

18 ODR AND E-ARBITRATION

Trends & Challenges

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The Internet and the technological advancement in information and communication technologies ('ICTs') have significantly altered the way business is conducted and led to an ever-increasing use of electronic instead of paper-based means of communication and data storage. Such ICT revolutionary and innovative applications have been equally extended to the Justice system in a manner that has transmogrified, and continues to do so, in-court and out-of-court dispute resolution techniques and schemes to ensure efficiency, fairness and swift resolution of ensuing disputes.

The assiduous development of new technologies, the proper administration of justice, and access to ADR have facilitated the evolutionary transition from ADR to ODR and the emergence of ODR as a separate and independent field of dispute resolution. whilst other chapters in the book have discussed, addressed, and analyzed diverse ODR schemes and applications, this chapter shall be dedicated to online arbitration in an attempt to disambiguate the online arbitration process and assess the opportunities and barriers to the development thereof as an effective ODR scheme.¹

This chapter shall be divided into five sections. In paragraph 1 the author shall shed light on the conceptual framework of e-arbitration. In paragraph 2 the issues pertaining to the e-arbitration agreement shall be scrutinized. Paragraph 3 shall focus on e-arbitral proceedings, and paragraph 4 shall address e-arbitral awards. Paragraph 5 shall provide an overview of some e-arbitration projects or initiatives. Paragraph 6 shall provide some concluding observations, with an emphasis on the work of the UNCITRAL ODR Working Group.

1 PRELIMINARY CONSIDERATIONS: DEMYSTIFYING E-ARBITRATION

Arbitration, as the most prominent form of traditional out-of-court process, is widely used and globally recognized and applied owing to its default binding nature, finality, global

¹ It is worth noting that online arbitration is not an ODR process that is exclusive to online disputes, but is equally inclusive of traditional offline disputes.

regulation, and enforceability of arbitral awards.² Accordingly, taking arbitration online by utilizing state-of-the-art technologies, that are integrated and embedded into arbitral proceedings conducted wholly or substantially online, is a necessary evolutionary phase that matches the transition to a paperless world.

In essence, e-arbitration entails sufficient utilization of ICT applications. That said, it is submitted that for a process to qualify as an e-arbitration scheme, the ICTs employed should not be used as a simple assisting tool in the process, but should be integrated and embedded into the process itself and indispensable for its proper functioning and administration.

1.1 Overview of Initial e-Arbitration Projects

Since arbitration is the most prominent method of out-of-court dispute resolution processes, it did not seem surprising that the first ODR project was actually an e-arbitration initiative, that is: the *Virtual Magistrate* ('VM').

The VM was launched in March 1996 as an e-arbitration pilot project for the resolution of disputes involving (1) users of online systems, (2) those who claim to be harmed by wrongful messages, postings, or files and (3) system operators (to the extent that complaints or demands for remedies are directed at system operators). The plan for this pilot project was developed by a working group at a meeting sponsored by the National Center for Automated Information Research (NCAIR) and the Cyberspace Law Institute (CLI) on 25 October 1995.³ In the fall of 1996, the project was implemented by Villanova University School of Law, and in 1999, responsibility for the project was transferred to Chicago-Kent College of Law at the Illinois Institute of Technology. The arbitration process was conducted for the most part by email and decisions were to be posted on the Internet although the process itself remained confidential. However, the VM rendered only one decision in 1996 in a case involving a disputed message posted on America Online ('AOL') by Email America.⁴

Nevertheless, the service was not very popular and it was thought that e-arbitration might not be a very successful ODR mechanism.⁵ The failure of the VM was not directly attributed to the nature of the process itself but rather its limited scope, fairly primitive

2 Once a final arbitral award is rendered in binding arbitral proceedings, it enjoys a full *res judicata* effect, in so far as it is not set aside, which bars either party from re-litigating the subject matter of the case.

3 H.H. Perritt, 'Electronic Dispute Resolution' (1996). A paper delivered at the NCAIR Conference. Washington, DC 22 May 1996. See also M. Abdel Wahab, 'The Global Information Society and Online Dispute Resolution: A New Dawn for Dispute Resolution' (2004) 21(2) *Journal of International Arbitration*, pp.143-168.

4 The decision recommended that the message offering the sale of email addresses be removed by AOL because it violated the AOL service agreement as well as Internet customs.

5 E. Katsh and J. Rifkin, *Online Dispute Resolution*, San Francisco, Jossey-Bass 2001, pp. 56, 107-108.

technology employed, the absence of agreements to use the service, and insufficient publicity.⁶

On a different note, CyberTribunal, which was another e-arbitration project launched in September 1996 under the auspices of the University of Montreal's *Centre de Recherche en Droit Public* ('CRDP'), offered e-arbitration services, devised and implemented software applications and encryption technologies that guaranteed the security and confidentiality of the proceedings. The rules of procedure were inspired by the procedural rules used in international commercial arbitration such as the United Nations Commission on International Trade Law ('UNCITRAL') and the ICC. User-friendliness, transparency, due process were amongst the most important principles upheld by CyberTribunal.⁷ Before the project ended in 1999, it helped resolve over one hundred disputes.

Over the past decade, there were numerous institutions offering e-arbitration services,⁸ however whilst many are no longer in operation,⁹ others have emerged as new e-arbitration providers.¹⁰ This is clearly indicative that the ODR, and especially e-arbitration, arena is dynamic and changing. It is submitted that the continuation of providers is essentially dependent on case load, availability of funds, and the providers' ability to improve and upgrade the technology utilized and offered to the parties.

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- 6 A number of reasons might be the cause for such partial failure: (a) The initial predictions that online service providers would refer large numbers of cases to VM proved to be wrong; (b) the failure of significant numbers of complainants to submit disputes to VM is likely due to the fact they did not know about VM, at least they had no easy way to file a complaint with VM, as contrasted with filing complaints with service providers directly or in other forums. Nevertheless, it seems that the direct reason for this failure was the refusal of defendants to agree to the VM jurisdiction in cases filed by plaintiffs. See Abdel Wahab (2004).
- 7 For more information on the project, see V. Gautrais, K. Benyekhlef & P. Trudel, 'Cybermédiation et cyberarbitrage : l'exemple du Cybertribunal', in *Droit de l'informatique et des télécoms*, vol. 4, 1998, p. 46. See also F. Gélinas, 'Taking Stock of ODR: From Concept to Business Reality', in *Using Technology to Resolve Business Disputes, Special Supplement – ICC International Court of Arbitration Bulletin* 2004, pp.10-11.
- 8 A non-exhaustive list of these institutions include: Association of British Travel Agents ('ABTA'); BBBOnline; the CiberTribunal Peruano; the Commercial Initiative for Dispute Resolution; Cyberarbitration; Cybercourt; eResolution; the Honk Kong International Arbitration Center; IntelliCOURT; iCourthouse; Internet Ombudsman; MARS; NovaForum; ODR.NL; Online Resolution; the Resolution Forum; SettleTheCase; SmartSettle; SquareTrade; Trusted Shops; Web Assured; Web Dispute Resolutions; WEBDispute.com; WebMediate; Word&Bond; WIPO; the National Arbitration Forum; the Asian Domain Name Dispute Resolution Center; and the CPR Institute for Dispute Resolution.
- 9 This includes: the Virtual Magistrate, MARS, eResolution, Online Resolution, Word & Bond, CiberTribunal Peruano, NovaForum, ODR.NL, Online Resolution, etc.
- 10 See for example, the AAA online arbitration initiatives such as the Manufacturers/Suppliers Online Arbitration Protocol (<www.adr.org/sp.asp?id=35067>); Onlinearbitration.net (www.onlinearbitration.net); net-ARBitation Works (<www.net-arb.com>); ADR.eu (<http://eu.adr.eu/arbitration_platform/overview/index.php>); Online Arbitration Network (<www.oanlive.com>); Inspection Arbitration Service (<<http://inspectionarbitration.com/>>); eCourt (<www.ecourt.co.uk/arbitration.php>); ZipCourt (<www.zipcourt.com>); and the South African Institute of Intellectual Property Law (SAIIPL) ODR scheme (<www.domaindisputes.co.za/>). An overview of some existing online arbitration providers will be provided herein below.

1.2 *e-Arbitration: Definition and Advantages*

Whilst there exists an ever-increasing plethora of literature addressing the use of ICTs in dispute resolution and arbitration as the global business community's predominant adversarial and adjudicatory scheme, very few have attempted to discern or ascribe a special definition to 'e-arbitration' that clearly discerns its frontiers. This may be partly due to a preference to treat any form of use of ICT in arbitration as an application of e-arbitration. However, such view would ultimately entail, in light of the progressive use and proliferation of ICT applications, the immediate demise of the traditional form of arbitration and the treatment of any form of arbitral proceedings with an ICT component as e-arbitration, which is clearly questionable.

It is submitted that the role technology plays with respect to ODR varies according to the degree of utilisation of modern technological tools and software applications, and the balance between the human factor and the electronic element in the process. On a sliding scale analysis – and according to the role technology plays in the process – ODR schemes could be grouped into three categories: (a) Technology-assisted ODR mechanisms, where the role of technology is restricted to the provision of an adequate and secure medium of communication and information exchange; (b) Technology-based ODR mechanisms where a fully-fledged application of cutting-edge technology is utilised to resolve disputes; and (c) Technology-facilitated online dispute prevention ('ODP') guarantees, which help reduce the risk of potential e-disputes and incontrovertibly enhances trust and security in e-business.¹¹

That said, e-arbitration would normally fall within category (a) since the world has not evolved to a stage where the human factor in arbitration, essentially represented in the human arbitrator, is excluded. However, the sheer exchange of electronic communications or submissions, or the simple use of teleconferencing or videoconferencing for an arbitration hearing would not suffice to characterize the process as e-arbitration. These are clear cases of utilization of ICTs in arbitral proceedings.

On such account, e-arbitration, *strictu sensu*, would mean the integration of ICTs into arbitral proceedings to the extent that the latter are conducted wholly or substantially online. This would include filings, submissions, hearings, and awards being made or rendered online. Nevertheless, since such idealistic perception of e-arbitration is not universally shared, it would suffice to state that many institutions and ODR providers attempt to integrate ICTs into arbitral proceedings, with varying degrees, in an attempt to stigmatize the process as an expeditious, cost-effective, and efficient e-arbitration scheme.

In a nutshell, whilst the theory and practice of e-arbitration are not perfectly aligned, the present *status quo* mandates due consideration of the diverse 'deemed e-arbitration

¹¹ Abdel Wahab (2004), pp.167-168.

initiatives' whilst maintaining a firm understanding of e-arbitration as a scheme that entails conducting arbitral proceedings wholly or substantially online.

If compared to traditional offline arbitration, e-arbitration is considered to offer numerous advantages. Firstly, e-arbitration is generally a swift procedure. Secondly, it is much more cost-effective. Thirdly, it offers round the clock accessibility and availability. Fourthly, it offers a more efficient case management. Fifthly, it is suitable for both small claims and highly complex and high value disputes.

Nonetheless, e-arbitration raises a number of concerns, as it is often perceived that the adequate and well-established regulatory framework that governs offline arbitration is lagging behind with respect to e-arbitration. This could be due to some intertwined technical and legal obstacles that may impair the accelerated development, and in some cases the success, of e-arbitration as a major ODR scheme.

e-arbitration related concerns are generally divided into technical and legal concerns. The technical concerns necessarily pertain to technical standards and compatibility of systems, variation in the parties' technical abilities and expertise, security and confidentiality of arbitral proceedings and communications, ability to organize and conduct hearings online, and data integrity and authentication. On a different note, the legal concerns could be grouped into three categories: (a) arbitration agreement related challenges; (b) arbitral proceedings related challenges; and (c) arbitral awards related challenges.

Whilst the technical concerns or challenges are not exclusive to e-arbitration, but necessarily extend to all ODR schemes, they are of paramount importance in the context of arbitral proceedings owing to the legal and adjudicatory nature of such proceedings, which are normally subject to strict procedural norms that are needed to protect the integrity of the proceedings at large to avert subsequent challenge to arbitral awards.

In any event, owing to the integration of ICTs into arbitration in e-arbitral proceedings, the legal and technical challenges are indeed intertwined to the extent that each group of legal challenges scrutinized in the following pages shall include analysis of technology related issues.

Prior to engaging in an analysis of such challenges, it seems in order to determine the scope thereof, as this Chapter is not intended to address traditional challenges and issues pertinent to offline arbitral proceedings but rather aims at addressing those important challenges that are exclusively pertinent to e-arbitration.

2 E-ARBITRATION AGREEMENTS

The current legal framework for e-arbitration is provided by multiple layers of soft and hard law regulatory instruments, consisting mainly of international conventions and model

laws.¹² Moreover, many national arbitration laws and institutional rules do not exclude e-arbitration. In fact, some institutional rules provide for expedited online proceedings such as the AAA, the CIArb, the ICC, the CIETAC, the WIPO, the Czech Arbitration Court, and the HKIAC.

With respect to arbitration agreements, the challenge to the proliferation of e-arbitration would be the writing requirement and whether such requirement, for jurisdictions strictly adhering thereto, may be fulfilled electronically through electronic writing and signatures.

2.1 *The 'writing' requirement and the digital age: the proliferation of e-arbitration agreements*

Hitherto, the prevailing principle in arbitration law and practice is that an arbitration agreement needs to be agreed in 'writing'. National laws differ with respect to the characterization of such requirement. Whilst some laws consider 'writing' a formality,¹³ others consider 'writing' for evidentiary purposes.¹⁴ Nevertheless, there is an increasingly endorsed trend to dispense with the 'writing' requirement, especially in the context of international commercial arbitration.¹⁵ However, since the 'writing' requirement continues to pose certain challenges regarding the essence of such requirement and whether it includes e-writing or not, it seems necessary to shed light on the scope of such requirement in reference to the landmark international arbitration instruments, especially the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958) ('NYC') and the UNCITRAL Model Law on International Commercial Arbitration (1985 as amended in 2006) ('ML').¹⁶

At the outset, it is worth noting that Article (II) of the NYC and Article 7(2) of the ML respectively read as follows:

12 Whilst such regulatory instruments primarily pertain to traditional offline arbitration, the scope and wording of such instruments do not exclude online proceedings. See for example, the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958), the ML, the UNCITRAL Arbitration Rules (1976 as amended in 2010), and the UN Convention on the Use of Electronic Communications in International Contracts (2005), which states in Article (20) that it applies to the 1958 New York Convention.

13 See for example Article (10.2) of the Egyptian Arbitration Law No.27 of 1994.

14 See for example, Section (5.2) of the English Arbitration Act (1996) and Article (178) of the Swiss Private International Law (1987).

15 See for example Article (1507) of the French Code of Civil and Commercial Procedures, which was amended by virtue of the 13 January 2011 Decree No.48 for the reform of Arbitration, which has entered into force on 1 May 2011. However, French Law distinguished between domestic and international arbitration. Whilst the former necessitates the existence of an agreement in writing, as per Article (1443) of the French Code of Civil and Commercial Procedures, the latter is no longer subject to any formal requirement, as per Article (1507) of the said Law.

16 Owing to the fact that these two instruments impact national laws, reference thereto seems indispensable, especially that the NYC currently has 146 member States, and the ML has inspired national laws in more than 45 States and territories.

‘(1) Each Contracting State shall recognize an agreement in writing under which the parties undertake to submit to arbitration all or any differences which have arisen or which may arise between them in respect of a defined legal relationship.

(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 [...]’¹⁷

And

‘The arbitration agreement shall be in writing’,¹⁸

And

‘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.’^{19,20}

A glance at the above mentioned provisions reveals that whilst the 2006 amendment of the ML has explicitly given ‘e-writing’ the same weight of paper-based writing in so far as the e-communication provided an authentic record of the parties’ agreement to arbitrate that is incontrovertibly attributable to parties, the NYC itself has not provided guidance on the scope of the ‘writing requirement’.

This is quite understandable since the ML was amended in 2006, when the technological advancement and evolution of ICT applications has become a manifest and incontrovertible reality. The wording of Article (7) of the ML also accounts for future technological developments in so far as the e-communication would provide an authentic record of the agreement.

¹⁷ Article (II) of the NYC.

¹⁸ Article 7(2) of the ML [Option 1 for Article (7)].

¹⁹ Article 7(4) of the ML [Option 1 for Article (7)].

²⁰ Option 2 for Article (7) of the ML as adopted by the UN in 2006 succinctly states: “Arbitration agreement” is an agreement by the parties to submit to arbitration all or certain disputes which have arisen or which may arise between them in respect of a defined legal relationship, whether contractual or not.’ It is manifest that such version excludes any reference to the form of the arbitration agreement or the writing requirement.

On a different note, the NYC is quite old since it was concluded in 1958; at a time when ICT had not yet realized its potential and fulfilled its destiny.²¹ That is why, in 2006, the UNCITRAL issued a recommendation and guidance note on the interpretation of Article (II) of the NYC. The recommendation encourages member States to broadly construe Article (II) since the circumstances listed under paragraph (2) of the said Article are non-exhaustive, and enable parties to invoke Article (VII) to allow any interested party to avail itself of rights it may have, under the law or treaties of the country where an arbitration agreement is sought to be relied upon, to seek recognition of the validity of such an arbitration agreement.²² This necessarily entails that the 'writing' requirement should be broadly construed to encompass e-writing, especially if the relevant national law recognizes e-communications, e-documents, and e-signatures.

In essence, the UN is incentivizing States to give legal effect to e-writing, especially if their national laws provide for recognition and regulation of e-communications, whether in the form of e-commerce, e-signatures, or e-evidence laws.

In essence, such broad interpretation of the 'writing' requirement, which is consistent with international instruments and arbitration practice, is directly influenced by two factors: (i) the State's perception of arbitration as a general norm or an exception,²³ and (ii) the State's recognition of e-communications, e-documents, and e-signatures.²⁴

That said, the validity and recognition of e-arbitration agreements merit due consideration in light of the applicable national laws that should be construed in light of the governing and inspiring international instruments.

For example, Article (1316.1) of the French Civil Code, introduced by the Law of 13 May 2000 relating to E-Evidence (*Loi sur la preuve électronique*), states that 'writing'

21 In 1958, communications were conducted through letters and telegrams. From a technical point of view, it is difficult to see much difference between not only telegram and e-mail, but also telex, facsimile, and e-mail. For each technology, a message is converted to a digital format, then transmitted over a telecommunications network, and finally converted again to a human-readable form. See R. Hill, 'Online Arbitration: Issues and Solutions', (1999) 15 *Arbitration International*, p. 199. Available at <www.umass.edu/dispute/hill.htm>.

22 Article (VII.1) of the NYC states: 'The provisions of the present Convention shall not affect the validity of multilateral or bilateral agreements concerning the recognition and enforcement of arbitral awards entered into by the Contracting States nor deprive any interested party of any right he may have to avail himself of an arbitral award in the manner and to the extent allowed by the law or the treaties of the country where such award is sought to be relied upon.'

23 States that consider arbitration an 'exception' to courts' general jurisdiction would likely construe such exception narrowly, which would challenge the validity and weight of e-agreements. However, if States consider arbitration the 'standard scheme/norm' for B2B, or possibly B2C, disputes they would be inclined to recognize and broadly construe the writing requirement to encompass e-agreements in so far as they provide a credible record and are authentic.

24 There is a direct relationship between the regulation and recognition of e-communications/documents/signatures and the broad interpretation of the 'writing' requirement in the context of arbitration agreements.

includes the use of new technologies for the conclusion of an agreement.²⁵ Moreover, Article (1316.3) states that ‘an electronic-based document has the same probative value as a paper-based document’.

Accordingly, the writing requirement enshrined in Article (1443) of the New French Code of Civil Procedures governing the form of domestic arbitration agreements should be construed in light of Article 1316 paragraphs (1) and (3) of the Civil Code.²⁶

The same principles should be applicable to the interpretation of the ‘writing’ requirement, which is enshrined in Article (10.2) of the Egyptian Arbitration Law, especially upon the enactment of the E-Signatures Law No.15 of 2004, which has given e-communications/documents/signatures the same probative value as paper-based documents.²⁷

In England, the English Arbitration Act (1996) defines the ‘writing’ requirement enshrined in Section 5(6) as inclusive of ‘being recorded by electronic means’.

In the USA, Article 6(a) of the Federal Uniform Arbitration Act refers to ‘an [arbitration] agreement contained in a record’. As per the Act the word ‘record’ means ‘information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form’.

In Germany, Article 1031(5) of the German Code of Civil Procedure explicitly states that the ‘written’ form shall include ‘electronic’ form pursuant to Section 126(a) of the German Civil Code.

The above are just examples of the tidal wave sweeping across the world and providing for the recognition of e-communications/documents/signatures, which certainly impacts the recognition of e-arbitration agreements in so far as certain conditions are fulfilled.²⁸

In the context of e-arbitration, the importance of such conditions is further amplified and emphasized by confidentiality, privacy, and security concerns. The risks associated with the use of ICT applications and new technologies can be mitigated and minimized through encryption technologies, firewalls and passwords, as well as privacy enhancing technologies (‘PETs’) to ensure that information about parties remains confidential and secure.

25 Article (1316.1) states: ‘A document in electronic form is admissible as evidence in the same manner as a paper-based document, provided that the person from whom it proceeds can be duly identified and that it be established and stored in conditions calculated to secure its integrity’. See the English version of the French Civil Code. Available at <www.legifrance.gouv.fr/html/codes_traduits/code_civil_textA.htm>, last accessed on 20 June 2011.

26 As previously mentioned, Article (1507) of the French Code of Civil and Commercial Procedures, as amended by virtue of the Decree No. 48 of 2011 for the reform of Arbitration, which entered into force on 1 May 2011, has dispensed with any formal requirement, including ‘writing’, for the conclusion of arbitration agreements in the context of international arbitration.

27 For an overview of the relevant provisions of this Law, see Chapter 24, ‘ODR in Africa’ in the present book.

28 These conditions are generally: (a) ability to retrieve and provide a sustainable record of the communication or agreement; (b) possibility of identifying the person(s) associated with such communication or agreement; and (c) availability of adequate technologies that secure the integrity of the communication or agreement.

2.2 *Functional Equivalence and e-Arbitration Agreements – the Click Wrap Saga*

It is worth noting that e-arbitration agreements need not be contained in one signed document, but could be included in exchange communications and data messages serving as offer and acceptance, or even incorporated in an e-document by reference to an already concluded e-agreement. Furthermore, it is now an online common practice that a website may contain an offer, including an arbitration clause, and invites a user to accept it by simple clicking on the ‘I accept’ or ‘Yes’ button. Most often the user has to fill out a standard form agreement or complete a few blank fields, whereas an arbitration clause remains ‘buried’ among numerous other general terms and conditions.

Although the information on the website can be structured and presented in many different ways, there are typically some facilities for confirmation and communication of user acceptance. The general principle is that in so far as the acts undertaken to conclude and confirm the conclusion of an e-arbitration agreement constitute a functional equivalence of a standard arbitration agreement, then an e-arbitration agreement is final and binding. Courts in certain jurisdictions have accepted the above mentioned reasoning. For example, US courts tend to hold that ‘arbitration clauses in point and click electronic contracts are enforceable [notwithstanding the FAA (9 U.S.C. 4) requirement of a “written” agreement]’.²⁹

Nevertheless, two specific issues merit due consideration in this context, these are: e-arbitration agreements in consumer contracts (B2C), and Automated Agent E-Agreements (‘AAEA’).³⁰

2.1.1 **e-Arbitration Agreements in Consumer Disputes (B2C)**

Whilst e-arbitration in business-to-business (‘B2B’) disputes does not generally pose problems with respect to issues of arbitrability, e-arbitration in B2C disputes may be quite challenging due to the inherent power disparity between consumers and businesses, which casts doubts on consumers’ informed consent.

Consumers very often engage in e-commerce transactions, hence bringing into question the credibility of an arbitration clause incorporated into an e-agreement for the provision of goods or services to consumers. Many arbitration laws limit or reject arbitration in B2C disputes, where consumers are not given the opportunity to negotiate the terms of the agreement. In the virtual world, this concern is further amplified, as consumers could be

29 See *Lieschke et al., v. Realnetworks, Inc.*, 2000 WL 198424 (N.D.Ill. 2-11-2000) and *In re: Realnetworks, Inc., Privacy Litigation*, 2000 WL 631341, F.Supp.2d (No. 00-C-1366) (N.D.Ill. 5-8-2000) Available at <www.technoinformationlaw.net>, last accessed on 3 November 2011).

30 Automated Agents are computer programs used to independently initiate an action or respond to electronic documents or messages without intervention or review by an individual at the time of action or response.

bound by an e-agreement whose terms are generally non-negotiable and is just one simple click away. Thus, it is necessary to ascertain the credibility and validity of an e-arbitration clause.

It is worth noting that international instruments such as the 1958 New York and 1961 European Conventions do not provide any guidance with respect to the non-arbitrability of certain disputes and in fact relegate the matter to the applicable national law(s), which are normally the *lex loci arbitri* and the *lex loci executionis*. On such account, national laws indeed become relevant.

Under national laws, there is no uniform rule regarding the arbitrability of consumer disputes. For example, England does not exclude arbitration by means of a contractual clause in consumer contracts. Under the 1996 English Arbitration Act, ss. 89-91 deals with consumer arbitration agreements and provide for the application of the Unfair Terms in Consumer Contracts Regulations ('UTCCR').³¹ Section 89(3) of the Act states that rules dealing with consumer arbitration agreements represent overriding mandatory norms and apply regardless of the law applicable to the arbitration agreement.

In the United States, consumer arbitration clauses are held to be enforceable unless they are procedurally unconscionable (which requires a finding of unfairness or lack of notice) or substantially unconscionable (they lead to an unreasonably high expense of arbitration fees imposing a burden on the consumer).³² With respect to e-contracts concluded with consumers in cross border e-commerce, they are likely to be effective according to federal US law,³³ if prior to the electronic signature or the conclusion of the contract the consumer consented to the use of such means of electronic commerce.³⁴

On the EU level, consumer arbitration is to be admissible according to the European Parliament Resolution on the Promotion of Recourse to Arbitration for the Resolution of Legal Conflicts (1994),³⁵ Commission Recommendation on the Principles Applicable to the Bodies Responsible for Settlement of Consumer Disputes,³⁶ and the Council Directive

31 The Unfair Terms in Consumer Contracts Regulations (1994) S.I. 1994/3159 were replaced by the Unfair Terms in Consumer Contracts Regulations (1999) S.I. 1999/2083 to reflect the implementation of the Council Directive 93/13/EEC on unfair terms in consumer contracts OJ L95, 21/4/93 at 29. Section 91(1) of the English Arbitration Act states: 'A term which constitutes an arbitration agreement is unfair for the purposes of the Regulations so far as it relates to a claim for a pecuniary remedy which does not exceed the amount specified by order for the purposes of this section.'

32 See *Hillv. Gateway 2000*, No. 96-3294, 105 F.3d 1147 (7th Cir. 1997), cert. Denied, 118 S. Ct. 47 (1997) and *Day Brower v. Gateway 2000*, 246 A.2d 246 (N.Y. App. 1998).

33 Electronic Signatures in Global and National Commerce Act (2000).

34 Section 101(c)(1)(A) states: 'Notwithstanding subsection (a), if a statute, regulation or other rule of law requires that information relating to a transaction or transactions in or affecting interstate or foreign commerce be provided or made available to a consumer in writing, the use of an electronic record to provide or make available (whichever is required) such information satisfies the requirement that such information be in writing if - (A) the consumer has affirmatively consented to such use and has not withdrawn such consent.'

35 Resolution of 25/07/94, EU OJ C 205/519, 1995.

36 Commission Recommendation 98/257/EC of 30 March 1998, OJ 115/31 of 17/04/98.

on Unfair Terms in Consumer Contracts (1993).³⁷ According to the latter, it should be noted that in Schedule 2, Regulation 5(5), which provides an indicative and non-exhaustive list of terms which may be regarded as unfair, (q) deals with unfair dispute resolution clauses and consider terms that have the objective of excluding or hindering the consumer's right to take legal action or exercise any other legal remedy, particularly by requiring the consumer to take disputes exclusively to arbitration not covered by legal provisions, unduly restricting the evidence available to the consumer or imposing on the latter a burden of proof which, according to the applicable law, should lie with another party to the contract to be unfair.

There seems to be no consensus on the interpretation of the wording of letter (q) and whether the mere exclusivity of an arbitration clause may be considered unfair. Although the English Arbitration Act has reduced the ambiguity surrounding the interpretation of (q) by s. 91, it is still uncertain whether the courts in other European States will enforce exclusive arbitration clauses in consumer contracts.³⁸

Thus, in order to dispense with potential legal challenge with respect to e-arbitration in consumer disputes, it seems advisable to consider the relevant applicable national law(s). However, it should be noted that if the exclusive e-arbitration agreement is separately negotiated and/or was agreed upon after the dispute has arisen; it should principally be enforceable and, if subject to the EU Directive on Unfair Contract Terms, Regulation (5) thereof would apply.³⁹

That said, there exists a number of safe harbour principles or precautionary measures that aim at supporting the reasonableness, fairness, validity, and enforceability of such e-clauses, these are: (i) the consumer should have the opportunity to review e-clauses and they should be easily visible and accessible; (ii) the consumer should be required to perform some specific act of assent to the terms; (iii) the consumer should be notified that he/she is entering into a binding e-agreement that is equivalent and just as binding as paper and signature based documents; (iv) there should be adequate and clear notice (in block letters or red colour *etc...*) to such specific e-arbitration agreement; (v) ensure that the consumer cannot obtain the product or service without an explicit consent to these e-clauses,⁴⁰ and

37 Council Directive 93/13/EEC OJ L95, 21/4/93, p. 29.

38 It should be noted that unfairness should not be assessed on the sole basis of exclusivity of the arbitration clause. Regulation 6(1) ascertains this principle by stating: 'Without prejudice to regulation 12, the unfairness of a contractual term shall be assessed, *taking into account the nature of the goods or services for which the contract was concluded and by referring, at the time of conclusion of the contract, to all the circumstances attending the conclusion of the contract and to all the other terms of the contract or of another contract on which it is dependent.*' (Emphasis added).

39 Regulation 5 states: 'A contractual term which has not been individually negotiated shall be regarded as *unfair* if, contrary to the requirement of good faith, it causes a significant imbalance in the parties' rights and obligations arising under the contract, to the detriment of the consumer.' (Emphasis added).

40 In *Specht v. Netscape Communications Corp.*, 2001 WL 755396, 150 F. Supp. 2d 585 (S.D.N.Y., 5 July 2001) a US Court decided that general conditions containing an arbitral clause could not be invoked against a user

it would be even better to seek an explicit additional and separate consent to such e-arbitration agreement; and (vi) it may be useful to use digital signature technologies and encryption to authenticate an addressee's consent, or maintain additional information which the Internet service provider can capture, including the 'IP address' of the addressee and any other relevant information.

2.2.2 e-Arbitration Agreements in AAEA

With respect to AAEA may be quite problematic in the context of e-arbitration agreements since no direct human intervention in the conclusion of the e-arbitration agreement occurs, which threatens the validity of the parties' consent to arbitration. However, Article (12) of the UNCITRAL Convention on the Use of Electronic Communications in International Contracts (2005) recognizes AAEA by stating that they should not be denied validity or enforceability on the sole premise that no human intervention existed.⁴¹

In so far as two agents engage in operations that signify agreement, or an individual knowingly interacts with an electronic agent an agreement is duly and validly formed. Whilst national courts have not yet developed case law and precedents on the validity of such e-agreements, it is worth noting the attribution of actions of automated message systems to a person or legal entity is based on the paradigm that an automated message system is capable of performing only within the technical structures of its preset programming. However, it is conceivable that future technological applications and generations of automated information systems may be able to act autonomously through developments in artificial intelligence ('AI') and modify the instructions in its own programs and possibly devise new instructions without direct or indirect human intervention.⁴²

If such automated agents become self conscious and autonomous, it would be quite challenging to ascertain the validity of an e-arbitration agreements concluded on behalf of a certain user since such forms of AI would be autonomous and severed from specific users.

Having discussed the crucial issues pertaining to e-arbitration agreements, the following section shall focus on e-arbitral proceedings.

who had downloaded a piece of software. In this instance, the user was able to download the software directly by clicking on the 'download' link, without having to click on the 'I accept' button. In summary, a click does not signify acceptance unless it is linked explicitly to the general conditions. A click that simply starts the download without any other reference may therefore be considered inoperative.

41 Article (12) states: 'A contract formed by the interaction of an automated message system and a natural person, or by the interaction of automated message systems, shall not be denied validity or enforceability on the sole ground that no natural person reviewed or intervened in each of the individual actions carried out by the automated message systems or the resulting contract.'

42 United Nations, United Nations Convention on the Use of Electronic Communications in International Contracts, Explanatory Note by the UNCITRAL Secretariat (2007), para. 211, p. 69. Available at: <www.uncitral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf>, last accessed 3 November 2011.

3 E-ARBITRATION PROCEEDINGS

Generally, arbitral proceedings refer to the process and the manner in which arbitration is conducted by an arbitral tribunal and/or administered by an institution (if the arbitration is institutional). E-proceedings normally commence by filing an e-request for arbitration and would involve e-hearings (audio and/or video conferencing), e-submissions and e-production of documents/evidence, e-deliberations, and/or e-communications (whether inter-party, inter-tribunal, and/or party-tribunal), and would normally end by an e-award.

It is unequivocal that arbitral proceedings wholly or substantially conducted online are more cost-effective if compared to traditional offline arbitral proceedings involving face-to-face hearings. However, the use of technology in arbitral proceedings in a manner that would render the process wholly or substantially conducted online may be a double-edged sword, as technology, which is intended to boost efficiency and incentivize conduciveness, it may nevertheless be challenging and potentially impeding or inefficient if no adequate measures and applications are utilized to safeguard the integrity, confidentiality, and security of e-proceedings.

3.1 *e-Communications, Security, and Confidentiality*

ICTs are generally expected to be well integrated into the e-arbitration process. Accordingly, e-communications form an essentially integral part of the proceedings starting from e-filing, exchanged communications, e-hearing, e-deliberations until the rendering of e-awards. In all such processes and communications security, confidentiality, authenticity, and procedural integrity remain a prime directive and an absolute requirement that guarantees the success and continuation of the proceedings in an efficient manner.

At the outset, it is worth noting that Confidentiality aims to foster trust by restricting the dissemination of certain information. It is a well-established principle in arbitration, where it represents a key to the success of the process.⁴³ Accordingly, it is generally hailed as a strategic advantage of international commercial arbitration,⁴⁴ although some scholars have argued that there is no general duty of confidentiality as such in international arbitration.⁴⁵ However, practice reveals that confidentiality is of paramount importance to the parties and many institutional rules provide for a general duty of confidentiality.⁴⁶

43 EC, *Commission green paper on alternative dispute resolution in civil and commercial law*, 19 April 2002, <http://europa.eu.int/eur-lex/en/com/gpr/2002/com2002_0196en01.pdf> at 28

44 L. Trakman, 'Confidentiality in International Commercial Arbitration' (2002) 18 *Arbitration International* 1 at p. 5.

45 J. Paulsson & N. Rawding, 'The Trouble with Confidentiality' (1995) 11 *Arbitration International* p. 303.

46 The most comprehensive clause on confidentiality is found in the World Intellectual Property Organisation (WIPO) Arbitration Rules. This is probably due to the fact that WIPO is particularly involved in technology

Confidentiality concerns all stakeholders in e-proceedings, these include: e-arbitration providers, arbitrators, and the parties, as confidentiality in the electronic medium is quite inseparable from security. In any online medium, communications and data may be intercepted, monitored, altered, accessed, downloaded or even destroyed. However, such risks should not be exaggerated, as paper-based documents and traditional communications are not entirely risk-free, as they may be equally forged, altered, accessed, intercepted, or destroyed. Moreover, the risks posed by new technologies can be minimized through the use of encryption technologies, digital signatures, firewalls and passwords, as well as privacy enhancing technologies (PETs) to ensure that confidential information remains secure.⁴⁷ On such account, e-arbitration providers should use effective encryption technologies to ensure the confidentiality of the proceedings and the authenticity of any electronic communications to prevent unauthorized access to information.

The use of encryption technologies with respect to emails and web-based communications (such as Secure Multipurpose Internet Mail Exchange Protocol (S/MIME) and Pretty Good Privacy (PGP) for e-mails and Secure Sockets Layer technology (SSL) and Secure Hypertext Transfer Protocol (S-HTTP) for web-based communications) is central to the efficiency and integrity of the proceedings. The use of powerful cryptographic products that guarantee both privacy and authentication is indispensable. Even if the information is intercepted, it remains completely incomprehensible.

Regarding SSL and S-HTTP, whilst the former creates a secure connection between a client and a server and has the added feature of being able to encrypt all data passed between the client and the server, including data at the Internet Protocol (IP) level, the latter only encrypts HTTP-level messages and is designed to transmit individual messages securely. Thus, both could be seen as complementary rather than competing technologies.

In essence, encryption technologies may also be used to secure electronic documents. They prevent unauthorized access and manipulation. This not only includes use of digital

and intellectual property disputes, which usually involve trade secrets, patents and copyright materials calling for a high degree of confidentiality. Articles 73-76 of the WIPO Arbitration Rules provide that the existence of an arbitration, the documents and materials produced in the arbitration, including witness testimonials, and the awards shall remain confidential. This general and comprehensive duty of confidentiality binds the parties, their witnesses, the arbitrators and the WIPO Arbitration and Mediation Centre. Only in exceptional circumstances, as when ordered by a court, required by law, agreed by the parties or when the information comes within the public domain will a party be released from its duty of confidentiality and then only within the necessary limits.

⁴⁷ The OECD has prepared an action plan aimed at securing effective privacy protection online and building trust in business-to-consumer electronic commerce by encouraging the adoption of privacy policies and the use of PETs, whose prime purpose is to help implement privacy principles. See OECD, *Privacy Online: Policy and Practical Guidance* (2003), <www1.oecd.org/publications/e-book/9303051E.PDF>.

signatures, complex multi-layer password applications, use of one-time password generating devices, but may also encompass the use of invisible digital watermarks,⁴⁸ and biometrics.⁴⁹

By and large, the diverse encryption techniques employed with respect to communications to ensure their integrity, security, and confidentiality necessarily extend to encompass e-hearings (whether audio or audio-visual conferencing) and e-deliberations amongst arbitrators.⁵⁰ The strength and quality of the signal and connection would depend on the: (a) infrastructure and technical connectivity; (b) compatibility issues; and (c) service availability. Such factors would certainly influence the possible use of audio or video conferencing when e-hearings include cross-examination of experts and witnesses and in cases of multi-party proceedings.⁵¹

From a purely practical stance, it is worth noting that as at 2011 the age of video-conferencing is still at its infancy worldwide including North America, where excellent broadband infrastructure, and state-of-the-art of communication media do not generally include use of video.⁵²

Most of ODR, including e-arbitration, service providers who have advertised use of video conferencing have by now either removed these references from their websites, or have become inactive to the extent that ODR providers offering videoconferencing such as the National Mediation Board are the exception.⁵³

3.2 *e-Due Process Requirements*

The fundamental requirements of due process should be observed in e-arbitral proceedings. Due process is essential to ensure the fairness and impartiality of decisions. Parties should be allowed to present their case on equal grounds, present evidence and counterclaims, and be notified of other party's submissions. However, prolonged time limitations for

48 Digital watermarking enables forged copies to be identified. A watermark is introduced throughout a document using an encryption algorithm – or computer instructions – based on a very large prime number. This large number is the key needed to retrieve a watermark. The algorithm selects certain sentences in a document and subtly changes their syntactic structure. See 'Purdue Team Develops Watermark To Protect Electronic Documents', *Science Daily*, 27 April 2001, <www.sciencedaily.com/releases/2001/04/010427071702.htm>.

49 T. Schultz, *Information Technology and Arbitration*, Kluwer Law International 2006, p. 141.

50 Hearings are not necessarily mandatory and in many cases e-proceedings could proceed on a documents only basis. In some institutions, such as the ICANN, the default rule is that proceedings are documents only. According to ICANN's Uniform Domain Name Dispute Resolution Policy Rules, Rule (13) dealing with In-Person Hearings states, 'There shall be no in-person hearings (including hearings by teleconference, video-conference, and web conference), unless the Panel determines, in its sole discretion and as an exceptional matter, that such a hearing is necessary for deciding the complaint'.

51 For a detailed analysis and checklist of technical issues and examples of video conferencing applications, see Schultz (2006), pp. 168-180.

52 See Chapter 19, 'ODR in North America'.

53 *Ibid.*

submissions and strict formal procedural rules are not needed in ODR in general and online arbitration in particular, as they will hinder swift decisions. In so far as the parties are treated equally and given equal opportunities to present their cases, fairness is achieved and due process is observed.⁵⁴

Associated with the due process requirements is the concern regarding the exclusive use of technology to conduct arbitral proceedings (such as communicating via emails, secure chat sessions, audio and video conferencing), and whether this could be impede due process. Taking into consideration the parties' freedom to opt for e-proceedings,⁵⁵ the parties' choice could either be explicit in their agreement or implicit by conducting the proceedings under the auspices of an ODR provider whose applicable rules and policy provides for the exclusive or non-exclusive usage of online technologies. Failing such choice, the arbitral tribunal may conduct e-proceedings, provided that this does not create a situation in which one party is unable to access some information.⁵⁶

Accordingly, e-arbitral proceedings should not be rejected save in cases where online proceedings substantially and adversely affect due process requirements by impeding a party's effective communication and participation, which will result in the creation a form of 'virtual inequality'.

3.3 *e-Management and e-Disclosure*

E-arbitral proceedings are generally expected to be paperless proceedings with submissions being fully, or substantially, made online. It may be worth noting that e-arbitration is so far institutional in nature, where service providers offer their platforms and online facilities for the administration and conduct of the proceedings. The institutional nature of e-arbitration may be due to the fact that the success and efficiency of the process requires the availability of adequate and powerful platform with enormous storage capacity and state-of-the-art secure communications system.

Some traditional and well established arbitral institutions have even developed special platforms and services for e-filing and e-management of arbitral proceedings such as the

⁵⁴ Impartiality, fairness, equality, and adversarial procedure as the constituent elements of due process are expressions of a fundamental universal human right to a fair trial sanctioned by Human Rights Conventions and Declarations, almost all national arbitration laws (see *e.g.* section 33 of the English Arbitration Act 1996), the ML (Article 18), and institutional arbitration rules offered by ADR and ODR providers. The New York Convention and the European Convention consider the non-observance of fairness and adversarial procedures in arbitration proceedings sufficient grounds for the annulment and non-enforceability of the award. (See Articles V (1)(b) and IX (1)(b) respectively).

⁵⁵ Hill (1999).

⁵⁶ For example, it would not be acceptable to impose the transmission of documents via CD-Rom if one party states that it does not have the facilities for reading CD-Roms. *Id.*

AAA WebFile,⁵⁷ the ICC NetCase,⁵⁸ and the CIETAC Online Dispute Resolution Centre,⁵⁹ which proved to be very successful. In any event, the movement towards global transformation to paperless proceedings seems prevailing and inevitable. To that effect, traditional as well as e-arbitral institutions must ensure the availability of well organized, secure, and efficient platforms that are able to host the diverse facets of arbitral proceedings.

Owing to the accelerated and progressive integration of technology in arbitral proceedings, and since arbitral proceedings may involve: (a) the submission of massive documents including documentary evidence, witness statements, and expert reports; (b) lengthy hearings with multi-participants, it became indispensable to develop some standards and best practices in managing e-proceedings. To that effect, several arbitral institutions have issued guidelines, reports, and protocols on the use of technology in arbitration and e-disclosure in arbitral proceedings.⁶⁰ These guidelines and protocols aim at the proper integration of technology in arbitral proceedings.

57 AAA WebFile offers fast, convenient online claim filing through our AAA WebFile service. In addition to filing claims, clients can make payments, perform online case management, access rules and procedures, electronically transfer documents, select Neutrals, use a case-customized message board and check the status of their case. See <<https://apps.adr.org/webfile/>>.

58 ICC NetCase was launched by the ICC in November 2005 as a service allowing arbitrations to be conducted in a secure online environment. NetCase enables all participants in arbitration to communicate through a secure website hosted by ICC. The service has been subject to periodic improvements so that NetCase enables searching for documents, ability to conduct full text searches in case documents posted on NetCase, irrespective of the format. Moreover, NetCase enables users to update information in real time, exchange views in a secure environment, instead of sending unsecure emails, and post very large documents and numerous documents in several file formats. See Schultz (2006), pp. 93-97.

59 CIETAC, as a well established dispute resolution provider, has pioneered in offering e-arbitration through its dedicated online dispute resolution centre. <www.cietacodr.org>. On 1 May 2009, the new Online Arbitration Rules ('Online Rules') of CIETAC came into effect. The Online Rules are aimed primarily at e-commerce disputes, without excluding the parties' ability to agree on including other types of disputes. To that effect, the CIETAC Online Dispute Resolution Centre was established to resolve internet domain name disputes and e-commerce disputes. The Online Rules state: (a) the default modes of submission/transmission to be used by the parties and the Secretariat are email, Electronic Data Interchange, facsimile etc (although other traditional modes such as the post and courier may be used depending on the circumstances of the case); (b) there are also provisions for deemed dates and times of receipt of electronically transmitted documents; (c) in relation to electronically produced, transmitted and stored evidence, Article (29) states that evidence's reliability is derived from the reliability of the methods in producing, storing, and authenticating the evidence, as well as in maintaining its integrity; (d) Article (15) states that CIETAC will use its reasonable endeavours to keep data communications secure and encrypted; (e) Article (32) states that the process is generally 'documents only', however Article (33) states that where an oral hearing is necessary, the default mode of hearing is by video conference or other electronic means of communication unless in-person hearings are warranted in light of the circumstances; and (f) Article (37) entitles the arbitral tribunal to engage in a online mediation process during the online arbitral proceedings if so requested by the parties. <www.cietac.org/index/rules/4760665e7716e27f001.cms>, last accessed 3 November 2011.

60 See for example the ICC Section on Information Technology, *Report on Special IT Requirements in International Arbitration*, Document 42/21-005 (2002); the CI Arb, *Protocol for E-Disclosure in Arbitration* (2008); the ICC Commission, *Report of the ICC Commission on Arbitration Task Force on the Production of Electronic Documents in International Arbitration: Techniques for Managing Electronic Document Production When it is Permitted or Required in International Arbitration*, (2011).

The guidelines and protocols normally address procedural issues pertaining to: the parties' ICT capacity, confidentiality and security protocols, document formatting, referencing system, pagination, categorization, customization for electronic search, pre-hearing arrangements and verification of technical compatibility and adherence to the agreed code of communications.

With respect to e-disclosure or production of documents, which is an area that is exceedingly gaining special attention many institutions such as the IBA, the ICDR-AAA, the CIArb, the CPR, and the ICC have issued guidelines and protocols that are exclusive to e-disclosure.

In 1999, the IBA issued its Rules on Taking of Evidence in International Commercial Arbitration,⁶¹ and such Rules were revised in 2010.⁶² From a purely technical stance, the IBA Rules are not exclusive to e-disclosure or e-production of documents. However, the term 'Document' is defined under the 1999 Rules and the new 2010 Rules to encompass electronic documents.⁶³ In the 2010 revised Rules, reference has been made under Article 3(3)(a)(ii) to 'Document maintained in electronic form', but no attempt to further define such term has been made.

In any event, the 2010 Rules addressed the scope and advisability of 'e-disclosure' (the request for production of electronic communications and electronically stored information such as e-mails, hyperlinked spreadsheets or information stored on mobile phones) and stated under Article 3(3)(a)(ii) that in the case of '*Documents maintained in electronic form*', the requesting party may, or the arbitral tribunal may order that it shall be required to, identify

specific files, search terms, individuals or other means of searching in an efficient and economical manner.

In 2008, the ICDR-AAA issued the 'Guidelines for Arbitrators Concerning Exchanges of Information', and whilst such Guidelines were equally not exclusive to e-disclosure, the Guidelines devoted section (4) to 'electronic documents'. Section (4) states that in case of e-documents, the party in possession thereof may make them available in the form most convenient and economical for it, unless the arbitral tribunal determines, on application and for good cause, that there is a compelling need for access to the documents in a different form. In any event, requests for e-documents should be narrowly focused and structured to make searching for them as economical as possible, and the tribunal may direct testing or other means of focusing and limiting any search.

61 <www.int-bar.org/images/downloads/iba%20rules%20on%20the%20taking%20of%20evidence.pdf>.

62 <www.ibanet.org/Publications/publications_IBA_guides_and_free_materials.aspx#takingevidence>.

63 The 1999 version defines 'Document' as 'a writing of any kind, whether recorded on paper, electronic means, audio or visual recordings or any other mechanical or electronic means of storing or recording information'. The 2010 revised Rules defines it in a similar, but not an identical way, as 'a writing, communication, picture, drawing, program or data of any kind, whether recorded or maintained on paper or by electronic, audio, visual or any other means'.

Similarly, in 2008, the CIArb issued their 'Protocol for E-Disclosure in Arbitration'.⁶⁴ This Protocol was indeed exclusive to e-disclosure and was incentivized by achieving early consideration of e-disclosure in those cases in which early consideration is necessary and appropriate for the avoidance of unnecessary cost and delay. A request for e-disclosure must be narrow, clearly descriptive, and reasonably justified to prove the relevance and materiality of the requested e-document.⁶⁵ The primary source of disclosure of electronic documents should be reasonably accessible data; namely, active data, near-line data or offline data on disks. In the absence of particular justification it will normally not be appropriate to order the restoration of back-up tapes; erased, damaged or fragmented data; archived data or data routinely deleted in the normal course of business operations.⁶⁶

The Protocol specifically states that production of e-documents shall, subject to the tribunal's final determination in the absence of agreement, normally be made in the format in which the information is ordinarily maintained or in a reasonably usable form.⁶⁷ The Protocol also refers to the production of 'metadata'⁶⁸ and states that a party requesting disclosure of metadata in respect of e-documents shall be required to demonstrate that the relevance and materiality of the requested metadata outweigh the costs and burdens of producing same.⁶⁹

Furthermore, in 2008 the CPR issued their 'Protocol on Disclosure of Documents and Presentation of Witnesses'.⁷⁰ The Protocol, as evident from its title, is not exclusive to e-disclosure but provides useful rules on production of e-documents, which are consistent with the above mentioned rules. Section 1(d)(1) of the Protocol states that emails or electronically created documents found in the active or archived files of key witnesses or in shared drives used in connection with the matter at issue are more readily accessible and less burdensome to produce when sought pursuant to reasonably specific requests. Moreover, the production of e-documents should be granted only upon extraordinary need, and that requests for back-up tapes, or fragmented or deleted files should only be granted if the requesting party can demonstrate a reasonable likelihood that files were deliberately destroyed or altered by a party in anticipation of litigation or arbitration and outside of that party's document-retention policies operated in good faith.

64 <www.ciarb.org/information-and-resources/E-Disclosure%20in%20Arbitration.pdf>.

65 Paragraphs (4) and (6) of the Protocol.

66 Paragraph (7) of the Protocol.

67 Paragraph 9(1) of the Protocol.

68 Metadata describes other data. It provides information about a certain item's content. In other words, it is data about data content or content about content, and by describing the contents and context of data files the quality of the original data/files is greatly increased.

69 Paragraph 9(2) of the Protocol.

70 <<http://cpradr.org/Resources/ALLCPRArticles/tabid/265/ID/614/CPR-Protocol-on-Disclosure-of-Documents-and-Presentation-of-Witnesses-in-Commercial-Arbitration.aspx>>.

Under Section 1(d)(3) it is emphasized that issues regarding the scope of the parties' obligation to preserve documents for potential disclosure in the arbitration should be dealt with at an early scheduling conference, or as soon as possible thereafter. Under Schedule 2 Mode (B) it is stated that e-disclosure relates to information from primary storage facilities only. No information required to be disclosed from back up servers or back up tapes, and no disclosure of information from cell phones, PDAs, voicemails, etc. e-disclosure relates to information reasonably accessible from active data.

Most recently, in 2011, the ICC Commission issued its Report on the 'Production of Electronic Documents in International Arbitration'. This comprehensive Report fundamentally states that there is no automatic duty to disclose documents, or right to request or obtain document production, in international arbitration, and the advent of e-documents should not lead to any expansion of the traditional and prevailing approach to document production. Thus, requests for the production of e-documents should remain limited, tailored to the specific circumstances of the case and subject to the general document production principles of specificity, relevance, materiality and proportionality.

In essence, the ICC Report builds on the prevailing general principles applicable to production of documents, especially e-documents and endorses the applicable IBA Rules governing taking of evidence in arbitration. To that effect, the ICC Report ascertains that the production of electronic documents, subject to the prevailing principles of specificity, relevance, materiality and proportionality, should not jeopardize the efficient and cost-effective use of arbitration.

The Report then addresses the characteristics of e-documents,⁷¹ and the diverse techniques to efficient management of e-disclosure and e-documents.⁷² On such account the Report confirms: (a) the necessity of addressing e-disclosure as early stages of the proceedings, (b) aversion of fishing expeditions and confining the e-disclosure process to relevant, specific, material, and proportional documents, (c) ensuring that e-documents are produced in the most expeditious, cost-effective and efficient form appropriate in the circumstances, (d) due care in dealing and requesting the production of metadata, (e) due consideration of costs for e-disclosure, (f) avoidance of privileged and confidential e-documents, and (g) acknowledging that whilst a party may wish, for its own benefit, to take steps to preserve relevant evidence, it is under no automatic duty to do so, and a tribunal should not consider imposing such a duty absent a specific and warranted reason to do so, such as credible allegations of fraud, forgery or deliberate tampering with evidence.

71 These characteristics are: (a) increased volume, (b) dispersal, (c) durability and fragility, (d) use of hardware and software, (e) metadata, and (f) electronic search and review tools.

72 Efficient management involves: (a) limited scope of production, (b) need for IT expertise, (c) cost allocation, (d) form of production, (e) privileged content, and (f) preservation and inferences in case of failure to produce required e-documents.

By and large, the above confirms that e-proceedings warrant efficient management of evidence and communications, and that e-disclosure or production of e-documents should remain exceptional in nature and subject to the constraints of materiality, specificity, relevance, and proportionality taking into consideration the time and cost associated therewith and the overall pertinence to the issues in dispute. This clearly reflects the challenges posed by integrating ICT in arbitral proceedings and the dire need for efficient and cost effective techniques to adequately address such issues.

3.4 *e-Arbitrator and Artificial Intelligence*

Another aspect of e-arbitration that pertains to arbitral proceedings is the nature of e-arbitrators and the potential use of ICTs and AI to substitute the human factor.

At the outset, it is generally envisaged that human intervention in traditional dispute resolution processes seems indispensable. However, ODR has spawned its own culture, techniques, and processes to the extent that some ODR schemes are purely ICT based and fully automated. Whilst this has been well addressed under diverse chapters throughout this Book, an important question in the context of e-arbitration remains unanswered and indeed warranted, that is: can e-arbitration be fully automated? Can the proceedings be conducted by non-human neutrals? Can AI and non-human intelligence offer a substitute to human arbitrators?

As anomalous and unreasonable this may seem, these are indeed questions that merit discussion, especially that the near future may hold prospects for such non-human based e-arbitral proceedings.

In principle, it is worth noting that almost all existing rules and laws envisage arbitrators as humans and requires them to possess the necessary capacity, impartiality, independence, and ability to decide a case.

The most recent French Law on Arbitration issued by virtue of Decree No. 2011-48 of 13 January 2011 explicitly endorses such requirement and universal presumption that an arbitrator cannot be but a human. Article (1450) of the French Arbitration Law states ‘only a natural person having full capacity to exercise his or her rights may act as an arbitrator’. This is also confirmed under Article (16) of the Egyptian Arbitration Law No. 27 of 1994, which provides that an arbitrator cannot be a minor, bankrupt, or subject to any incapacity. Similarly, the English Arbitration Act 1996 irrefutably presupposes that an arbitrator is inherently and by default a human, as Article (26) deals with the event of the arbitrator’s death.

Whilst such requirement, as illustrated under English, French, and Egyptian laws, is certainly shared at a global level by other States,⁷³ the issue of whether an arbitrator can be an artificial being or non-human based intelligence certainly warrants careful consideration.

It is submitted that arbitrators are irrefutably essential to the arbitration process and that human intervention is pivotal to arbitration and its success. However, one needs to draw a distinction between rational and logical assessment which natural and artificial intelligence are capable of achieving, and the socio-humane print, which only humans are capable of independently demonstrating.

In arbitration, whether traditional or electronic, fact-finding, independent assessment, and critical analysis are essential skills for arbitrators. Such complex and intertwined processes may, in future years, be undertaken by advanced forms of artificial intelligence, if such forms are capable of adapting to diverse variables and exhibiting independence. It is 'independent assessment' that may be subject to rigorous challenges, especially that AI applications are essentially programmed by humans, even if such programming takes place at a basic level, and the AI applications are then able to evolve and engage in a smart self-learning and optimization process.

Whilst ICTs have, thus far, been integrated in e-arbitration in tandem with human arbitrators', who are the award makers, it is not inconceivable that the future would give rise to certain applications that take e-arbitration to new frontiers and uncommonly perceived dimensions.

It is not impossible that, at least for some forms of arbitration where the arbitrators' discretionary powers are restricted by choosing either party's final requests,⁷⁴ the future would yield opportunities for AI applications to engage in an assessment process for both parties' proposals before rendering a decision in favour of either. This may be truly difficult and challenging in cases where arbitrators are expected to render a traditional arbitral award upon full assessment of the facto-legal matrix of the case and irrespective of either party's requests. Nevertheless, it remains to be seen how national laws and courts would adapt to such prospects of integrating AI into arbitration.

73 It is submitted that even arbitration laws, which do not explicitly refer to arbitrators as humans, they do implicitly share such understanding through the explicit use of human associated pronouns such as 'he', 'him' etc when referring to arbitrators. See for example section (5) of the US Federal Arbitration Act, which states: '[...]as if *he* or they had been specifically named [...]' and Article 180(2) of the Swiss Private International Law, which states: '[...]If *he* does not possess [...].'

74 This form of arbitration is referred to as either 'pendulum', 'flip-flop', 'final offer', or 'baseball' arbitration.

3.5 *e-Seat and Place of Proceedings*

The seat or place of arbitration, as the location where the award was made,⁷⁵ is indeed relevant to the arbitration process, although such relevance is sometimes challenged by some scholars and practitioners. However, the seat or place of arbitration normally determines the nationality of an arbitral award which in turn distinguishes the courts of primary jurisdiction entrusted with any possible challenge or recourse against the arbitral award. The seat or place may also have certain overriding or supplementary rules that supersede or complement the applicable procedural rules chosen by the parties.

In e-arbitration, the determination of the seat of arbitration gives rise to certain problems and challenges relating to the determination thereof in case the parties fail to agree on a specific seat or place of arbitration, as the proceedings normally take place in a virtual setting amongst parties and arbitrators that could be virtually dispersed. In the absence or failure to agree on a seat, some scholars advocate the view that the seat should be the place where the servers are located,⁷⁶ or the place where the computer is based or where the emails of the arbitrator are sent and collected.⁷⁷

However, it is submitted that the above criteria may be quite difficult and/or confusing to ascertain and may not be a true representation of the parties' intention or expectations. Accordingly, it is submitted that the prevailing criteria, in the absence of the parties' agreement on the seat or place, are: (a) the arbitral tribunal shall determine such seat of arbitration;⁷⁸ (b) the e-arbitration provider shall determine the seat;⁷⁹ or (c) the seat shall be that of the e-platform used for the conduct of the e-arbitral proceedings.

75 The 'seat or place of arbitration' should not be confused with the place where hearing(s) or meeting(s) are conducted, as the arbitral tribunal is generally entitled to hold hearings or meetings wherever appropriate without affecting the location of the judicial seat of arbitration as the place where the award is rendered.

76 M.H.M. Schellekens, 'Online Arbitration and E-commerce', (2002), 9 *Electronic Communication Law Review*, p. 122.

77 A. Vahrenwald, 'Out-of-Court Dispute Settlement Systems for E-Commerce', (2000), *Report on Legal Issues Part IV: Arbitration*, p. 87. Available at: <<http://tbplaw.com/data/part4.pdf>>, last accessed 3 October 2011.

78 This practice exists in traditional arbitration. See for example: Article 20(1) of the ML, which states: 'If the parties have not previously agreed on the place of arbitration, the place of arbitration shall be determined by the arbitral tribunal having regard to the circumstances of the case. The award shall be deemed to have been made at the place of arbitration.' This was mirrored under Article 18(1) of the UNCITRAL Arbitration Rules, where it is stated: 'If the parties have not previously agreed on the place of arbitration, the place of arbitration shall be determined by the arbitral tribunal having regard to the circumstances of the case. The award shall be deemed to have been made at the place of arbitration.' The same wording was literally adopted under Article 18(1) of the CRCICA Arbitration Rules.

79 It is not uncommon that the service provider/arbitral institution determines the seat in the absence of the parties' choice. Traditional arbitral institutions have often included that in their rules. See for example: Rule (10) of the AAA Arbitration Rules, which states: '[...] If a party objects to the locale requested by the other party, the AAA shall have the power to determine the locale, and its decision shall be final and binding.' Article (18.1) of the ICC Arbitration Rules, enforceable as of January 2012, states: 'The place of the arbitration shall be fixed by the Court, unless agreed upon by the parties.' Article (16.1) of the LCIA Arbitration Rules, which states: 'Failing such a choice, the seat of arbitration shall be London, unless and until the LCIA Court

With respect to criteria (a) and (b), the following connecting factors merit due consideration to avert an arbitrary or subjective decisions: (i) domicile or place of business if the parties share a common domicile or place of business; (ii) the parties' nationality if they share a common nationality place of potential enforcement, if known; (iii) location of e-arbitration provider.

It is worth noting that criterion (c), which provides for adopting the place of the e-platform, is equally appealing, especially that it qualifies as an implicit or indirect agreement on the seat of arbitration, as the parties' have voluntarily opted for such e-arbitration provider. However, such criterion should be carefully considered when the e-arbitration provider is located in a place that is different from the location of its e-platform which is used for the purpose of the proceedings. In this case, it seems more realistic to opt for the place where the e-arbitration provider is located, as the parties are using that provider's services.

All the above criteria would only come into effect, if the parties fail to agree on the seat. However, it is worth noting in this context that, unlike traditional offline arbitration providers, e-arbitration providers do not generally include in their rules, if any, provisions regarding the determination of the seat in case if the parties fail to agree, which could be quite problematic in case of cross border disputes.⁸⁰

4 E-ARBITRAL AWARDS

This section does not intend to address traditional issues pertaining to offline arbitral awards, but aims at succinctly addressing some pertinent issues in the context of e-awards. The issues that generally pertain to e-awards are: (a) e-writing and e-signatures of e-awards; (b) e-notification of e-awards; and (c) enforceability of e-awards.

determines in view of all the circumstances, and after having given the parties an opportunity to make written comment, that another seat is more appropriate.' Articles 39(a) and 33(a) of the WIPO Arbitration and Expedited Arbitration Rules state: 'Unless otherwise agreed by the parties, the place of arbitration shall be decided by the Center, taking into consideration any observations of the parties and the circumstances of the arbitration.' However, the AAA-ICDR Rules which apply to international arbitration have opted for a hybrid criterion where Article 13(1) states: 'If the parties disagree as to the place of arbitration, the administrator may initially determine the place of arbitration, subject to the power of the tribunal to determine finally the place of arbitration within 60 days after its constitution. All such determinations shall be made having regard for the contentions of the parties and the circumstances of the arbitration.'

80 The following institutions do not seem to have accessible or detailed arbitration rules: Net-Arb <www.net-arb.com>; Inspection Arbitration Services <<http://inspectionarbitrationservice.com>>; odrworld <www.odrworld.com>; Settle Today <www.settletoday.com>; and ZipCourt <www.zipcourt.com>. However, the following institutions have included arbitration rules, but without reference to the seat or place of arbitration: arbitration.in <www.arbitration.in>; eCourt <www.ecourt.co.uk/arbitration.php>; the Czech Arbitration Court Online Platform ADR.eu for domain name disputes <www.adr.eu/>.

4.1 *e-Awards: e-Writing and e-Signatures*

Arbitral awards must generally be in writing and duly signed by the arbitral tribunal. This is a standard global norm and practice.⁸¹ Article IV(1)(a) of the NYC on the Recognition and Enforcement of Foreign Arbitral Awards (1958) requires that the party seeking recognition and/or enforcement of an arbitral award produce the 'duly authenticated original award or a duly certified copy thereof'.

This entails that an e-award must be 'in writing' and duly 'signed'. The challenge in e-arbitration is that e-awards are normally rendered online, which means that they could either be: (i) an electronic record of a paper award such as a scanned paper document of a signed original paper award, or (ii) an e-award that is rendered in electronic format and digitally signed.

The first type of award is irrelevant for the purpose of the present analysis, as the award was originally paper based. The second type of awards: 'e-awards' is clearly relevant. This e-award is e-written and e-signed. The question is: would an e-award of that form be considered an original? If so, would it remain an original if it has been printed or reproduced in paper format?

Regarding the writing requirement, this has been discussed and analysed when addressing e-arbitration agreement herein above, so the same principles apply regarding the weight of e-. However, it would suffice to state that: (i) in so far as the electronic document provides a functional equivalent of a paper document; and (ii) the relevant applicable law of the State of enforcement (the *lex loci executionis*) subscribes to the functional equivalence doctrine, then the e-award would be considered an original. To that effect, and in accordance with international standards, the writing requirement would be met if an e-award is accessible so as to be usable for subsequent reference.⁸²

81 It should be noted that such general and widely respected rule is upheld under Article 31(1) of the ML, Article 1057(2) of the Dutch Arbitration Act 1986 (Book IV of the Code of Civil Procedure), Article 43(1) of the Egyptian Arbitration Act 1994, Article 31(1) of the Russian Arbitration Act 1993, and Articles 1513 and 1515 of the French Code of Civil and Commercial Procedures, as amended by virtue of the Decree No. 48 of 2011 for the reform of Arbitration does have some exceptions. See for example, Section 52(1) of the English Arbitration Act (1996), which states: 'the parties are free to agree on the form of the award', and Article 189(1) of the Swiss Private International Law (1987), which states: 'The arbitral award shall be rendered according to the procedure and in the form agreed upon by the parties.'

82 This international standard is enshrined in Article 9(2) of the UN Convention on the Use of Electronic Communications in International Contracts (2005) states: 'Where the law requires that a communication or a contract should be in writing, or provides consequences for the absence of a writing, that requirement is met by an electronic communication if the information contained therein is accessible so as to be usable for subsequent reference.' The use of the word 'accessible' is meant to imply that information in the form of computer data should be readable and interpretable, and that the software that might be necessary to render such information readable should be retained. The word 'usable' is intended to cover both human use and computer processing. The notion of 'subsequent reference' was preferred to notions such as 'durability' or 'non-alterability', which would have established too harsh standards, and to notions such as 'readability' or 'intelligibility', which might constitute too subjective criteria. See UNCITRAL Secretariat,

Whilst such electronic record of the e-award would qualify as 'writing', it merits authentication and formalization in order to qualify as an original document. In the context of e-awards, this is possible through one of two options: (i) printing the e-award on paper and signing it manually for authentication, which transforms its nature to a paper-based award; and (ii) digitally signing the e-award to authenticate it and ensure that it is treated as an original for the purpose of enforcement.

The present chapter is not intended to discuss e-signatures and the diverse technologies associated therewith. However, it is submitted that the requirements of an e-signature are met if adequate technologies, such as PKI or biometric encryption,⁸³ are used to identify the signing arbitrator, indicate that arbitrator's intention in respect of the content of the award,⁸⁴ and ensuring the reliability of the arbitrator's e-signature.⁸⁵

In any event, if the enforcement of an e-award is sought in a national court, national law shall determine which of the above two options is applicable. On one hand, certain national laws may require a paper award that is manually signed, as e-signatures or e-awards are not yet fully recognized or regulated. On the other hand, certain national laws have proceeded to an advanced stage by recognizing e-signatures and validating e-awards. For example, in the USA, the Revised Uniform Arbitration Act of 28 August 2000 states under Article (19): 'An arbitrator shall make a record of an award. The record must be signed or otherwise authenticated by any arbitrator who concurs with the award.' The words 'or otherwise authenticated' confirm that an arbitrator can execute an award by an

'Explanatory Note on the UN Convention on the Use of Electronic Communications in International Contracts', para. 146

<www.cnucci.org/pdf/english/texts/electcom/06-57452_Ebook.pdf>, last accessed 1 November 2011. This provision is a mirror image of Article 6(1) of the UNCITRAL Model Law on E-Commerce (1996).

83 PKI is the public key infrastructure, which assumes the use of public key cryptography. The latter is a common method for authenticating a data sender or encrypting data. Public key cryptography is sometimes known as asymmetric cryptography. A PKI encryption infrastructure consists of: (i) a certification authority (CA) that issues and verifies digital certificate, which includes the public key or information about the public key; (ii) a registration authority (RA) that acts as the verifier for the certificate; (iii) authority before a digital certificate is issued to a requestor; (iv) one or more directories where the certificates (with their public keys) are held; and (v) a certificate management system. On a different note, biometric encryption refers to technologies that measure and analyze human body characteristics, such as DNA, fingerprints, eye retinas and irises, voice patterns, facial patterns and hand measurements, for authentication purposes. Biometric devices normally consist of: (i) reader or scanning device; (ii) software that converts the scanned information into digital form and compares match points; and (iii) a database that stores the biometric data for comparison.

84 See Article 9(3) of the UN Convention on the Use of Electronic Communications in International Contracts (2005).

85 Reliability is assessed and confirmed if: (1) the signature creation data are, within the context in which they are used, linked to the signatory and to no other person; (2) the signature creation data were, at the time of signing, under the control of the signatory and of no other person; and (3) any alteration to the electronic signature, made after the time of signing, is detectable. Such criteria are enshrined under Article 6(3) of the UNCITRAL Model Law on Electronic Signatures (2001).

e-signature. This wording was specifically intended to conform to the Electronic Signatures in Global and National Commerce Act, 15 U.S.C.A. § 7001.⁸⁶

Moreover, the proper implementation of the 'functional equivalence' doctrine entails that a digitally signed e-award satisfies the requirements of an original award when there is a reliable assurance of its integrity and when it is capable of being displayed to the concerned person to whom it should be presented for enforcement. Thus, when an electronic certificate is added at the end of an 'original' e-award to attest to the 'originality' of that award, or when data is automatically added by computer systems at the start and the finish of a data message in order to transmit it, such additions would be considered as if they were a stamp certifying the originality of the e-award.⁸⁷

By and large, it is submitted that the near future could hold plausible opportunities for the development and implementation of an interconnected electronic pathway through which e-awards may be electronically transferred from one State to the other for enforcement purposes, which marks a total transformation to a paperless society. Such application would also ensure that an original and authentic e-award would remain in its original electronic form across the globe, which would facilitate enforcement of e-awards.

The new e-Apostille Pilot Program ('e-APP') is an interesting development in this regard, as it could provide a medium facilitating cross boarder recognition of foreign e-awards.⁸⁸ Under the e-APP, the Hague Conference on Private International Law ('HCCH') and the National Notary Association of the United States ('NNA') are, together with any interested State (or any of its internal jurisdictions), developing, promoting and assisting in the implementation of low-cost, operational and secure software technology for (i) the issuance of and use of e-Apostilles, and (ii) the creation and operation of e-Registers for of e-Apostilles.⁸⁹

86 An e-signature under the Electronic Signatures in Global and National Commerce Act is intended to mean 'an electronic sound, symbol, or process attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record'. 15 U.S.C.A. § 7006(5). See National Conference of Commissioners on Uniform State Laws, Uniform Arbitration Act <www.law.upenn.edu/bll/archives/ulc/uarba/arbitrat1213.htm>, last accessed on 3 November 2011.

87 United Nations, 'UNCITRAL Model Law on Electronic Commerce with Guide to Enactment' (1999), para. 67 <www.uncitral.org/pdf/english/texts/electcom/05-89450_Ebook.pdf>, last accessed on 3 November 2011.

88 An Apostille is an additional authentication required for international acceptance of notarized documents, which could include arbitral awards.

89 See <www.e-app.info>. According to the official press release of the Hague Conference on Private International Law dated 20 May 2011, Spain has already issued and registered its first e-Apostilles using state-of-the-art technology developed under the e-APP (electronic Apostille Pilot Program) for Europe project, thus becoming the second State worldwide (after New Zealand) to have completed a comprehensive implementation of both of the e-APP's components. Full adoption of e-APP means that Spain has implemented a technologically advanced system to facilitate (1) the issuance of and use of electronic Apostilles (e-Apostilles), and (2) the electronic registration of Apostilles in an e-Register that is accessible online. Spain is also unique in that it has become the first State worldwide to develop a central e-Register to operate and record data across multiple domestic jurisdictions.

In practice, this means that the applicant can download e-Apostilles online from the website of the relevant authority in a participating State. The applicant will then obtain an electronic file consisting of a digitally signed e-Apostille and the underlying document such as the original e-award. The e-Apostille can be easily verified in other States via the central e-Register which will contain information regarding Apostilles issued by all competent authorities in the issuing State.

Whilst such e-APP is not dedicated or specifically tailored to e-awards, it testifies to the possibility of inclusion of e-awards therein and/or developing a parallel cross border system for e-awards.

4.2 *e-Awards and Notification*

In the context of e-arbitration an award is normally rendered online and notified to the parties by the e-arbitration provider and/or arbitral tribunal. The importance of e-notification stems from the fact that notification of the award informs the parties of the content of the award in preparation of voluntary compliance, recourse, or enforcement.

Whilst such notification is generally unproblematic and many national laws are quite liberal and recognize e-notifications,⁹⁰ it is worth noting that e-notifications may not be sufficient or valid under certain national laws. For example, certain laws may require court bailiff or other official forms of notification in order to trigger the rights and obligations of the parties to an award. For example, under Egyptian law, courts have, in the context of traditional offline arbitration, shown inclination to prefer formal court bailiff notification for the aversion of any challenges to institutional or informal notifications.

In any event, it seems advisable to verify any overriding mandatory requirements prevailing under the *lex loci arbitri* and/or the *lex loci executionis* regarding e-notification, as well as other e-award related issues, to avert the lapse of applicable time limits and/or implicit waivers of certain rights or obligations.

4.3 *e-Awards and Enforcement*

It is unequivocal that arbitral awards are the awaited outcome of the proceedings and e-arbitration is not an exception in this regard. However, e-awards raise certain concerns with respect to their enforceability, these are: (i) the final and binding nature of e-awards; and (ii) the application of the NYC to e-awards.

⁹⁰ The English Arbitration Act (1996) has opted for a truly liberal approach by explicitly providing under Section 55(1) that the parties are free to agree on the requirements as to notification of the award. In such a case, the parties may well agree that the arbitral award is to be notified to them by e-mail or uploaded on a secure platform accessible to them, which is quite frequent in e-arbitration.

With respect to the final and binding nature of e-awards, it is worth noting that not all e-awards are final and binding. For example, under the online arbitration rules of ADR.eu administering domain name disputes through e-proceedings,⁹¹ the decision of the administrative panel is not final and legally binding,⁹² as it does not prevent either the complainant or the domain name holder from submitting the dispute to a court of competent jurisdiction for independent resolution before the administrative proceeding is commenced or after it is concluded.⁹³ Thus, an e-award rendered does not qualify as a final and binding award subject to the enforcement in accordance with the NYC. However, an e-award rendered by the administrative panel shall be implemented by the Registry (EURid) upon the lapse of (30) calendar days from the date of notification of the e-award, provided no court proceeding has been initiated.

On a different note, other e-arbitration providers confirm the finality and binding nature of their awards,⁹⁴ which renders it necessary to shed light on the enforceability of e-awards under the NYC since it constitutes the most frequently used Convention to enforce foreign arbitral awards, especially that (146) States have acceded to the Convention, the latest of which is Liechtenstein on 5 October 2011.

With respect to enforceability of e-awards, it is worth noting that e-awards may be domestic or international in nature. If an e-award is rendered domestically, enforceability shall be determined in accordance with the procedures and applicable law prevailing and applied by national courts and will vary depending on the State of enforcement and whether its laws recognize and/or enforce e-awards.

However, in case of cross border disputes, e-awards may qualify for enforcement under the NYC if an e-award is characterized as a foreign award, which is normally the case when an award is sought enforcement in a different State. It has been seen that the NYC is capable of encompassing e-arbitration agreements and e-awards. Thus, there is nothing to suggest that the Convention does not categorically apply to e-awards.

91 <http://eu.adr.eu/arbitration_platform/overview/index.php>.

92 It is worth noting that Article 12(a) of the ADR Rules state that the decision is final. However, the term 'finality' is used in this regard to refer to absence of further appeal under the ADR Rules; it does not exclude subsequent court proceedings or arbitration if agreed by the parties.
<http://eu.adr.eu/html/en/adr/adr_rules/eu%20adr%20rules.pdf>, last accessed on 3 November 2011.

93 See § 4(k) of the UDRP Policy. <www.icann.org/en/dndr/udrp/policy.htm#4>, last accessed on 3 November 2011. According to § 4(k), if an administrative panel decides that the domain name registration should be cancelled or transferred and the Registrar receives official documentation that a lawsuit has been commenced against the complainant in a Mutual Jurisdiction within ten (10) business days after the notification of the decision it will not implement the Administrative Panel's decision. No further action will be taken until the Panel receives (i) satisfactory evidence of a resolution between the parties; (ii) satisfactory evidence that the lawsuit has been dismissed or withdrawn; or (iii) a copy of an order from such court dismissing the lawsuit or stating that the domain name holder does not have the right to continue to use the domain name.

94 See for example: ZipCourt.com and net-arb.com.

Nevertheless, in order to qualify for enforcement and/or recognition under the NYC, an e-award is generally expected to meet the conditions for recognition and/or enforcement enshrined in Article V of the Convention.⁹⁵ Whilst such conditions equally apply to traditional and e-arbitration and it is not intended to provide an overview or analysis of such diverse conditions in this chapter, three brief comments in relation there to merit a mention in the context of e-arbitration.

First, in order to qualify for enforcement and/or recognition and e-award must be final and binding. Thus, non-binding awards may not be subject to the NYC as previously mentioned.

Secondly, an e-award must comply with due process requirements as a manifestation of procedural public policy principles. Due process issues in relation to e-arbitration have been discussed herein above under e-proceedings. Nevertheless, it is worth reiterating that each party must be afforded equal and reasonable opportunity to present its case, and in an electronic environment the use of ICTs may impact a party's ability to present its case. On such account, e-awards may be considered in contravention of the forum's public policy if a party was prevented or restricted from presenting its case owing to some technical difficulties beyond that party's control.⁹⁶ In any event, it should be clear that the party invoking the due process/public policy defence should clearly demonstrate how its rights to present its case have been adversely affected, taking into consideration their voluntary decision to join e-proceedings. It is submitted that there is no direct correlation between

95 Article V of the NYC states: '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 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.

2. Recognition and enforcement of an arbitral award may also be refused if the competent authority in the country where recognition and enforcement is sought finds that:

(a) The subject matter of the difference is not capable of settlement by arbitration under the law of that country; or (b) The recognition or enforcement of the award would be contrary to the public policy of that country.'

96 For a detailed analysis of this issue and examples of such technical difficulties, see Schultz (2006), pp. 119-122.

the electronic nature of an award and its violation of public policy and due process requirements.

Thirdly, an e-award is equally expected to deal with matters that are capable of being electronically arbitrated. In essence, arbitrability does not generally differ in case of e-arbitration and traditional offline arbitration. However, with the proliferation of e-arbitration services, some States may opt for excluding certain arbitrable disputes from the scope of arbitrability in e-proceedings. Accordingly, it remains necessary to consider the prevailing overriding mandatory norms of the *lex loci arbitri* and the *lex loci executionis* to avert challenging and/or refusal of enforcement of e-awards.

5 E-ARBITRATION INITIATIVES AND PROJECTS

As mentioned herein above, the e-arbitration landscape has changed over the past decade; several providers have ceased operations, others have emerged, and the e-arbitration arena is in a constant state of flux owing to diverse variables and circumstances.⁹⁷ That is why it is often perceived that the regulatory framework that governs the institution of traditional offline arbitration is lagging behind with respect to e-arbitration. This may be partly due to the fact that traditional offline arbitration providers and institutions are not generally offering fully fledged e-arbitration schemes. Thus, it may be possible that some new market entrants have assumed such role, as e-arbitration providers, without having sufficient knowledge and experience in administering arbitral proceedings or developing successful and comprehensive e-arbitration rules.

In the following few pages, we shall shed light on few e-arbitration initiatives and projects. This overview is neither intended to be comprehensive nor inclusive of all providers, but is purely intended for didactic purposes so that readers can follow recent developments in e-arbitration providers.

That said, the following e-arbitration providers have been selected for a number of reasons, which are: (a) novelty; (b) unconventionality; (c) diversity; and (d) actual offering of e-arbitration services.⁹⁸

Well established arbitral institutions offering traditional arbitration, namely the AAA and ICC are excluded for three reasons: (a) their quasi e-arbitration framework and/or platforms have been well addressed in diverse scholarly writings; (b) their e-arbitration services have been briefly addressed herein above; and (c) their e-arbitration services are

97 *Supra*. ... [to be added in final proof when all pages are sequenced]

98 Some providers do not offer a fully fledged e-arbitration service, but simply provide a resourceful directory of professional who may serve as arbitrators. See for example, the Global Arbitration Mediation Association (GAMA). GAMA is located in Georgia, USA and serves as a compilation of e-directories and not an ADR forum or institution. GAMA serves as an information resource for parties and ADR professionals. See <<http://gama.com>>, last accessed on 3 November 2011.

not necessarily offered as a stand alone unrelated service, but is generally integrated in, and utilized for the purpose of, their traditional offline arbitral proceedings.⁹⁹

Whilst the above reasons do not generally apply to CIETAC Online Dispute Resolution Centre, which is quite innovative, new, and serves as a separate track ODR provider, with dedicated online arbitration rules, reference has been made herein above to the most notable features of the online arbitration rules of the CIETAC ODR Centre,¹⁰⁰ and it would suffice to state, at this juncture, that CIETAC's ODR Centre seems a truly promising ODR and e-arbitration initiative. It is hoped that similar well established arbitral institutions across the globe would follow CIETAC's ODR initiative by establishing a stand alone e-arbitration procedure.

In light of the above mentioned, we shall provide herein below a succinct overview of the following e-arbitration providers: (a) Virtual Courthouse;¹⁰¹ (b) Internet Arbitration;¹⁰² (c) eCourt;¹⁰³ (d) ADR.eu;¹⁰⁴ and (e) ZipCourt.¹⁰⁵

5.1 *Virtual Courthouse*

The Virtual Courthouse.com is a US ODR initiative physically located in Annapolis, Maryland. It is an Internet-based service that enables parties to submit disputed claims, responses and supporting material in digital form for resolution by e-mediation, e-arbitration, or e-neutral evaluation.¹⁰⁶

With respect to e-arbitration, the process seems primarily tailored to small claims and quite uncomplicated. The Virtual Courthouse.com website does not offer much information or statistics on successfully arbitrated cases and does not seem to offer a set of directly visible arbitration rules. The Virtual Courthouse.com equally offers face-to-face arbitration, however it is stated that the fees for such face-to-face process shall be at the third party's neutral applicable hourly rate.¹⁰⁷

Whilst it seems evident that a neutral is expected to render a documents' only e-decision, the website does not offer much information until a user is registered, but it seems possible

99 Whilst the above reasons do not apply to CIETAC Online Dispute Resolution Centre

100 *Supra*. ... [to be added in final proof when all pages are sequenced]

101 <<http://virtualcourthouse.com>>.

102 <<http://www.net-arb.com>>.

103 <<http://www.ecourt.co.uk>>

104 <<http://www.adr.eu>>.

105 <<http://www.zipcourt.com>>.

106 <<https://www.virtualcourthouse.com/index.cfm>>.

107 <<https://www.virtualcourthouse.com/index.cfm/category/3/pricing.cfm>>.

to use video conferencing software if required, as IOCOM visimeet video conferencing is listed as an alliance partner.¹⁰⁸

5.2 *Internet Arbitration*

net-ARB is another US based e-arbitration provider located in Georgia. It was founded in 2005 with an aim to provide a fast and affordable ODR service through email. net-ARB offers e-arbitration and it is stated that no payment will be charged until the respondent(s) agree(s) to arbitrate the dispute. It is further stated that the hearing procedures, all testimonies and evidence are made online through emails.

net-ARB operates a detailed website and does offer e-arbitration services for diverse disputes, whether personal or business disputes. However, net-ARB's focus seem to be on small claims disputes and e-commerce disputes, as they do offer relatively low value packages for resolution of such disputes.¹⁰⁹ They equally offer a 'Consumer Confidence Program (CCP) Seal of Trust', which enables businesses to agree to pre-dispute net-ARB dispute resolution clauses.

net-ARB is quite unique in offering what might be referred to as *e-amiable compositeur* services, or equity based arbitration. net-ARB's provides a set of guidelines for arbitrators when resolving disputes, these are: (a) application of general principles of equity and common law; (b) utilization of common sense analysis of circumstances and context; and (c) using personal experience and expertise. In essence, net-ARB states that equity will prevail over any legal principles that may lead to an opposite result.¹¹⁰

It is also stated that arbitrators must immediately decline to decide a case and request re-assignment in case of conflict of interest, existence of bias, and loss of neutrality.¹¹¹ Whilst such principles are amongst the fundamental pillars of arbitration, it is questionable that such request is expected to come from the arbitrator(s) in question. Any challenge as to the arbitrator's impartiality and independence is normally expected to come from the aggrieved party, unless the concerned arbitrator declines to serve as soon as he/she becomes aware of situations that give justifiable doubts as to his/her impartiality and independence.

108 IOCOM offers Visimeet, as a cloud hosted service, which allows any user with internet connectivity to participate in full multipoint collaboration video conferencing without requiring any enterprise to own or administer expensive hardware to facilitate such meetings. Any individual can simply sign up for the Visimeet service and optionally purchase a subscription based on their individual requirements. Alternately, a group facilitator may purchase a block of licenses to use the service and likewise provision these accounts to team members as desired. See <www.insors.com/features.php>, last accessed 3 November 2011.

109 <www.net-arb.com/what_will_arbitration_cost.php>, last accessed 3 November 2011.

110 net-ARB states that their arbitrators have the power to 'do equity' even when a legal technicality might require the opposite result. <www.net-arb.com/FAQ.php#Rules>, last accessed 3 November 2011.

111 *Ibid.*

With respect to the e-award, net-ARB offers binding arbitral awards. However, the parties are free to agree, at any time prior to the conclusion of a hearing, that an e-award shall not be binding, or it shall be semi-binding with respect to one of the parties.¹¹²

With respect to enforcement of e-awards, net-ARB states that the award must be turned into a judgment, where the court issues a *feri facias* (a judicial writ ordering the sheriff to satisfy the judgment from the debtor's property). The winning party may receive a sworn Affidavit of arbitration including the terms of the arbitration agreement and the amount of the e-award.¹¹³

Finally, with respect to confidentiality and case information, the terms of use of net-ARB's services state that net-ARB will generally maintain the confidentiality of all information and evidence, surrendering such only if ordered to do so by a court of competent jurisdiction or in order to defend against slanderous or libelous statements.¹¹⁴ Moreover, net-ARB Arbitrators will resist testifying if a case that has been arbitrated goes to court for any reason except as necessary to authenticate an award for the purposes of confirming that award in a court of competent jurisdiction.¹¹⁵ Furthermore, net-ARB pledges that it will not share or use evidence from one case to support claims in a new or additional case regarding the same matters or involving the same parties.¹¹⁶

5.3 *eCourt*

eCourt is a UK based ODR provider located in London. eCourt offers e-mediation and e-arbitration services. eCourt offers two main e-arbitration packages, these are: (i) *Standard Package*, and (ii) *Premium Package*.¹¹⁷

The 'Standard Package', which is considered an e-arbitration scheme, is obviously some sort of 'neutral evaluation' and not arbitration. eCourt provides for a four-step evaluation under the Standard Package, these are: (1) selecting the number of words needed, (2) submitting the case notes of a party, (3) making payment,¹¹⁸ and (4) eCourt returning an assessment entitled 'Verdict'.¹¹⁹ It is stated that when only one party submits its case note and background information, eCourt will deliver an independent opinion on the facts and evidence submitted.¹²⁰

112 *Ibid.*

113 *Ibid.*

114 <www.net-arb.com/arbitration_agreement.php>, last accessed on 3 November 2011.

115 *Ibid.*

116 *Ibid.*

117 <www.ecourt.co.uk/howitworks.php>, last accessed on 3 November 2011.

118 The current advertised costs are £25 per 250 words. *Ibid.*

119 *Ibid.*

120 *Ibid.*

The 'Premium Package' is subject to a six- step evaluation, these are: (1) choice of assessors by claimant or by eCourt upon claimant's request,¹²¹ (2) selecting the number of words needed, (3) choice of a third party representative (required), (4) submission of case notes, (5) making payment,¹²² and (6) eCourt returning the so-called verdict.

By comparing both packages, it is obvious that the 'Premium Package' offers greater choice and flexibility, by allowing a party to choose an 'assessor' and a representative. However, payment and fees in either are calculated on the basis of word count, which is quite anomalous and dependent on each party's preference to provide a full or succinct overview of the issues in dispute. Moreover, if one party has budgetary constraints, an arbitrator or 'assessor' may not be able to fairly decide the case if the least number of words is provided. This is quite challenging and may give rise to justifiable doubts as to parties' equality and ability to present their case, as either or both party(ies) rights may be impaired because of fee calculations.

With respect to process duration, eCourt states that a simple arbitration case should take less than (7) working days and more complicated case may take up to (28) days.¹²³

Concerning the nature and finality of such 'verdicts', eCourt submits that all verdicts are independent awards based solely on logic and a sense of fair play, according to the merit of the case submitted.¹²⁴ On such account, similar to 'Virtual Courthouse', eCourt verdicts seem to be equity based and not legally oriented. Moreover, eCourt explicitly state that it does not seek to take away the right of any individual to seek redress in the courts, which means that the 'verdict' or e-award is not final and binding unless such final and binding nature is agreed amongst the parties.¹²⁵

5.4 ADR.eu

ADR.eu is an ODR service of the Czech Arbitration Court and is based in Prague. It helps brand and trade mark owners, domain name registrants, and registration companies all over the world to resolve disputes online. ADR.eu is the only ADR provider for (.eu) domain name disputes.¹²⁶

121 eCourt whilst considering such packages 'arbitration' schemes, the arbitrators are referred to as assessors, which confirms the understanding that such e-processes are neutral evaluations or independent opinions and not arbitration *strictu sensu*. The eCourt defines an 'assessor' as: 'Someone, like an eCourt Assessor, who gives an impartial viewpoint to deliver in independent fair minded verdict to settle a dispute.' <<http://ecourt.co.uk/glossary.php>>, last accessed 3 November 2011.

122 The cost is £25 per 250 words per chosen 'assessor', with a minimum of two assessors.

123 *Ibid.*

124 <www.ecourt.co.uk/rules.php>, last accessed on 3 November 2011.

125 *Ibid.*

126 <www.adr.eu>, last accessed on 3 November 2011.

In January 2009, ADR.eu launched a unique UDRP service for generic Top Level Domains such as .com, .net, .org, .biz, .info, .mobi and .tel which features e-filing and class complaints. ADR.EU administers also disputes related to .co.nl domains, according to the ICANN's UDRP Policy and Rules. These disputes are decided by UDRP Panelists.

The Czech Arbitration Court has established an e-arbitration platform and rules dedicated to arbitrating domain name disputes.¹²⁷ If proceedings are commenced in an e-format, all communications will take place on the e-platform and via e-mails.¹²⁸

The proceedings usually take two-third months until a decision is rendered, and decisions are generally published in full unless the Panel decides that the decision or some parts of it shall not be published. However, the portion of any decision determining that a complaint has been brought in bad faith must always be published. Any other documents filed with a complaint will be accessible to the other Party, to the Panel, and to the Czech Arbitration Court but will not be published.¹²⁹

It is also worth noting that the online platform allows for a complainant or respondent to be represented in a given dispute by only one representative. Therefore, if a party has multiple representatives, it must select one person to be its 'official' representative for the purposes of the particular administrative proceeding. The representative then serves as the sole contact person for purposes of that administrative proceeding.¹³⁰

Finally, whilst it is perceived that the decision of the administrative panel is not subject to appeal within the scope of the administrative proceedings, it should be noted, as previously mentioned, that such e-proceedings neither prevent the complainant nor the domain name holder from submitting the dispute to a court of competent jurisdiction for independent resolution before the administrative proceeding is commenced or after it is concluded, which clearly impacts the binding nature of the proceedings.¹³¹

5.5 *ZipCourt*

ZipCourt is yet another US based e-arbitration provider established in February 2011, and operates next to Stanford University in Palo Alto, California. ZipCourt launched its online courtroom service on 12 October 2011, and enables clients to select between two different tracks of e-arbitration: (i) *Arbitrator's Discretion*, and (ii) *Baseball Arbitration*.¹³²

127 <www.adr.eu/arbitration_platform/udrp_supplemental_rules.php>, last accessed 3 November 2011.

128 It is worth noting that complainant is given three options on the preferred method of communication, these are: (a) electronic form; (b) hard copy form (registered postal or courier service); or (c) facsimile form. In all three forms communications will take place on the e-platform, but if a complainant opts for a facsimile or hard copy form, this shall be in addition to the e-platform communication.

129 <www.adr.eu/adr/help/index.php#12>, last accessed 3 November 2011.

130 *Ibid.*

131 *Ibid.*

132 <www.zipcourt.com>, last accessed 3 November 2011.

If parties select ‘Arbitrator’s Discretion’, the arbitrator impartially reviews the dispute and determines a final resolution in accordance with local law, and which likely mirrors the result that would have been reached in a local courtroom. This final resolution is independent of, but gives consideration towards, the parties’ own recommendations. However, if the parties select ‘Baseball Arbitration’, each party submits a recommended resolution, and the arbitrator chooses the one which is the most fair and correct. ‘Night baseball arbitration’, being a derivative of ‘baseball arbitration’, is used for complex disputes and entails conducting a factual analysis of the parties’ final proposals. The arbitrator will then select which proposal is closest to his/her own independent analysis.¹³³

With respect to the scope of ZipCourt’s e-arbitration service, ZipCourt will not resolve child custody, employment discrimination, home foreclosures, and other related cases.¹³⁴ In most cases, a case can be commenced, reviewed, and decided within a month. However, the length may also depend on the complexity of the dispute.

ZipCourt explicitly states that its e-arbitration processes result in an ‘arbitration award’ capable of being enforced outside the US in accordance with the NYC.¹³⁵ However, ZipCourt, understandably, does not guarantee enforceability of the e-award, but appears to be the only e-arbitration provider, which explicitly refers to the UNCITRAL Working Group III on ODR and states that their processes are in compliance with international standards.¹³⁶

Finally, ZipCourt does not seem to be a purely equity based process, but it is rather stated that the arbitrator renders his/her e-award in accordance with the applicable local law.¹³⁷ However, ZipCourt does not seem to have developed a specific set of e-arbitration rules that govern the proceedings. Fees for the proceedings are determined in accordance with the dispute complexity, and there are three levels of complexity, namely: (a) ‘disagreement’, which involves a low level of complexity; (b) ‘dispute’, which involves a medium degree of complexity; and (c) ‘complex dispute’ which involves a high level of complexity.¹³⁸

6 CONCLUSION: THE FUTURE OF E-ARBITRATION

Throughout this chapter, the author has provided an overview of the diverse phases of e-arbitration and attempted to shed light on some of the intricacies and challenges thereof. It is submitted that the current ICT regulatory framework and global policies do not

¹³³ <www.zipcourt.com/Services>, last accessed 3 November 2011.

¹³⁴ <www.zipcourt.com/Global-FAQs>, last accessed 3 November 2011.

¹³⁵ *Ibid.*

¹³⁶ *Ibid.*

¹³⁷ *Ibid.*

¹³⁸ *Ibid.* As currently charged, the fee for a ‘disagreement’ is 399 USD per party, the fee for a ‘dispute’ is 1,999 USD per party, and the fee for a ‘complex dispute’ is 14,900 USD per party.

hamper the development of e-arbitration, which is indeed lagging behind when compared to offline traditional arbitration.

Throughout the chapter, it has been seen that not many e-arbitration providers exist and many have even ceased to operate. This may be due: (a) the fact that arbitration is a formal dispute resolution process that requires strict adherence to certain procedural safeguards and norms, which is not readily easy to implement online and is quite challenging depending on the technologies employed by the providers; (b) non-traditional e-arbitration providers are generally small or medium sized, localized, and not necessarily familiar or experienced in administering or conducting arbitral proceedings; and (c) the true success of e-mediation, which is a more informal and party controlled process that is not subject to procedural constraints or legal norms.

The *status quo* of the e-arbitration landscape confirms that there exists two distinct groups of e-arbitration providers, namely: (a) *small and medium sized newcomers*; and (b) *traditional arbitration institutions and providers*.

Having reviewed a number of providers and their services, it seems evident that traditional providers have generally developed e-platforms to support and revolutionize their traditional arbitral proceedings. The advantage of developing and offering e-arbitration through traditional arbitration institutions and providers is that they are well versed and experienced in developing arbitration rules and administering arbitral proceedings. However, the first and persisting challenge for such entities is to truly consider the potential of offering e-arbitration as a separate track dispute resolution process that is distinct from their traditional offline arbitral proceedings. The CIETAC has realized such potential and developed their CIETAC Online Dispute Resolution Centre and exclusive e-arbitration rules.

The second challenge for traditional arbitration providers is technology and the proper integration thereof in arbitral proceedings to facilitate its transformation into e-arbitral proceedings that are truly distinct from traditional offline proceedings. Such challenge is not exclusive to integration and implementation of state-of-the-art technologies, but also extends to include user friendliness, system compatibility, trustworthiness, and security. Accordingly, it remains to be seen how the utilized and implemented technologies will facilitate and support the proper conduct of successful e-proceedings.

On a different note, small and medium sized newcomers are generally tech-oriented providers that offer e-arbitration or specialized tracks thereof. However, they are generally localized, and not necessarily familiar with traditional international arbitration norms and rules.

That said, it seems that if traditional arbitration providers are interested and committed to developing their e-arbitration platforms with appealing state-of-the-art technologies, they would be more successful in administering and developing international e-arbitration.

Taking into consideration the *status quo* of e-arbitration, the proliferation and globalization thereof requires due implementation of international standards and their adaptation to local conditions, whenever necessary. This process of integrating the global and the local is often referred to as 'glocalization'. On such account, it is submitted that glocalizing e-arbitration will help boost its proliferation and success to assume its position amongst the most prevailing ODR processes.

Having scrutinized the diverse challenges relating to e-arbitration agreements, e-proceedings, and e-awards, it is manifest that there exist no legal barriers or obstacles to successful implementation of e-arbitration and its integration in the existing global and regional regulatory framework. It has been seen that traditional conceptions remain in a constant state of flux and are increasingly challenged due to the progressive advancement in ICTs and their integration in arbitration.

In light of the above mentioned, it is submitted that the success of e-arbitration and its prospects require the existence of certain nourishing and enabling environment, which necessitates the following: (a) global and local legal recognition of electronic documentation and signatures; (b) developing a set of minimum technical standards for the utilization of ICTs to ensure security, confidentiality, integrity, authentication, and interoperability; (c) accreditation of ODR and e-arbitration providers and/or developing a set of regulatory and procedural norms that guarantee availability of quality proceedings; and (d) international support for ODR processes, especially e-arbitration services.

In this context, regional and international initiatives would be indeed beneficial for the development of e-arbitration. On such account, two initiatives merit a brief mention, namely: (a) the US proposal to the OAS as a regional ODR initiative; and (b) the UNCITRAL international ODR initiative.

6.1 *US Proposal for the Organization of American States (OAS)*

Recognizing and acknowledging the need for an adequate ODR system and efficient redress schemes for e-commerce disputes, the USA submitted a proposal to the OAS regarding the creation of a regional ODR system. The proposal, submitted by the United States in 2010, focuses on building a practical framework for consumer protection, which, *inter alia*, includes an OAS-ODR initiative for electronic resolution of cross border low value-high volume e-commerce consumer disputes designed to promote consumer confidence in e-commerce by providing quick resolution and enforcement of disputes across borders, languages, and different legal jurisdictions.¹³⁹

139 C. Rule, V. Rogers, & L. Del Duca, 'Designing a Global Consumer Online Dispute Resolution (ODR) System For Cross-Border Small Value-High Volume Claims – OAS Developments', 42(3) *Uniform Commercial Code Law Journal* (2010), pp. 221-264.

The ODR process proposed is divided into three phases: (i) the initiation/negotiation phase, (ii) the e-arbitration phase, and (iii) the award. During the first phase of the procedure, the Buyer and Vendor are provided an opportunity to exchange information and proposals, and negotiate a binding e-settlement. However, if the parties fail to settle their dispute, the second phase is triggered and a qualified ODR neutral is appointed to mediate and, if necessary, arbitrate the case and issue a binding e-award. This process is intended to be a documents only e-proceedings and the e-award is expected to be rendered within twenty days of the arbitrator's appointment. If an e-award is rendered,¹⁴⁰ the process moves to the third phase, where relevant local organizations take the necessary measures to ensure that the losing party complies with the award.¹⁴¹

The proposed process, which is exclusive to e-commerce cross border consumer disputes, therefore includes an e-arbitration component, and involves several stakeholders who are necessary for the cross border implementation of the processes, namely: the consumer and the vendor, the neutral/arbitrator, the ODR provider, the national consumer authorities, and the central administrator.¹⁴²

By and large, whilst the US-OAS proposal remains an unbinding initiative, it represents a clear example of a regional ODR initiative directed at resolving consumer disputes through a multi-tiered interconnected process that includes an e-arbitration component if amicable settlement fails. This proposal marks a new era for ODR, as it aims at developing and implementing an inclusive supranational system whose feasibility and implementability shall be tested in the near future.

6.2 *The UNCITRAL ODR Working Group*

On a more global level, the role of the UNCITRAL may not be overlooked, as the latter plays a great role in harmonizing and approximating national policies. To this effect, the recent initiative and establishment of an UNCITRAL Working Group on ODR seems indispensable to the development of the ODR field at large and e-arbitration in particular.

The year 2010 marked a new era for ODR, as the global recognition thereof, through the establishment of a dedicated UNCITRAL ODR Working Group, confirms the distinc-

140 An e-award may include monetary compensation, return of a product or service, and/or replacement of a product or service. The award will be final and binding and vendors, who have seven days to comply (unless the award indicates otherwise), are expected to indicate that they have consented to the e-award being enforced in any court with appropriate jurisdiction. *Ibid.* p. 238.

141 For detailed discussion of the diverse phases, *ibid.* p. 236 *et seq.*

142 The central administrator manages the process for all regional OAS member state participants, and provides a single secure database for storing the documents and other information related to the resolution of claims. The central administrator also maintains a public list of eligible vendors who have agreed to be listed on the home page and have claims processed/arbitrated against them. *Ibid.* p. 240.

tiveness of the ODR field and processes. The first meeting of the UNCITRAL ODR Working Group took place on 13-18 December 2010 in Vienna.

In relation to e-arbitration, it was specifically stated during the first meeting of the Working Group that:

‘[...] further work could be undertaken to determine whether specific rules were needed to facilitate the increased use of online dispute settlement mechanisms. In that context, it was suggested that special attention might be given to the ways in which dispute settlement techniques such as arbitration and conciliation might be made available to both commercial parties and consumers. It was widely felt that the use of electronic commerce tended to blur the distinction between consumers and commercial parties. It was also recalled that in a number of countries, the use of arbitration for the settlement of consumer disputes was restricted for reasons involving public policy considerations and might not easily lend itself to harmonization by international organizations.’¹⁴³

During the Working Group second meeting held in May 2011 in New York, the Group considered the absence of international standards on ODR and the need to address disputes arising from the low value transactions in B2B and B2C transactions in developed and developing countries. Such consideration led to an attempted formulation of draft procedural rules to be used as a model by ODR providers.¹⁴⁴

The draft procedural rules, which are currently under review, scrutiny, and consideration have three main characteristics: (i) they provide for multi-tiered processes, which include a negotiation, facilitation, and binding arbitration phases; (ii) taking into consideration the perception that e-commerce disputes are generally low value disputes, it is expected that, unless otherwise decided by the parties, disputes will be handled by a sole neutral who is selected by the ODR provider; and (iii) it is expected that the proceedings would be a documents only based process.

These draft procedural rules elaborate and emphasize the requirement for a rapid, effective and relatively inexpensive dispute resolution processes that can be globally implemented.¹⁴⁵ Amongst the essential issues that are currently being considered by the Working Group and which will form the basis for future work on e-arbitration are the

143 UNCITRAL Secretariat, *Annotated Agenda, A/CN.9/WG.III/WP.106*, 23rd Session, 23-27 May 2011, New York, para.5. Available at: <<http://daccess-dds-ny.un.org/doc/UNDOC/LTD/V11/809/69/PDF/V1180969.pdf>>, last accessed on 3 November 2011.

144 *Ibid.* para.9 and 10.

145 UNCITRAL Secretariat, *Online dispute resolution for cross-border electronic commerce transactions: draft procedural rules, A/CN.9/WG.III/WP.109*, 24th Session, 14-18 November 2011, Vienna. Available at: <www.uncitral.org/pdf/english/workinggroups/wg_3/wp_109_e.pdf>, last accessed on 3 November 2011.

following:¹⁴⁶ (i) ascertaining ODR stakeholders, and the requirements and mandate of each stakeholder (such as ODR providers, neutrals, and parties); (ii) the level(s) at which ODR processes, including e-arbitration, should function, namely: local, regional, and/or global; (iii) funding and location of ODR providers; (iv) enforceability of e-awards under the NYC; (v) e-arbitration agreements and consumer disputes; (vi) authentication and certification of e-awards; (vii) developing self compliance schemes and measures; and (viii) applicable law issues in e-arbitration and whether equitable principles, codes of conduct, uniform generic rules or sets of substantive provisions should be applied in deciding cases.

By and large, it is obvious that the Working Group is still considering all options and approaches, and it is likely that discussions would continue in relation to the above hot topics, especially the applicability of the draft procedural rules to B2B, B2C, and C2C disputes as well as the governance of the NYC in relation to recognition and enforcement of e-awards.

In a nutshell, it is unequivocal that the edifice of e-arbitration is far from complete, and much work lies ahead prior to the existence of a distinct, well established, and efficient e-arbitration system at national, regional, and global levels.

146 UNCITRAL Secretariat, *Online dispute resolution for cross-border electroniccommerce transactions: issues for consideration in the conception of a global ODR framework*, A/CN.9/WG.III/WP.110, 24th Session, 14-18 November 2011, Vienna. Available at: <<http://daccess-dds-ny.un.org/doc/UNDOC/LTD/V11/859/64/PDF/V1185964.pdf>>, last accessed on 3 November 2011.

