties should be advised by qualified legal arbitrators to consider the implications of this particular technological process. Parties should be allowed to decide on their preferred dispute resolution process after weighing the benefits and disadvantages of a blockchain arbitration. Thus, any contractual provision must be clear, free and unequivocal in the self-execution option in a blockchain arbitration, considering all the comments analyzed hereby.

Conclusion

Enthusiasts have predicted that blockchain will bring deep change, from cryptocurrencies through land registries to health records.[67] Despite early promises for a dispute-free environment in which transactions are self-executed, the experience has been that, as any other area of human interaction in a rapidly evolving complex setting, it is bound to generate misunderstandings.[68]
In such settings, new platforms are starting to offer blockchain dispute resolution services. Kleros offers a platform for online transactions with low-value cross-border disputes, which typically do not go to traditional arbitration.

This paper analyzed the parties' liberty to contractually agree on a decentralized blockchain arbitration. Parties may choose blockchain arbitration for a variety of reasons, amongst which, its self-execution and self-regulation characteristics. They also may prefer it to tailor the dispute resolution process in a manner that best suits their interests. The right to agree on a blockchain arbitration is a recognized right to the parties. It should similarly be the parties' right to waive set-aside proceedings, analogous to applying the self-execution mechanism, if they so wish.
The leading territorial theory in international arbitration recognizes the power that national courts of the seat of arbitration have to conduct a review of the process, if necessary. Based on limited grounds, the courts aim to preserve the integrity of the arbitral process. Thus, judicial assistance in a blockchain arbitration ultimately provides safeguards against an arbitrary decision.
In conclusion, new technologies have evidently made their way into the legal industry. International arbitration is deemed to be the most suitable dispute resolution mechanism blockchain technology, given its borderless features. The question that remains is, when will these technologies start to be contemplated in international and national arbitration laws? The amendment of national legislations and certain institutional rules are necessary towards achieving a more flexible, open and transnational arbitration for a realistic blockchain arbitration process. Whether or not the challenges presented for blockchain arbitration by the existing legal framework can be overcome is debatable. In this aspect, this paper has attempted to go one step further to marrying blockchain technology with the existing legal framework in international arbitration.

---

[67] A. Wright, P. De Filippi, 'Decentralized Blockchain Technology and the Rise of Lex Cryptographia', ed. 1, pp. 48-49, 2015.

[68] J. Bacon, *et al.*, 'Blockchain Demystified', 2017, available at: *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3091218* <accessed on 15 October 2020>.

Bibliography

A. Meissner, "Chapter III: The Award and the Courts, Enforcement of a CIETAC Arbitral Award with Vienna as Place of Oral Hearing", in C. Klausegger *et al., Austrian Yearbook on International Arbitration*, 2020, pp. 341 - 353.

A. Pulle, "Securing Natural Justice in Arbitration Proceedings", 20 Asia Pac. L. Rev. 63, 2012.

A. Wright, De Filippi, "Decentralized Blockchain Technology and the Rise of Lex Cryptographia", ed. 1, pp. 48-49, 2015.

Briner, Hamilton, "The History and General Purpose of the Convention: The Creation of An International Standard to Ensure the Effectiveness of Arbitration Agreements and Foreign Arbitral Awards", in E. Gaillard, "*Enforcement of Arbitration Agreements and International Arbitral Awards: The New York Convention in Practice 3, 5"*, di Pietro (eds.), 2008.

International Chambers of Commerce, Report and Preliminary Draft Convention Adopted by the Committee on International Commercial Arbitration, at its Meeting of 13 March 1953, reprinted in 9(1) ICC Ct. Bull. 32, 32, 1998.

I. Shehata, "Arbitration of Smart Contracts Part 3" Issues to Consider When Choosing Arbitration to Resolve Smart Contracts Disputes", Kluwer Arbitration Blog, 2018.

J. Bacon, et al., "Blockchain Demystified", 2017, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3091218 <accessed on 15 October 2020>.

J. Jemielniak, "Comparative Analysis as an Autonomization Strategy in International Commercial Arbitration", Volume 31, Issue 1, *International Journal for the Semiotics of Law*, 2018, pp. 155-173.

M. Boronkay and P. Exenberger, "F. Blockchain, Smart Contracts and Arbitration Overrated Hype or Chance for the Arbitration Community?" in C. Klausegger *et al.*, *Austrian Yearbook on International Arbitration*, 2020, pp. 411 - 418.

M. Duarte, "Could Blockchain Help the Recognition of International Arbitration Awards?", Kluwer Arbitration Blog, 2018.

M. Kaczmarczyk and J. Lam, "Sociology of Commercial Arbitration: Tools for the New Times", Volume 36, Issue 6, *Journal of International Arbitration*, Maxi Scherer ed., Kluwer Law International, 2019, pp. 693 - 726.

M. Paulsson, "The Blockchain ADR: Bringing International Arbitration to the New Age", Kluwer Arbitration Blog, 2018.

M. S. Sattar, "Can or Should Parties Waive the Right to Set Aside and Arbitral Award?", Volume 21, Issue 3, A.L.R., 2018, pp. 55"57.

M. Tang and J. Liu, "Annual Review on International Trade Dispute Resolution in China", *Commercial Dispute Resolution in China: An Annual Review and Preview*, Kluwer Law International, 2019, pp. 223 - 258.

M. Wahab *et al.*, "Online Dispute Resolution: Theory and Practice: A Treatise on Technology and Dispute Resolution", Eleven International Publishing, 2012.

M. Wahab, "Online Arbitration: Tradition Conceptions and Innovative Trends"™ in Van den Berg A, *International Arbitration: The Coming of a New Age?,* Kluwer Law International, 2013, pp. 664.

N. Blackaby *et al.*, "Redfern and Hunter on International Arbitration", Volume 82, Issue 4, Oxford: Oxford University Press, *Arbitration: The International Journal of Arbitration, Mediation and Dispute Management*, 6th edn., 2016, pp. 475-476.

N. Jevremovic, "In Review: Blockchain Technology and Arbitration", Kluwer Arbitration Blog, 2019.

N. Teramura, "Ex Aequo et Bono as a Response to the "OverJudicialisation" of International Commercial Arbitration", Volume 54, International Arbitration Law Library, Kluwer Law International, 2020, pp. 153 - 182.

P. Berman, "Global Legal Pluralism: A Jurisprudence of Law Beyond Borders", Cambridge University Press, 2012.

P. Wiliniski, "Should the Miami Draft be given a second chance? The New York Convention 2.0", Spain Arbitration Review | *Revista del Club Español del Arbitraje*, Issue 34, Kluwer Law International, 2020, pp.77-90.

R. Bansal, "Enforceability of Awards from Blockchain Arbitrations in India", Kluwer Arbitration Blog, 2019.

R. Morek, "The Regulatory Framework for Dispute Resolution: A Critical View", 38 U. Tol. L. Rev, Hein Online, 2006.

R. Thakur, "Arbitration Proceedings and Principles of Natural Justice", SSRN, Electronic Journal, DOI: 10.2139/ssrn. 1955451, 2011.

R. Wolff, "Arbitration Agreements and E-Awards" Arbitration Agreements Concluded in an Electronic Environment and Digital Arbitral Awards" in *Arbitration in the Digital Age: The Brave New World of Arbitration*, Piers & Aschauer eds., 2018.

S. Rodríguez, "The what, the why, and the how: Blockchain as a solution for Institutional Arbitration", Spain Arbitration Review | *Revista del Club Español del Arbitraje*, Issue 37, Kluwer Law International, 2020, pp. 77-97.

W. Tan, "Allowing the Exclusion of Set-Aside Proceedings: An Innovative Means of Enhancing Singapore's Position as an Arbitration Hub" in L. Boo and G. Born ed., *Asian International Arbitration Journal*, Volume 15, Issue 2, Kluwer Law International, 2019, pp. 92

W. W. Park, "Arbitration of International Contract Disputes", 39 Bus. Law. 1785 (1983); M. Rubino-Sammartano, International Arbitration Law and Practice, 2001.

Y. Dezalay, B. Garth, "Dealing in Virtue. International Commercial Arbitration and the Construction of a Transnational Legal Order", The University of Chicago Press, 1996, pp. 33"63.

Z. Loebl, "*Designing Online Courts: The Future of Justice is Open to All*", Chapter 2: First Online Civil Courts, Kluwer Law International, 2019, pp. 25 - 54.

Cases

Dallah Real Estate and Tourism Holding Company v. The Ministry of Religious Affairs, Government of Pakistan, 2010, UKSC 46; Gouvernement du Pakistan v. Societe Dallah Real Estate & Tourism Holding Co, Cour d'appel de Paris, Pole 1 Ch. 1, no. 09/28533, 2011.

Methanex Motonui Ltdv. Joseph Spellman & Ors, 2004, 1NZLR95.

Noble ChinaInc.v. Lei, 1998, 42O.R. (3d) 69; 42B.L.R. (2d) 262.

OTV v. Hilmarton, Cour de Cassation, Cass. Civ.1, 1997, 1997 Rev. Arb. 376.

Popack v. Lipszyc, 2015, ONSC3460.

Re PetroChina International (Hong Kong) Corp Ltd, 4 HKLRD 604, 2011.

Legislation

Government of India, "The Arbitration & Conciliation Act", 1996, Amendment Act, 2019.

Ministry of Electronics and Information Technology, Government of India, "Information Technology Act", 2000, Amendment Act, 2008.

Record of the Seventeenth Meeting of the United Nations Conference on International Commercial Arbitration, U.N. Doc. E/CONF.26/SR.17, 4., 1958.

Report of the Committee on the Enforcement of International Arbitral Awards, U.N. Doc. E/2704, 43 et seq., 1955.

The United Nations Commission on International Trade Law (UNCITRAL), "United Nations Convention on the Use of Electronic Communications in International Contracts", 2007, available for download at *https://www.uncitral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf*, last visited on October, 2020.

The United Nations Commission on International Trade Law (UNCITRAL) on the work of its eighteenth session, 1985.

United Nations Conference on Trade and Development (UNCTAD), Course on Dispute Settlement in International Trade, Investment and Intellectual Property; Electronic Arbitration, 2003, available for download at *https://unctad.org/en/Docs/edmmisc232add20_en.pdf*, last visited on October, 2020.