

Obstacles to Realising the Advantages of Electronic Arbitration as a Mechanism for Resolving International Trade Disputes



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Submission date: 24/08/2025 Acceptance date: 06/10/2025 Publication date: 30/12/2025



Abstract: The rapid expansion of e-commerce and the use of digital communications technologies has transformed traditional legal frameworks, necessitating the adaptation of arbitration procedures to the digital environment. The advantages of e-arbitration, such as speed, lower costs, and global accessibility, have emerged, but major obstacles have also emerged, including judicial uncertainty, implementation challenges, procedural concerns, and gaps in local legislation. In this context, numerous international efforts have been made, including initiatives by the European Union, the World Intellectual Property Organization, and other arbitration institutions, to establish a reliable and secure framework for the settlement of e-commerce disputes, while emphasizing the urgent need for harmonized regulations and institutional development to enhance the role of e-arbitration as a practical, effective, and trustworthy tool for settling cross-border commercial disputes in the digital age.

Key Words: electronic arbitration; international trade disputes; e-commerce; dispute resolution ;internet ; arbitration enforcement;

معوقات تجسيد مزايا التحكيم الإلكتروني كآلية لفض نزاعات التجارة الدولية

ملخص: أدى التوسع السريع للتجارة الإلكترونية واستخدام تقنيات الاتصالات الرقمية في تحول الأطر القانونية التقليدية، مما استلزم تكيف إجراءات التحكيم مع البيئة الرقمية. ظهرت مزايا التحكيم الإلكتروني، كالسرعة وانخفاض التكاليف وإمكانية الوصول العالمي، لكن بالمقابل ظهرت أيضا عقبات رئيسية، تتمثل في عدم اليقين القضائي، وتحديات التنفيذ، والمخاوف الإجرائية، والثغرات في التشريعات المحلية. وفي هذا الإطار بذلت العديد من الجهود الدولية، بما في ذلك مبادرات الاتحاد الأوروبي والمنظمة العالمية للملكية الفكرية ومؤسسات التحكيم الأخرى، لإنشاء إطار عمل موثوق وآمن لتسوية نزاعات التجارة الإلكترونية مع التأكيد على الحاجة الملحة إلى لوائح مُنسقة وتطوير مؤسسي لتعزيز دور آلية التحكيم الإلكتروني كأداة عملية وفعالة وجديرة بالثقة لتسوية النزاعات التجارية العابرة للحدود في العصر الرقمي.

الكلمات المفتاحية: التحكيم الإلكتروني؛ النزاعات التجارية الدولية؛ التجارة الإلكترونية؛ حل النزاعات، الإنترنت؛ إنفاذ التحكيم؛

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Obstacles à la réalisation des avantages de l'arbitrage électronique comme mécanisme de résolution des différends commerciaux internationaux

Résumé : L'expansion rapide du commerce électronique et l'utilisation des technologies de communication numérique ont transformé les cadres juridiques traditionnels, nécessitant l'adaptation des procédures d'arbitrage à l'environnement numérique. Si les avantages de l'arbitrage électronique, tels que la rapidité, la réduction des coûts et l'accès mondial, sont apparus, des obstacles majeurs sont également apparus, notamment l'incertitude judiciaire, les difficultés de mise en œuvre, les préoccupations procédurales et les lacunes des législations nationales. Dans ce contexte, de nombreux efforts internationaux, notamment des initiatives de l'Union européenne, de l'Organisation mondiale de la propriété intellectuelle et d'autres institutions d'arbitrage, ont été déployés pour établir un cadre fiable et sécurisé pour la résolution des litiges liés au commerce électronique, soulignant l'urgente nécessité d'une harmonisation des réglementations et d'un développement institutionnel pour renforcer le rôle de l'arbitrage électronique en tant qu'outil pratique, efficace et fiable pour la résolution des litiges commerciaux transfrontaliers à l'ère numérique

Mots Clés: Arbitrage électronique; litiges commerciaux internationaux; commerce électronique; résolution des litiges, Internet; exécution de l'arbitrage;



Introduction:

The widespread use of the internet in legal transactions in general, particularly commercial transactions, has led to the emergence of a new type of transaction known as electronic transactions, or what has come to be termed e-commerce. E-commerce is defined as the production, promotion, sale, and distribution of products through a communication network, primarily via a new form of commercial contract known as electronic commerce contracts. These are contracts in which offers of goods and services meet with acceptance from parties either within the same country or across different countries through various electronic means, including the internet, to conclude a binding agreement.

The unique characteristics of electronic contracting, namely, its conclusion without the physical presence of the parties, its reliance on electronic means, and its commercial, consumer-oriented, and often international nature, where electronic payment systems are employed, have contributed to its growth and widespread adoption, transcending political and geographical boundaries.

The emergence of new legal realities arising from contractual relationships that are not concluded within a defined territorial framework has had a significant impact, particularly in the necessity of adopting dispute resolution mechanisms suited to these developments. The need for new legal rules tailored to this type of legal transaction has become imperative, given that existing legal provisions were designed and established to protect transactions executed and performed physically. As a result, they are entirely incapable of extending their applicability to transactions whose defining characteristic is that they are both concluded and executed electronically. Thus, just as electronic commerce and electronic transactions laws have secured their place within the legislative frameworks of numerous states, procedural rules have been established alongside them to safeguard the rights of parties engaged in electronic dealings and to resolve disputes arising between them. These rules are adapted to the distinctive nature of the environment in which electronic transactions occur, an electronic medium that transcends state borders, often involving parties situated in different countries.

In light of the need to adopt an electronic arbitration mechanism, particularly for disputes stemming from electronic commerce contracts, this study seeks to address the following question: **To what extent is the mechanism of electronic commercial arbitration effective in overcoming the obstacles that hinder its complete and efficient realisation?**

To clarify this issue, the research has been divided into two main sections:

Section One: Nature of Electronic Arbitration

Section Two: Obstacles to the realisation of the electronic arbitration mechanism



Section One: Nature of Electronic Arbitration

The digital environment profoundly influences legal relationships among individuals and introduces a series of legal challenges and complexities that demand specialised and urgent regulatory frameworks. These challenges largely necessitate a serious reassessment of existing legal rules to ensure their compatibility with the distinctive nature of digital-age applications. The integration of this revolutionary concept into the sphere of international commerce has had a considerable impact, expanding and enhancing trade while elevating it to an entirely new level of interconnection and complexity. Consequently, traditional terms of international commerce have acquired the descriptor “electronic,” fundamentally transforming their legal provisions, nature, and very existence. Examples include electronic contracts, electronic commerce, electronic signatures, and even electronic currency.¹

Disputes in commerce increasingly arise between contracting parties over the details of agreements within the digital domain. As such, methods of dispute resolution have themselves found a place within this same environment. Traditional mechanisms for resolving disputes, specifically submitting them to national courts with territorial jurisdiction, have become ill suited for addressing this category of dispute. Hence, it became necessary to devise a novel mechanism for their resolution, resulting in the development of electronic arbitration.

Subsection One: Concept of Electronic Arbitration

Although a single concept, electronic arbitration is referred to by various terms, including *cyber arbitration*, *electronic arbitration*, *cyberation*, *cyberspace arbitration*, *virtual arbitration*, and *arbitration using online techniques*.² It does not differ in definition from traditional arbitration except in the means through which arbitration proceedings are conducted in a virtual environment. In electronic arbitration, there is no reliance on physical documents, traditional writing, or the physical presence of participants. Even arbitral awards are delivered to the parties in a fully electronic form, authenticated and finalised through the use of electronic signatures.

Subsection One: Definition of Electronic Arbitration

In the 1999 Uniform Electronic Commerce Act, the Canadian legislature defined the term *electronic* as “the process of creating, recording, transmitting, or storing in digital form or any other intangible form through electronic means or by any other similar means capable of creating, recording, transmitting, or storing electronically.”

Notably, the Canadian legislature complemented the Electronic Commerce Act with the 1999 *Uniform Electronic Evidence Act*, thereby completing the Canadian

¹ Ja‘far Dīb al-Ma‘ānī, *Al-Taḥkīm al-Ilīktrūnī wa-Dawr al-Qaḍā’ al-Waṭanī bi-Taḥqīqih* [Electronic Arbitration and the Role of National Courts in Its Enforcement], 1st ed. (Amman: Dār al-Thaqāfah li-al-Nashr wa-al-Tawzī‘, 2014).

² P. Thieffry, *Commerce électronique: Droit international et européen* (Paris: Litec, 2002), 17.



legal framework governing electronic commerce.¹ Accordingly, electronic arbitration is defined as arbitration proceedings conducted over the internet, acquiring its electronic character from the method by which it is carried out, namely, through audiovisual means over an open, international network for remote communication, without requiring the disputing parties or arbitrators to convene in a specific physical location.²

While the defining feature of electronic arbitration, and the primary distinction from its traditional counterpart, lies in the use of modern means of communication in its procedures, a contentious issue arises as to whether the entirety of the arbitration must be conducted electronically for it to be deemed electronic or whether the use of electronic means at any stage of the process suffices to qualify it as such.³ Jurisprudence has not reached a unified position on this matter; instead, it has diverged into two principal schools of thought:

The first view holds that arbitration is considered electronic, whether conducted entirely through electronic means or only partially so. In this sense, electronic tools may be limited to certain stages, such as the conclusion of the arbitration agreement or the initiation of proceedings. In contrast, the remaining stages proceed through traditional methods, for instance, by holding arbitration hearings in the physical presence of both parties.

The second view asserts that arbitration can be deemed electronic only if it is conducted entirely through electronic means. In this approach, the process must begin with an electronic arbitration agreement, followed by arbitration proceedings conducted via modern communication technologies, with no physical meetings between the parties and arbitrators, no in-person hearings, and culminating in the issuance of an electronic award.

The prevailing view is the latter because electronic arbitration must be thoroughly conducted through electronic means. To argue otherwise would render nearly every arbitration "electronic," as modern communication technologies are almost invariably used at some point in arbitral proceedings, such as serving notices via email or transmitting documents by fax. The mere use of such technologies does not suffice to classify arbitration as electronic.⁴

¹ Khālid Mamdūh Ibrāhīm, *Al-Taḥkīm al-Ilīktrūnī fī 'Uqūd al-Tijārah al-Duwalīyah* [Electronic Arbitration in International Trade Contracts], 1st ed. (Alexandria: Dār al-Fikr al-Jāmi'ī, 2008), 246–48.

² See also:

a. Alā' Ya'qūb al-Nu'aymī, "Al-Itfāq al-Qānūnī li-Ittifāq al-Taḥkīm al-Ilīktrūnī" [The Legal Framework of Electronic Arbitration Agreements], accessed at <http://slconf.uaeu.ac.ae/papers/n3/alaa.pdf>

³ Al-Nu'aymī, *ibid.*, 976–78.

⁴ 'Iṣām 'Abd al-Fattāḥ Maṭar, *Al-Taḥkīm al-Ilīktrūnī* [Electronic Arbitration] (Egypt: Dār al-Jāmi'ah al-Jadīdah, 2009), 39.



All international arbitration centers seek to benefit from technological advancements by maintaining websites through which parties may communicate with them. However, this alone does not render the arbitration cases they administer electronic, nor does it entail the application of electronic arbitration rules in place of traditional arbitration procedures. Furthermore, the *NetCase* system, employed by specific electronic arbitration centres to conduct online arbitration sessions such as the International Chamber of Commerce (ICC) in Paris, allows parties engaged in arbitration under ICC rules to communicate via a secure, dedicated online platform. Within this platform, exchanged information is encrypted, and documents are archived and organised by individual cases. Nevertheless, arbitration conducted through this system remains traditional rather than electronic, as its use does not eliminate the need for in-person arbitration sessions.¹

Subsection Two: Distinguishing the Mechanism of Electronic Arbitration from Other Electronic Dispute Resolution Mechanisms

The mechanisms of online dispute resolution (ODR) that can be distinguished from those of electronic arbitration include the following:

First—Simplified Electronic Negotiations:

This is considered the most widely used alternative dispute resolution (ADR) method, enabling parties to reach a mutually satisfactory settlement by bringing their viewpoints closer together and removing the obstacles that gave rise to the dispute. It is a method that facilitates agreement through direct bilateral communications and is supported by advanced technological systems for the transmission and storage of information and tools for managing sessions via the internet, satellite communications, and other similar means.

Second – Automated Negotiations:

In this mechanism, the disputing parties are granted the right to determine the scope of settlement and to submit claims and defences in a resolution process conducted by a computer through secure websites, with access restricted exclusively to users possessing digital passwords.

Third – Electronic Mediation and Electronic Conciliation:

This mechanism involves the intervention of a neutral third party, referred to as the mediator, who assists the disputing parties in narrowing differences and finding common ground impartially and objectively to reach a mutually acceptable, amicable settlement through electronic procedures. Similarly, electronic conciliation is a voluntary means of dispute resolution in which a neutral third party proposes a series of satisfactory solutions, one of which is selected by the parties to resolve the dispute.

¹ ‘Āṭif Muḥammad al-Faqī, *Al-Taḥkīm al-Ilīktrūnī Bayn al-Wāqī‘ wa-al-Ma’mūl* [Electronic Arbitration: Between Reality and Expectation] (Egypt: Maṭba‘at al-Ma‘ārif, 2020), 63.



Conciliation differs from arbitration in that the conciliator's decision is not binding on the parties, whereas an arbitral award is legally binding on both parties.¹

Fourth – Virtual electronic courts:

These courts hold their hearings, receive submissions and pleadings, and issue judgments entirely via the internet. From this perspective, electronic arbitration has emerged as the most suitable mechanism for addressing the demands of globalisation because of the following:

1. Its ability to be conducted and concluded entirely online, as most of the documents necessary for the arbitral process can be easily replaced with electronic files capable of storing written information.
2. The fact that the parties to the dispute often reside in different countries, even at opposite ends of the globe, yet this geographical distance loses significance in the presence of the internet, which facilitates the growth of international trade.

Subsection Two: Advantages and disadvantages of the electronic arbitration mechanism

Traditional arbitration, as an alternative means of dispute resolution, offers numerous advantages over litigation, which represents the conventional avenue of dispute settlement. In addition to inheriting these advantages from traditional arbitration, the mechanism of electronic arbitration possesses further benefits derived from the digital medium through which it is conducted, benefits closely linked to electronic commerce and electronic contracts.

Subsection One: Advantages of the Electronic Arbitration Mechanism

This mechanism has many features that render it a highly effective tool for dispute resolution. Among the most significant advantages are the following:

First: Speed in Resolving Disputes

Speed is one of the principal advantages of arbitration as a serious alternative to judicial proceedings, which are often lengthy, complex, and bound by strict procedural and temporal constraints. The expediency that arbitration offers in settling disputes arising from commercial transactions is of considerable value, given that commerce itself demands efficiency and promptness at both the contractual formation and execution stages. Commercial dealings are characterised by their repetitive and continuous nature between contracting parties, further underscoring the importance of swift dispute resolution.

This advantage is amplified and most clearly demonstrated in the context of electronic arbitration, as the digital medium saves time at every stage of the arbitration process. The arbitration agreement itself is often electronic and is concluded within the framework of a preceding electronic contract, which is itself

¹ Haytham 'Abd al-Rahmān al-Baqlī, "Al-Taḥkīm al-Ilīkrūnī ka-Aḥad Wasā'il Taswiyat al-Munāza'āt" [Electronic Arbitration as a Means of Dispute Resolution], accessed at <http://www.kenanaonline.com/blog/76756/page/3>



characterised by speed of execution. This is exemplified in what is legally termed *click-on contracts*, where a simple click of a computer mouse suffices to express consent to agree.¹

Second: The Desire to Submit the Dispute to Technically Skilled and Trusted Experts

Disputes arising from the conclusion and execution of electronic contracts require arbitrators possessing technical expertise in this specialised field, often referred to as professional competence. This attribute is not typically found in a national judge. For this reason, disputing parties often choose arbitrators with a high level of skill and expertise in the subject matter of the dispute, thereby avoiding the shortcomings of judicial proceedings, in which judges may lack specialisation in various types of disputes. Judges often rely, either entirely or partially, on the findings of court-appointed experts without questioning or amending their opinions, owing to their own lack of familiarity with the technical aspects of the expertise involved.²

Third: Reduction of Costs

The use of electronic means in arbitration, from initiation to conclusion, significantly reduces arbitration costs, much like it accelerates dispute resolution. This cost-saving advantage is realised directly through the use of electronic tools in multiple stages of the arbitration process, thereby substantially lowering expenses associated with traditional procedures.

Fourth: The Existence of an International Convention on the Recognition and Enforcement of Arbitral Awards

This refers to the *1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards*, which provides a global framework for recognising and enforcing arbitral awards, unlike judicial decisions, for which no comparable international convention exists, aside from regional and bilateral treaties.³

Fifth: Overcoming the challenges of jurisdiction and conflicts of law

The internet constitutes a global, open space with its own virtual domain, detached from geographical boundaries, making it exceedingly challenging to localise legal relationships formed within its framework under a specific territorial jurisdiction. In this context, the distinction between international and domestic contracts loses practical significance; even if such a distinction were attempted, it would be nearly impossible to apply. The transition of commerce from its traditional to its electronic form compels acceptance of scenarios in which an individual may negotiate and

¹ Alā' Ya'qūb al-Nu'aymī, *ibid.*, 979. See also: Tūjān Fayṣal al-Sharīdah, "Māhīyat wa-Ijrā'āt al-Taḥkīm al-Ilīktrūnī" [The Nature and Procedures of Electronic Arbitration], accessed at <http://slconf.uaeu.ac.ae/papers/n3/tojan%20alshrida.pdf>

² Ibrāhīm Aḥmad Ibrāhīm, *Al-Taḥkīm al-Duwalī al-Khāṣ* [Private International Arbitration], 3rd ed. (Cairo: Dār al-Nahḍah al-'Arabīyah, 2000), 5–6.

³ Muḥammad Ibrāhīm Abū al-Hayjā', *Al-Taḥkīm al-Ilīktrūnī* [Electronic Arbitration] (Amman: Dār al-Thaqāfah li-al-Nashr wa-al-Tawzī', 2002), 46.



conclude a commercial contract via their personal computer while travelling between countries or even in locations beyond the jurisdiction of any state, such as the high seas. Similarly, it is entirely conceivable for a contract to be concluded between parties located in two different countries, each governed by a legal system entirely distinct from the other. This inevitably raises questions regarding which court has jurisdiction to hear the dispute and which law should apply in the event of a conflict arising between the parties to an electronic commercial contract. This problematic situation stems from the absence of harmonised substantive rules to which states are uniformly bound in the field of e-commerce, as well as the lack of standardised rules on jurisdiction that reflect the unique nature of e-commerce.

Applying traditional judicial rules to an electronic dispute would require filing the case before the national courts of one of the parties, where such courts would rely on private international law conflict-of-law principles to determine the applicable substantive law. This approach poses a significant challenge for online actors, as it often results in the application of a legal system unfamiliar to one or both parties.

Even if the parties agree to determine the applicable law and the competent court to hear the dispute as a clause in the electronic commercial contract, such an agreement may not provide an effective solution. This is because national courts in certain jurisdictions may not recognise the parties' freedom to choose the governing law or the forum for dispute resolution. This stands in contrast to situations in which the parties agree to adopt arbitration as their means of resolving disputes: in such cases, national courts are bound to uphold the arbitration agreement in accordance with international conventions, most notably the 1958 New York Convention, as well as domestic arbitration laws themselves.¹

Subsection Two: Disadvantages of the Electronic Arbitration Mechanism

Undoubtedly, despite the numerous advantages outlined above, the use of this mechanism also presents several drawbacks. The most significant may be summarised as follows:

First: Concerns over the Confidentiality of Arbitration

Maintaining the confidentiality of disputes and their resolution is one of the primary reasons for resorting to arbitration rather than litigation, particularly in commercial disputes, where safeguarding trade secrets is essential to prevent exploitation in unfair competition. Traditional arbitration proceedings largely ensure this crucial advantage for merchants, as their closed sessions are restricted solely to the parties involved. However, electronic arbitration may not guarantee the same level of confidentiality as traditional arbitration, given that its procedures take place

¹ Aḥmad 'Abd al-Karīm Salāmah, *Al-Taḥkīm fī al-Mu'āmalāt al-Mālīyah al-Dākhilīyah wa-al-Duwalīyah* [Arbitration in Domestic and International Financial Transactions] (Cairo: Dār al-Nahḍah al-'Arabīyah, 2006), 45.



over the internet, a medium that inherently poses a potential threat to the secrecy of the arbitral process.¹

Second, the incompatibility of domestic legislation with electronic arbitration

Legal rules were initially developed and stabilised to govern traditional, physical commercial transactions, both the rules concerning the conclusion and execution of such transactions and those addressing disputes arising from them and their resolution. The laws regulating arbitration as a means of dispute settlement generally impose strict formal requirements for the validity of arbitration agreements, the issuance of arbitral awards, and the conditions necessary for their enforcement. These legal frameworks, which are explicitly designed for conventional arbitration conducted through traditional means and procedures, may prove difficult for electronic arbitrations to satisfy because of their emphasis on formality and procedural compliance.

In this context, electronic arbitration risks being rendered ineffective, as failure to meet the prescribed legal formalities and conditions could lead to the unenforceability of arbitral awards. To prevent this outcome, it is often necessary for national legislators to intervene by enacting new provisions or amending existing legislation to fully accommodate the unique characteristics of arbitration in the digital environment, much as they have adapted laws to address electronic contracts.²

Third, the possibility of using the electronic arbitration mechanism to exclude the application of public policy laws

Electronic arbitration may allow for the circumvention of laws related to public policy, which are fundamental to safeguarding essential economic, political, and social interests. However, such exclusion would likely lead to significant complications at the enforcement stage.

Fourth: Procedural and Substantive Challenges

Electronic arbitration raises various procedural and substantive obstacles, particularly concerning the right to defence, the right to oral hearings, and the principle of confrontation between parties. Other challenges include time zone differences between disputing parties, disparities in communication technologies between states, and determining the applicable law.

Section Two: Obstacles to Recognising the Electronic Arbitration Mechanism

As an innovative method of resolving disputes electronically, electronic arbitration faces numerous obstacles to its recognition. Overcoming these challenges requires serious consideration of structural and methodological development. The

¹ Muḥammad Ma'mūn Sulaymān, *Al-Taḥkīm al-Iliktrūnī* [Electronic Arbitration] (Alexandria: Dār al-Jāmi'ah al-Jadīdah, 2011), 76.

² Manasī Muḥammad 'Abd al-'Azīz, *Ittifāq al-Taḥkīm fī Munāza'āt al-Tijārah al-Iliktrūnīyah* [Arbitration Agreements in E-Commerce Disputes], 1st ed. (Kuwait: Maktabat al-Falāḥ li-al-Nashr wa-al-Tawzī', 2011).



issues raised by electronic arbitration in the resolution of international trade disputes stem primarily from the following factors:

Subsection One: Obstacles Related to the Nature of Electronic Arbitration and Its Fundamental Challenges

There is no doubt that numerous obstacles hinder the effective implementation of electronic arbitration. Some of these challenges are inherent to the nature of this mechanism, whereas others concern its institutional structures.

First: Domestic Legal Systems Lagging Behind Rapid Developments in Electronic Commerce Contracts

Most legal systems do not regulate electronic commercial transactions adequately in their domestic legislation. Moreover, many countries' legal frameworks governing traditional litigation and arbitration procedures remain static, failing to recognise arbitration conducted by electronic means or to amend existing laws to allow the recognition and enforcement of electronic arbitral awards. This situation has prompted questions regarding the validity of dispute resolution procedures conducted through electronic means, the enforceability of electronic arbitral awards, and the determination of the legal seat of arbitration: should the arbitrator's location, the provider's or user's location in information service contracts, or the place where the contract was concluded or performed be considered?

Questions also arise as to whether arbitral awards issued electronically meet the conditions for enforcement under the existing rules of traditional arbitration. This includes assessing whether current frameworks can accommodate electronic arbitration practices in their current form or whether they require adaptation to reflect the use of digital communication technologies in conducting arbitration proceedings.

The widespread adoption of electronic commerce applications and the frequent use of modern communication technologies, such as email, for transmitting messages and documents give particular importance to the issues raised by employing these tools in the administration of arbitration proceedings. One key concern is that the recognition of arbitral awards rendered electronically may face enforcement challenges in jurisdictions lacking provisions that compel their courts to recognise awards issued in arbitration proceedings conducted entirely online or awards based on arbitration clauses contained in electronic contracts.

Although Article II, paragraph 1, of the *New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards* obliges signatory states to recognise arbitration agreements and enforce foreign arbitral awards, it imposes several conditions for doing so. These include that the arbitration agreement must be in writing and signed and that the arbitral award must be duly authenticated. Meeting these conditions in the context of electronic dispute resolution necessitates a reconsideration and broadening of the legal concepts of "writing" and "signature" to



accommodate the technological advancements that have transformed their traditional forms.¹

Subsection Two: Arbitrators' Noncompliance with Mandatory Rules

Parties, particularly the weaker party to a contract, often hesitate to resort to arbitration in general and electronic arbitration in particular owing to concerns that arbitrators may fail to apply the mandatory protective provisions outlined in national legislation. This apprehension is heightened in cases involving consumers, as such failure could result in the annulment of the arbitral award and render it unenforceable.

In response to this criticism, some scholars have defended both traditional and electronic arbitrations by emphasising the practical, procedural, and legal safeguards observed by arbitrators in disputes involving electronic commerce, including the following:

a. **Consideration of Public Interest:** Arbitrators are mindful of public interest and take into account the mandatory rules stipulated in national legislation, whether those rules belong to the law of the opposing party or form part of the commercial customs of a particular trade sector.

b. **Prioritisation of International Public Policy Objectives:** The primary goal of the arbitrator is to uphold the interests and objectives of the international community. The means available to arbitrators for respecting and protecting the weaker party or consumers often exceed those available to a national judge. Arbitrators can select, from a range of legal systems, the law that best achieves protective goals for vulnerable parties or consumers.²

Subsection Three: Validity of the Arbitration Agreement and the Challenge of Determining the Seat of Arbitration

The validity of an arbitration agreement, under the *New York Convention*, is assessed by reference to several laws, including the law of the country in which the award was rendered. This presupposes the ability to identify the country of issuance, thereby placing the award within the territory of a specific state, a presumption that is

¹ See also:

- Tūjān Fayṣal al-Sharīdah, *ibid.*, 7110 ff.
- Khālīd Mamdūḥ Ibrāhīm, *ibid.*, 325.
- Nabīl Zayd Muqābilah, "Al-Taḥkīm al-Iliktrūnī" [Electronic Arbitration], accessed at http://www.dralmarri.com/show.asp?field=res_a&id=216

² Amīnah Rawābiḥī, *Al-Taḥkīm al-Iliktrūnī fī Taswīyat Munāza'āt al-Tijārah al-Iliktrūnīyah* [Electronic Arbitration in Resolving E-Commerce Disputes] (Master's thesis, Specialisation in International Law and Political Relations, 'Abd al-Ḥamīd Ibn Bādīs University, Mostaganem, 2017).



difficult to uphold when an award is issued and drafted on an online communication platform.

Furthermore, the *New York Convention* contains provisions that presume that arbitration proceedings are conducted in a specific location or within the territory of a given state. Consequently, any procedural irregularity relative to that state's law may constitute grounds for refusing recognition and enforcement of the arbitral award.

This raises the question of whether arbitration proceedings conducted entirely through electronic means should be classified as "national" proceedings, subject to the traditional *lex fori* of the court, or whether they constitute a form of "delocalised" or "floating" arbitration beyond the confines of a specific jurisdiction.

The classification of arbitration as either national or foreign has traditionally hinged on the notion that proceedings take place in a specific physical location. This classification is further determined by the courts of the state where enforcement of the arbitral award is sought, particularly in assessing whether the award was issued within its territory and whether the arbitral proceedings were subject to its domestic law or whether the award originated outside its jurisdiction.¹

The determination of the seat of arbitration is closely linked to several established arbitration rules that emphasise the territorial aspect of arbitration, including the location of the proceedings and the place where the arbitral award is issued. This raises questions about how to determine the place of issuance of an electronic arbitral award in cases where arbitrators residing in different countries agree on the reasoning of the award through fax or email. The implications of these rules necessitate a careful examination of how to define the seat of arbitration in proceedings conducted entirely through electronic communication networks.

The nature of these networks further complicates matters, prompting questions regarding the place and time at which an arbitral award is deemed to have been issued, as well as the award's enforceability under existing rules when the evidence on which it is based is submitted on electronic media. Such evidence may be subject to numerous challenges, particularly concerning the validity and confidentiality of the proceedings. The absence of a physical location in the framework of electronic arbitration justifies these concerns, as the "seat" of arbitration is only nominal or virtual. Neither the parties nor the arbitrators meet in person; instead, the entire process is conducted online through communication networks.²

Subsection Two: Obstacles Related to the Functioning of Electronic Arbitration Institutions

The reality of dispute resolution outside the judicial framework has given rise to a wide range of practical, diverse, and comprehensive applications for disputes arising

¹ Tūjān Fayṣal al-Sharīdah, *ibid.*, 1108.

² 'Ādil Abū Hashīyah Maḥmūd Hūṭah, *Uqūd Khadamāt al-Ma'lūmāt al-Ilīkrūnīyah fī al-Qānūn al-Duwalī al-Khāṣ* [Electronic Information Service Contracts in Private International Law] (Cairo: Dār al-Nahḍah al-'Arabīyah, 2004), 315.



from electronic commerce. This development is a logical consequence of a serious effort to maximise the advantages offered by the digital environment and continuously evolving electronic tools to successfully adapt traditional dispute resolution methods such as negotiation, mediation, conciliation, and arbitration to an online format. Several private initiatives, supported by various economic organisations, regional entities, and professional associations, have emerged in this domain to keep pace with rapid technological advancements, and these initiatives have become important sources from which electronic arbitration draws its foundations.

First Subsection: Use of the Electronic Arbitration Mechanism within the European Union

In recognition of the importance and effectiveness of electronic arbitration, many states and international organisations have enacted laws enabling parties to resort to arbitration online. The European Union (EU) has been at the forefront of these efforts, adopting several serious and effective measures to address obstacles in this field, including the following:

1. Article 17 of Directive 2000/31/EC on Electronic Commerce

This provision allows member states to resolve disputes between information service providers and their users outside the courts through electronic means.

2. Encouragement to Remove Legal Barriers

The EU has encouraged member states not to impose legislative barriers to the use of alternative dispute resolution mechanisms outside judicial channels. Article 1 of Directive 2000/31/EC on electronic commerce stipulates the following: “*Member states shall ensure that information service providers and their users are allowed to resolve their disputes outside the courts and through technological means in the electronic environment.*”

3. Recommendations on Online Consumer Dispute Resolution

4. The European Commission, particularly in the context of consumer protection, has issued recommendations to adopt a series of guidelines for online dispute resolution (*Conflicts Online*), including the following:

- The establishment of a European network for online dispute resolution, as well as the resolution of all consumer-related disputes, particularly in the service sector.
- The development of general principles that member states must observe in resolving disputes through online platforms. The objective of this recommendation is to address gaps in Recommendation No. 298/257, which ensures maximum consumer protection in electronic transactions within the European Union.¹

¹ Sāmī ‘Abd al-Bāqī Abū Šāliḥ, *Al-Taḥkīm al-Tijārī al-Iliktrūnī* [Electronic Commercial Arbitration] (Cairo: Dār al-Naḥḍah al-‘Arabīyah, 2004).



Second Subsection: The Use of the Electronic Arbitration Mechanism within the Framework of the World Intellectual Property Organisation (WIPO)

The World Intellectual Property Organisation (WIPO) plays an increasingly significant role in developing and promoting an arbitration system tailored to electronic commerce, as well as in regulating internet-related disputes, particularly those concerning intellectual property, domain names, and trademarks.

This system has effectively overcome numerous challenges by allowing parties the freedom to choose the applicable law while ensuring the uniformity of sanctions despite differences in nationality. This is especially crucial given that the resolution of commercial disputes relating to intellectual property rights is of vital importance, requiring swift adjudication, low costs, and the provision of alternative solutions to traditional judicial methods, which are often lengthy and expensive.

The WIPO Arbitration and Mediation Centre has provided substantial support in resolving disputes between individuals and corporations worldwide, particularly as electronic commerce contracts have gained prominence. The centre maintains an extensive roster of arbitrators and mediators specialising in this field, representing over 70 countries. These experts operate under WIPO's regulatory framework and dispute resolution procedures.¹

Subsection Two: The Virtual Electronic Court

The Virtual Electronic Court was established in September 1996 at the Faculty of Law, University of Montreal, Canada, under the auspices of the Centre de recherche en droit public (Centre for Public Law Research). This project offers electronic arbitration services through the use of software applications and encryption technologies that ensure security and confidentiality in carrying out proceedings. Its procedural rules are inspired by those of international commercial arbitration systems, such as the United Nations Commission on International Trade Law (UNCITRAL) and the International Chamber of Commerce (ICC). They are adapted to meet the unique requirements of electronic communication channels while maintaining transparency and ease of use.

The primary objective of the Virtual Electronic Court is to establish a system or mechanism for preventing and resolving disputes arising from the use of cyberspace for information exchange. It provides arbitration services through electronic platforms and channels, develops codes of conduct tailored to the nature of electronic commerce, ensures the integrity of data and the resolution of disputes, and promotes a framework that guarantees the credibility of electronic procedures. Parties to disputes may join this system, and their participation is formalised within a contractual framework.²

¹ Caprioli, E., and R. Soreuil. "Le commerce électronique: Vers l'émergence de règles juridiques transnationales." *Journal du Droit International* 2 (1997): 323–29.

² Alboukrek, K. "Adapting to the New World of E-Commerce." *George Washington International Law Review* 35 (2003): 425–35.



The Virtual Electronic Court has jurisdiction over disputes relating to electronic commerce, competition, copyright, and trademarks and matters concerning freedom of expression or privacy in cyberspace. Its competence is thus limited to disputes arising from the use of information and communication technologies in the field of electronic information exchange.

First Subsection: Virtual Judging

Despite the significance of the recommendations and decisions issued by the European Union and the substantial efforts undertaken by the WIPO, the first practical experiment in resolving electronic commerce disputes through the internet was the *Virtual Judge* programme. This project, launched experimentally in March 1996, aimed to provide online arbitration services to resolve disputes between internet users and those harmed by unlawful messages or files, as well as disputes involving system operators, by offering a platform through which complaints and compensation claims could be filed against them.¹

The Virtual Judge project is an American initiative developed through collaboration between the Villanova Centre for Law and Information Policy and the Cyberspace Law Institute, a body specialising in electronic dispute resolution. In 1999, the project was transferred to the Chicago-Kent College of Law at the Illinois Institute of Technology. It received additional support from the American Arbitration Association (AAA), the internet Law Institute, and the National Centre for Automated Information Research (NCAIR).²

The primary aim of the Virtual Judge project is to provide prompt and impartial solutions to internet-related disputes through a mediator accredited by the centre, who possesses legal expertise in arbitration, electronic commerce law and contracts, internet law, and disputes involving trademarks and intellectual property. Under this system, the arbitrator is appointed by the American Arbitration Association (AAA) from a preestablished list of qualified arbitrators.

The arbitral tribunal under this framework consists of either a sole arbitrator or a panel of three. The appointed virtual judge communicates with the disputing parties who voluntarily submit to this system via email and renders a decision within 72 hours of the dispute's submission. The decision has no binding legal effect unless it is accepted by both parties. The Virtual Judge system is specifically designed to adjudicate disputes arising from the use of information networks, between users themselves or between users and system operators, where one party seeks redress for damage caused by messages or information that do not meet legal standards.

Second Subsection: Domain Name Dispute Resolution System

¹ Guillemard, Sylvette, and Anaïs Danet. "La justice virtuelle: Vous avez dit justice?" *Revue de Notariat* 123, no. 1 (2022): 323–44.

² Bahary-Dionne, A. "L'accès à la justice en contexte numérique: L'information juridique par et pour les justiciables sur les médias sociaux." *Windsor Yearbook of Access to Justice* 36 (2018).



The internet has enabled companies and commercial institutions worldwide to create websites through which they present their products to visitors and potential customers. However, this development has also given rise to new legal challenges, particularly concerning intellectual property rights. Among the most significant are disputes related to trademarks, as some websites adopt domain names identical or similar to well-known trademarks, often with the intent of attracting customers, thereby creating legal conflicts over ownership and usage rights.¹

The domain name system (DNS) enables internet users to access desired websites and exchange data with them through a series of characters that direct users to the intended site. In this context, the internet Corporation for Assigned Names and Numbers (ICANN) has issued several key documents addressing this matter, including the following:

1. **The Principles Document** was issued on 26 August 1999, which entered into force on 1 December 1999 and established the **uniform domain name dispute resolution policy (UDRP)**.
2. **The Rules of Procedure** issued on 24 October 1999 outline the procedural framework of the dispute resolution system.

The ICANN arbitration system aims to combat the registration of domain names that are identical or confusingly similar to well-known trademarks, with the intention of reselling them to the rightful owners of those names or marks, a practice known as *cybersquatting*. The domain name dispute resolution system is characterised by its reliance on electronic mechanisms, such as email, for the entire dispute resolution process. The WIPO Arbitration and Mediation Centre provides standardised complaint and response templates and maintains a comprehensive database for case management.

This system does not depend on the physical location or nationality of complainants, respondents, or registrants, as it was deliberately designed to be standardised and globally applicable, particularly for high-level domain name disputes. Moreover, it is structured to operate entirely without requiring the physical presence of any of the parties in a specific location.²

Conclusion

In the modern era, the law is continually confronted with complex and unprecedented situations that require the adoption of well-structured positions and clearly defined substantive and procedural frameworks. The emergence of commerce in its electronic form in the late twentieth century, along with its remarkable success in attracting widespread attention and participation, has placed increasing pressure on law to swiftly establish the principles and foundations necessary for this new form of trade to create a coherent and well-organised legal framework.

¹ Jeuland, E. "Justice numérique, justice inique?" *Cahiers de la Justice* (2019): 193.

² Khālid Mamdūh Ibrāhīm, *ibid.*, 259 ff.



While the law has found relative ease in regulating the substance of electronic commerce itself, it has faced significant challenges in developing legal mechanisms specifically designed to address disputes arising from this field and in tailoring these mechanisms to the realities of the digital environment. This has resulted in the adaptation of traditional dispute resolution methods to meet the unique needs of electronic commerce, with electronic arbitration emerging as the most suitable mechanism for this purpose.

Electronic arbitration has become an established reality worldwide and has reached an advanced stage of development in response to the demands of the digital age. However, this study reveals that the field still requires greater legal attention. There remain numerous deficiencies, particularly in the willingness of states to adopt definitive positions and take significant steps toward recognising and formalising the legal status of relationships established through electronic arbitration, as well as ensuring the enforcement of electronic arbitral awards.

Numerous challenges of varying natures continue to hinder the effectiveness of electronic commercial arbitration, preventing it from fully delivering on its promised advantages of efficiency, security, and practical utility in resolving commercial disputes. Achieving these objectives requires concerted efforts to strengthen the legal, human, and institutional frameworks governing arbitration. This will ensure that arbitration, in its electronic form, keeps pace with rapid developments and transformations in the field of international commerce and becomes a truly effective and trustworthy dispute resolution mechanism.

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