

# DOCUMENTATION OF ELECTRONIC ARBITRATION AWARD: A STUDY IN LIGHT OF UNCITRAL MODEL RULES AND EGYPTIAN LEGISLATION

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**Abstract :** *This study aims to examine the legal challenges related to the authentication of electronic arbitration awards. The study explores how these awards comply with the UNCITRAL Model Rules and Egyptian laws related to electronic transactions. This authentication aims to confirm the legal principles that establish equality between electronic and traditional formats. Therefore, electronic documents and signatures are granted equivalent evidentiary authority to paper documents and traditional signatures. Finally, it is recommended to establish an international legal framework to promote the authentication of electronic arbitration awards, ensure mutual recognition by national and international courts, and enhance transparency and security in electronic arbitration platforms.*

**Keywords:** *cyber arbitration, Egyptian laws, UNCITRAL guidelines, electronic signatures*

## 1. INTRODUCTION

The world is witnessing accelerated technological development, and its impact has not been limited to aspects of daily life only but has extended to include various economic and social fields, reaching the legal aspect as well. The digital revolution has radically transformed the methods of concluding and implementing contracts and resolving disputes arising from them because the traditional judiciary is no longer the only means of resolving these disputes. In this context, electronic arbitration has emerged as an effective means that keeps pace with the aspirations of parties wishing to settle their disputes quickly and efficiently and take advantage of modern digital means to save time and effort<sup>1</sup>.

With the increasing use of electronic contracts, the world faces new legal challenges related to the authentication and enforcement of electronic arbitration awards<sup>2</sup>. This process requires a precise legal mechanism to ensure the enforcement of electronic awards with the same legal force enjoyed by traditional arbitration awards. In this context, the UNCITRAL Model Rules emerge. It aims to establish a legal framework for regulating electronic arbitration and national legislation, such as Egyptian legislation, that addresses this issue.

In this context, pioneering projects in electronic arbitration have emerged, such as the cybercriminal, established by the Centre for Research in Public Law (CRDP) in Montreal, Canada, in 1996. This court aims to provide an effective mechanism for resolving disputes arising from the use of information space by providing arbitration and mediation services through electronic media and issuing certificates authenticating electronic signatures<sup>3</sup>. The American Arbitration Association (AAA) has also adopted the "Virtual Judge" project on the Internet. It is one of the first institutions to seek dispute resolution using

<sup>1</sup> J. CHAOHAN, "Transformation of Dispute Resolution: Technological Innovations in Dispute Resolution and Its Effect on International Law", SSRN, 2023, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4640977](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4640977).

<sup>2</sup> O. H. QOUTESHAT, "Challenges of authentication and certification of e-awards in Dubai and before the Dubai International Financial Centre courts: the electronic signature", Digital Evidence & Electronic Signature Law Review, vol. 13, 2016, p. 97, available at: <https://heinonline.org/HOL/LandingPage?handle=hein.journals/digiteeslr13&div=10&id=&page=>.

<sup>3</sup> M. T. AL-HILALI, "Electronic judiciary", Contemporary Egypt Magazine, vol. 104, issue 509, 2013, p. 16.



electronic arbitration. It enhanced its position as an alternative means of dispute resolution in the digital age<sup>4</sup>.

Based on the brief view above, this study examines the issue of authentication of electronic arbitration awards in light of these rules and legal systems. The study focuses on studying the compatibility of UNCITRAL Model Rules with legislation related to electronic transactions and the adequacy of this regulation to keep pace with legal and technological developments. Furthermore, the study seeks to demonstrate the most prominent challenges facing the enforcement of these electronic awards and how to authenticate them. Finally, the study aims to understand whether these awards enjoy the same legal force and enforceability as traditional arbitration awards or if there are difficulties preventing this.

Further, the researchers noticed that there is an absence of a clear and integrated legal framework to address the issue of authentication of electronic arbitration awards, especially in light of modern legislation such as the UNCITRAL Model Rules and Egyptian legislation. It is also noted that no specialised studies have addressed this topic in depth, which necessitates conducting this study to highlight the legal and technical challenges that may accompany the authentication and enforcement of electronic arbitration awards. The question arises regarding the compatibility of these awards with national legal systems and the extent to which they can be authenticated and enforced with the same legal force enjoyed by traditional arbitration awards.

### **Methodology**

An analytical comparative methodology was followed to complete this study. The researchers adopted this methodology in accordance with the recommendations of previous studies such as: Moqaddam<sup>5</sup>, and Al Mazrouei<sup>6</sup> that recommended this type of methodologies for such research. The researchers used analytical methods to analyse the legal texts related to electronic arbitration and study how these texts regulate the authentication and enforcement of electronic arbitration awards. The focus was on the compatibility of study awards with international legal principles, especially those contained in the UNCITRAL Model Rules.

The researchers also used the descriptive method to describe and analyse electronic arbitration procedures, from submitting applications to issuing and enforcing electronic awards. The focus was on how these procedures are implemented in different legal systems, identifying the practical and legal challenges associated with them.

### **Literature Review**

Regarding previous studies, we note that a previous study completed by Al Mazrouei the implications of enhancing the role of the judge in electronic arbitration. With the rapid growth of electronic information, the world has increasingly relied on technology for different transactions, leading to electronic adjudication (often referred to as remote arbitration). One notable benefit of electronic commercial adjudication is its compatibility with the nature of electronic contracts, making it highly effective in settling disputes related to digital transactions. Although electronic adjudication is viewed as a natural extension of traditional judicial systems, it is still relatively new and lacks comprehensive national legislation and international agreements.

As a result, multiple legal challenges have arisen. Al Mazrouei's study focuses on the role of the national judge in implementing electronic commercial arbitration, studying both the techniques used and the implications of its application, highlighting the limitations of traditional rules in the face of

<sup>4</sup> A. H. KOURITI, "Guarantees of electronic arbitration proceedings", *Journal of Legal Research and Studies*, Moroccan Center for Legal Studies, Consultancy, and Dispute Resolution, Morocco, issue 1, 2013, pp. 12-13.

<sup>5</sup> Z. H. MOQADDAM, "Means and guarantees of electronic authentication", *Bahri University Journal of Arts and Humanities*, vol. 3, no. 6, 2014, p. 12.

<sup>6</sup> H. F. S. AL-MAZROUI, "The implications of activating the role of the judge in electronic arbitration", *Al-Boughaz Journal of Legal and Judicial Studies*, vol. 1, 2019, pp. 209-244.

modern challenges<sup>7</sup>. Also, Qutishat's study addressed the challenges associated with the authentication and certification of electronic judgments in Dubai, particularly with regard to the Dubai International Financial Centre (DIFC) courts. The study highlighted the role of electronic signatures in this process, explored existing legal and technical issues, and provided insights into the evolving legal frameworks that support the use of electronic signatures in the judicial system<sup>8</sup>.

Moreover, the Maqabla (2014) addressed the nature of electronic arbitration. It provided a precise definition of the nature of electronic arbitration and explained how it is applied in different legal contexts. It also reviewed electronic arbitration awards in general, focusing on the legal foundations that regulate this process in various legal systems<sup>9</sup>. In addition, Moqaddam focused on the means and guarantees of electronic authentication. Their study explored the technical and legal methods used to ensure the credibility and security of authentication in electronic transactions. It also addressed the challenges parties may face when implementing electronic authentication and ways to enhance these guarantees within the framework of electronic arbitration<sup>10</sup>.

## 2. DISCUSSION SECTION

### 1.2 Authentication of Electronic Arbitration Awards

These themes were chosen to clarify the most important legal issues related to electronic arbitration, with a focus on addressing the most prominent challenges facing the authentication and enforcement of electronic arbitration awards in practical application. The application of legal rules specific to electronic arbitration in different judicial systems will be analysed. It studies the legal gaps that may affect the effectiveness of authenticating and enforcing electronic awards. Proposals and legal solutions presented to develop current legislation to ensure the effective enforcement of electronic arbitration awards.

#### Concept of Electronic Arbitration

The UNCITRAL Model Law defined arbitration under Article (2), which states that arbitration means any arbitration, whether administered by a permanent arbitral institution or not<sup>11</sup>. From a jurisprudential perspective, arbitration is defined as the method chosen by parties to resolve disputes arising from the contract by presenting the dispute to one or more arbitrators for determination by this arbitrator or arbitrators without resorting to the judiciary<sup>12</sup>.

Electronic arbitration means means or methods of arbitration that rely on technologies containing electrical, digital, magnetic, wireless, optical, electromagnetic, or other similar means, which is a type of characterization and definition of the specific activity field, and it means conducting arbitration using electronic media, methods, and networks, including the Internet<sup>13</sup>. Thus, the researchers note that electronic arbitration does not differ from ordinary traditional arbitration, except that electronic arbitration is limited to using electronic means in the arbitration process.

#### i. Characteristics of Electronic Arbitration, Key Advantages and Disadvantages

The advantages of electronic arbitration are the extreme ease and speed of its procedures. The disputing parties are not obligated to travel and physically appear before the arbitrators. However, they

<sup>7</sup> H. F. S. AL-MAZROUI, "The implications of activating the role of the judge in electronic arbitration", Al-Boughaz Journal of Legal and Judicial Studies, vol. 1, 2019.

<sup>8</sup> O. H. QOUTESHAT, Ibid.

<sup>9</sup> N. Z. MAQABLA, "A study entitled electronic arbitration", Journal of Jurisprudence and Law, College of Sharia and Law, Al-Jouf University, no. 24, 2014, p. 9.

<sup>10</sup> Z. H. MOQADDAM, Ibid.

<sup>11</sup> UNCITRAL (United Nations Commission on International Trade Law), Model Law on International Commercial Arbitration (1985), with amendments as adopted in 2006, UNCITRAL Official Website, available at: [https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/19-09955\\_e\\_ebook.pdf](https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/19-09955_e_ebook.pdf).

<sup>12</sup> M. S. FOUZY, International Commercial Arbitration, 3rd ed., 1st print, Dar Al-Thaqafa Publishing and Distribution, Amman, 2008, p. 12.

<sup>13</sup> I. M. IBRAHIM, Electronic arbitration in international trade contracts, Dar Al-Fikr Al-Jami'i, 2008, pp. 246-247.



can participate in electronic arbitration sessions through electronic communications and telephone conversations, where awards are issued quickly due to the ease of procedures that rely on the exchange of documents related to the dispute<sup>14</sup>.

Among the most important of these features are: The efficiency and speed of arbitration procedures, which has contributed to its spread as it does not require parties to be physically present before the arbitrators, but rather awards are issued quickly due to the ease of procedures that rely on electronic exchange between the disputing parties<sup>15</sup>. And, reducing litigation costs, which are modest due to the use of audiovisual means in holding arbitration sessions online for parties and experts, which reduces travel and transportation expenses<sup>16</sup>.

Confidentiality and avoiding the negatives of presenting the dispute before the public, unlike regular courts that are subject to the principle of the public trial<sup>17</sup>, as arbitration procedures and lack of publicity are confidential<sup>18</sup>. As well as, the efficiency of obtaining the award due to submitting documents via email, despite the advantages of electronic arbitration, it has many disadvantages and problems that face this type of arbitration, the most important of which are: Current legal systems are not keeping pace with the rapid development in the field of electronic commerce, in addition to the rigidity of existing legal rules in many countries of the world regarding the recognition of electronic arbitration awards<sup>19</sup>, and the existence of legal and technical obstacles represented by technical barriers and different degrees of security and confidentiality in electronic operations.

As for legal obstacles, they include obstacles accompanying arbitration agreements, including rules governing the place where the obligation arises and the place of arbitration in case the parties do not agree on a specific law, and obstacles related to arbitration decisions in terms of formal requirements and binding nature<sup>20</sup>.

Moreover, lack of trust from those dealing in electronic commerce, which stems from uncertainty about the possibility of enforcing arbitration awards issued electronically and from electronic arbitration not meeting the conditions required by law, especially writing, as electronic arbitration awards are not written in the traditional way known to us<sup>21</sup>. As well as Legal Capacity: All arbitration systems and legislation require that the legal capacity be available to both parties to the dispute and the arbitrators conducting the arbitration process. The issue of examining the capacity of arbitrators conducting the arbitration process can be overcome because the arbitration process is generally carried out via the Internet through centres specialized in electronic arbitration. These usually are keen on accuracy in various aspects, especially fundamental issues.

Thus, these centres appoint persons with full capacity and scientific and professional qualifications to conduct electronic arbitration operations. The discussion and research remain in the legal capacity of the parties to the dispute. Assuming that the capacity of the parties to the dispute is not available, we would be dealing with an invalid arbitration agreement due to the lack or absence of capacity of one

<sup>14</sup> A. A. HINDI, "Electronic arbitration award", Journal of Rights for Legal and Economic Research, Faculty of Law, Alexandria University, no. 2, 2009, p. 48.

<sup>15</sup> R. H. HAMDOUN, Towards a legal system for electronic arbitration, Dar Al-Jami'a Al-Jadida, Alexandria, 2013, p. 30.

<sup>16</sup> M. A. SALEH, "Electronic means for intellectual property dispute resolution: Electronic arbitration as a model", International Journal of Library and Information Sciences, vol. 1, no. 2, 2014, p. 17.

<sup>17</sup> E. A. MATAR, Electronic arbitration, Dar Al-Jami'a Al-Jadida, 2009, p. 54.

<sup>18</sup> M. A. SALEH, Ibid.

<sup>19</sup> R. H. HAMDOUN, Towards a legal system for electronic arbitration, Dar Al-Jami'a Al-Jadida, Alexandria, 2013, p. 30.

<sup>20</sup> M. ABDEL WAHAB, "Global information society and dispute resolution via the Internet, a new dawn for dispute resolution processes", Commercial Arbitration Newspaper, no. 2/21, 2004, p. 157.

<sup>21</sup> A. KHEBAB, Electronic arbitration in e-commerce, a comparative study, Master's thesis, Dar Al-Fikr Wal-Qanun Publishing and Distribution, Cairo, 2017, p. 78.



of the parties to the dispute at the time of signing it and the consequent invalidity of the arbitration award issued in the commercial dispute<sup>22</sup>

## ii. The Meaning of Electronic Arbitration Agreement

Electronic arbitration, like other contracts, requires agreement on it and does not arise except with the availability of its substantive and formal conditions until the agreement becomes effective. It is considered a binding contract for both parties, which will be discussed as follows:

1. Substantive Conditions: According to arbitration rules, substantive conditions must be met for the validity of the arbitration agreement, and these conditions are:
  - A. Capacity Condition: Since the electronic arbitration agreement is a contract conducted on the electronic network and signed between two parties at a distant location, which requires the contractor to verify the capacity of the other party, the electronic arbitration agreement may be invalid due to the lack or absence of capacity of one of the parties to the dispute at the time of signing.
  - B. Consent Condition: Consent is the matching of offer and acceptance as an expression of the contracting parties' will, meaning the meeting of two free and identical wills to resort to arbitration as a means of resolving the dispute. The law requires consent for the establishment of the contract. For consent to exist, each party must have a legally recognized will. Then, this will is directed toward creating a legal effect. It is required that the will be serious and real, not nominal or joking, and this is done through material manifestations indicating the will, such as speech, writing, gestures, or others. The expression of will is made through electronic means where the offer is directed through them, and acceptance is also received through them.
2. Formal Conditions: The principle in consensual contracts is the freedom of parties to choose the form of expression of their will. The existence of an offer and a matching acceptance based on valid consent is sufficient for the contract to be formed in general. As an exception, the law may require that the contract be in a specific form, such as requiring the contract to be in writing. Writing may not only be for proof but also for the conclusion and valid formation of the contract. In this context, the contract has no legal existence unless it is in the written form required by law, and then the contract is formal. Writing is an essential element in the contract, without which it cannot be established<sup>23</sup>.

It is noted that the Egyptian Arbitration Law No. 27 of 1994 stipulated in Article 12 that the arbitration agreement must be in writing. Otherwise, it is void and considered written if it is included in a document signed by the parties or through letters, telegrams, or any other means of written communication<sup>24</sup>.

As for electronic arbitration, a question arises about the extent to which the writing condition is met in the agreement, where it is noted that some international agreements, most importantly the United Nations Convention on the Use of Electronic Communications in International Contracts, in Article (9), have explicitly adopted the principle of full functional equivalence in law between traditional arbitration awards and electronic awards for electronic arbitration. The convention establishes criteria for achieving functional equivalence between electronic communications, paper documents, electronic authentication methods, and handwritten signatures. This means that when legal rules originally established for traditional awards require that the arbitration agreement be in writing, this requirement must also include electronic transactions, including electronic signatures and writing, which equates

<sup>22</sup> N. Z. MAQABLA, "A study entitled electronic arbitration", Journal of Jurisprudence and Law, College of Sharia and Law, Al-Jouf University, no. 24, 2014, p. 9.

<sup>23</sup> J. DEEB AL-MA'ANI, Electronic arbitration, Dar Al-Thaqafa for Publishing and Distribution, Amman, 2014, p. 94.

<sup>24</sup> Egyptian Arbitration Law No. 27 (1994), Egypt, available at: <https://mnasserlaw.com/wp-content/uploads/2020/11/arbitrationLawar.pdf>





between written documents and electronic documents. Thus, the writing condition is met in the electronic arbitration agreement included in the arbitration document<sup>25</sup>

In the context of discussing the authentication of electronic transactions in the arbitration process, the proof of the arbitration agreement in terms of its authentication by electronic means plays a large and effective role. It has become difficult to adjust legal provisions to suit the special nature of electronic communication means in a way that guarantees the rights of parties to the arbitration contract. This has made it necessary to develop legal provisions based on paper transactions, given the technological development that has allowed dealing with a new type of writing and signature<sup>26</sup>. Therefore, it has become necessary to find technological techniques that perform the same role, purpose, and function as the handwritten signature, which has led to the need to authenticate the electronic message. This stage is considered one of the most important stages of concluding the contract, which is the stage of certifying the signature due to its prominent role in proving the contract, verifying the validity of its data, and verifying the validity of the signature and its attribution to its owner. According to this authentication, a validity certificate is granted by the competent authorities to certify the electronic signature and that this signature was issued correctly by the same persons - parties to the electronic arbitration dispute<sup>27</sup>.

Therefore, all arbitration procedures must be documented. Also, the document must be appended with the signature of the person who has the authority to do so. It also requires registering documents in a special electronic register, which leads us to address the issue of documenting arbitration procedures. Arbitration procedures are carried out by exchanging information electronically, with these messages being stored in an electronic record to refer to it when needed. After being classified, these electronic supports need to be stored in electronic files and records, which in turn requires clarifying the concept of the record and authenticating electronic arbitration awards.

## **2.2 Authentication of Electronic Arbitration Award**

The electronic arbitration award, like other awards, must be authenticated, meaning that the documents related to the arbitration process must be appended with a signature from a person or competent authority with this authority. This leads to the necessity of having an entity that certifies this signature, which instills trust and security among the contracting parties. This is due to the nature of these contracts. They involve no actual meeting of the parties, which necessitates the existence of a third party, whether a legal or natural person. This third party ensures the integrity of the award from tampering and fraud. Additionally, they secure the signing process by verifying the identity of the contractors. Furthermore, they work to create electronic records specific to the arbitration process to document all parties' transactions. This process is called documentation of arbitration procedures<sup>28</sup>.

This calls for legal provisions based on paper transactions that are in line with technological development and modern means of communication, especially electronic transactions. These digital innovations are transforming global communications today. Consequently, it is necessary to verify signatures on such documents to ensure that the data sent has come from its original source without distortion or change. Therefore, this verification provides a solution to issues related to authentication and the integrity of electronic contracts. Moreover, it necessitates preserving these files and electronic records for future reference when needed<sup>29</sup>.

### **2.2.1 The Record in the Electronic Arbitration Process**

The record plays an important and effective role in the authentication process, as it is considered a functional equivalent of written documents as it secures the storage, documentation, and authentication

<sup>25</sup> United Nations (2005), Convention on the Use of Electronic Communications in International Contracts, available at: <https://www.wipo.int/wipolex/ar/text/201667>

<sup>26</sup> E. AL-KHALADI, Electronic arbitration, Egypt, 2009, p. 453.

<sup>27</sup> E.M. A. SULEIMAN, Conclusion and proof of electronic contracts, Dar Al-Jami'a Al-Jadida Publishing, Alexandria, 2008, p. 307.

<sup>28</sup> A. SHARAF AL-DIN, Electronic dispute resolution: legal studies in international commercial arbitration, Egypt, 2002, p. 90.

<sup>29</sup> E. NASIF, Electronic arbitration in international contracts, Lebanon, 2012, p. 25.



of information and data in the arbitration process. It serves as a means of proof in the arbitration process, and this record consists of a medium prepared to create, receive, send, and store data.

### **The Concept of Electronic Record:**

The record includes any carrier or medium prepared to create, store, send, or receive data electronically. The purpose of using the record is to document information to ensure its integrity and complete retrieval when necessary for the contracting parties or authorized persons. This requires creating an environment that protects the record from all natural and human negative influences and providing continuous and regular maintenance of this record, ensuring it maintains its strength and legal authority<sup>30</sup>. Thus, the record has a function which is to find a means to secure the documentation and storage of data and information. It is also considered one of the important means of arbitration.

It is also a means of proof in case of any dispute between the parties to the contract, where it can be likened to commercial books that merchants and commercial establishments are required to keep to show their commercial transactions. Therefore, the record contains data related to electronic transactions, the most important of which are the identity and email of the record owner, name, address, and email of the other party to the transaction, date and time of sending and receiving the message, volume of transactions between parties as documented in the message, an exact copy of the record kept in the archive, and other information<sup>31</sup>. The record for commercial transactions is a means of preserving information exchanged between parties to document the data recorded in it. It is an essential part of the data exchange system. Whenever transaction records are sufficient, complete, reliable, and provided with security elements, this helps complete the electronic data exchange system. The record can also be considered evidence presented to courts in case of doubt or disagreement between parties while guaranteeing the judge's right to assess the authenticity of these records<sup>32</sup>.

Researchers recognize the great importance of records in the arbitration process. In traditional transactions, written documents are required so parties can refer to them when needed. These documents are considered legal means of proof with full legal authority before the judiciary. Similarly, electronic records carry the same authority and legal force. This is because they document and preserve information and data exchanged between parties. As a result, the laws under study and agreements concerned with electronic transactions have required the existence of such records.

### **Legal Authority of Electronic Record:**

The electronic authenticator is obligated to create a list of the names of legal persons for whom electronic signature certificates have been issued without the law requiring monitoring of the subject or content of electronic transactions. More precisely, this restriction does not mean only storing electronic transactions. However, the purpose of the record is to verify that the natural person representing this legal person and signing the electronic transaction is the person whose data was registered when issuing the electronic certificate. It confirms conformity with the first data<sup>33</sup>.

The laws under study and international agreements related to electronic commerce have also recognized the legal authority of electronic records, which will be explained in this section. This is because this record has the same characteristics related to commercial books, making them readable to everyone, with the possibility of obtaining several copies of them, possibility protecting them from damage as much as possible, and providing security for the information they contain, which requires explaining this authority in the laws under study, including: Egyptian Law: We find that the Egyptian legislator has equated between the electronic record and the paper record, as stated in Article (3) of the Civil Status Law No. 143 of 1994 that what is meant by records are paper or automated records

<sup>30</sup> E. AL-KHALDI, Arbitration, Egypt, 2009, p. 299.

<sup>31</sup> R. H. HAMDOUN, Towards a legal system for electronic arbitration, Dar Al-Jami'a Al-Jadida, Alexandria, 2013, p. 30.

<sup>32</sup> I. M. IBRAHIM, Ibid.

<sup>33</sup> A. L. WALI, The legal system for electronic authentication, Journal of Studies and Research, University of Djelfa, no. 1, 2009, p. 16.



stored on the computer and its accessories, from which it is understood that the Egyptian legislator has recognized the authority of the electronic record.

However, it is noted that Executive Regulations No. 109 of 2005 for the Egyptian Electronic Signature Law No. 15 of 2004 required the existence of an independent electronic record as a condition for recognizing the legal authority of electronic documents, from which it is understood that the Egyptian legislator has recognized the authority of the record. The content of Article (8) of the regulations stated that the evidentiary authority established for electronic documents is achieved if several conditions are met, including that it is technically possible to determine the time and date of creating the electronic writing or official or customary electronic documents, and that this availability is done through an independent electronic preservation system subject to the control of the creator of these documents<sup>34</sup>.

UNCITRAL Model Law on Electronic Commerce: This law stipulated that the record should produce the legal effects of documents and handwritten signatures and that the legal effect resulting from them cannot be denied through several articles, including Article (6), which equated traditional writing with data messages contained in the record, when the law requires that information be written for a data message to meet that condition so that it can be referenced later. The equivalence between signatures on traditional messages and data messages such as records can be inferred from the text of Article (7) concerning signatures in this law. Article (7) of the UNCITRAL Model Law on Electronic Commerce is based on recognizing the functions of signature in a paper environment<sup>35</sup>.

### 2.2.2 The Authority Competent to Authenticate the Electronic Record

The laws under study required the existence of a competent authority, whether a natural or legal person, to authenticate the electronic arbitration process. These authorities have a significant and effective role in ensuring that the signature on the record is the same signature attributed to that person and no other in order for it to be considered valid as proof and other roles played by these authorities. A trusted entity must link a specific person or entity to the signature to ensure the signature's validity. This is done using a neutral third party called a certification service provider, certification service supplier, or authentication authority<sup>36</sup>.

The names given to the authority competent to certify signatures vary. The UNCITRAL Model Law on Electronic Signatures in Article (1) called it a certification service provider<sup>37</sup>. The third-party who undertakes the certification process is also called a certification service provider, and the authenticator intervenes based on the request of two or more persons, aiming to create, preserve, and prove electronic messages<sup>38</sup>.

Electronic signature authorities are also obligated to issue an electronic certificate confirming the identity of the electronic message's sender and the signature's validity. The authentication certificate is an electronic message delivered by a trusted third party, and it has the function of linking a natural or legal person with a pair of keys (private and public) and allows identifying the holder of the private key that corresponds to the public key mentioned in it. The certificate contains information about the user (name, address, capacity, other identifying elements), the legal representative for a legal person, the name of the certificate issuer, the user's public key, the serial number, the date of certificate delivery, and the expiration date. This is because individuals' purpose in resorting to electronic authentication authorities is to add an element of trust, security, and confidentiality to their electronic messages and

<sup>34</sup> Executive Regulations No. 109 (2005) for the Egyptian Electronic Signature Law No. 15 (2004), Egypt, available at: <https://manshurat.org/node/13791>.

<sup>35</sup> UNCITRAL, Ibid.

<sup>36</sup> I. A. ABOU EL-LAIL, *The legal aspects of electronic transactions*, Kuwait, 2003, p. 192.

<sup>37</sup> United Nations Commission on International Trade Law (2001), Model Law on Electronic Signatures, available at: <https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/ar/ml-elecsig-a.pdf>.

<sup>38</sup> E. M. A. SULEIMAN, Conclusion and proof of electronic contracts, Dar Al-Jami'a Al-Jadida Publishing, Alexandria, 2008, p. 307.





signatures to encourage others to contract with them after verifying their identity and their serious intention to contract<sup>39</sup>.

Researchers see the importance of obtaining authorization from the state for entities authorized to authenticate electronic transactions before undertaking these works (authentication works), to ensure the quality and trust of those dealing with them and to verify that the parties and their signatures on electronic documents are correct and free from any defect or forgery.

The Egyptian law on regulating electronic signatures did not define the signature certification authority. However, it is noted that the executive regulations of this law defined certification authorities in Article (1) as the entities authorized to issue certification certificates and provide services related to signatures. It is noted here through this definition that these regulations have limited the practice of providing certification services to legal persons only, without natural persons, and that this definition did not limit the activity of these entities to issuing electronic authentication certificates but expanded it to include all other services related to signatures<sup>40</sup>.

The European Directive on Electronic Signatures defined in Article (2) Paragraph (11) authentication authorities as any legal person, whether natural or legal, who has the legal authority to issue signature authentication certificates and provides services related to signatures<sup>41</sup>. This directive obligated member states of the European Union to license private entities to undertake the tasks of approving electronic signatures by issuing certificates proving that the digital signature meets the necessary conditions to be considered valid for proof and its connection to the document it is appended to, while securing it against any change in its content<sup>42</sup>.

The definition contained in the European Directive on Electronic Signatures is the same definition provided by the UNCITRAL Model Law on Electronic Signatures of 2001, which defined a certification service provider as "a person that issues certificates and may provide other services related to electronic signatures"<sup>43</sup>. The UNCITRAL Model Law did not come with specific conditions for accrediting authentication authorities but limited itself to determining their responsibilities. It is clear that this law considered the determination of conditions for accrediting authentication authorities as a regulatory matter. Similarly, it viewed the fees collected for such services as issues to be handled by the executive authority in each country. This approach acknowledges that regulating the accreditation of such bodies requires flexibility. Consequently, this flexibility may be better provided through systems issued by the executive authority in each country. However, in the European legislator's desire to ensure a minimum of standards for accrediting authentication authorities in European Union countries, the second annex to the European Directive on Electronic Signatures came with recommendations for accrediting authentication authorities<sup>44</sup>.

### 2.2.3 Procedures for Authenticating Electronic Arbitration Awards

Electronic authentication aims to ensure the integrity and security of transactions over the Internet, whether in terms of its parties, content, subject matter, or date. In other words, it creates a secure electronic environment for transactions over the Internet to support commercial trust. Electronic authentication procedures are carried out through electronic signatures, as they are considered one of the most important problems in electronic transactions, which lies in the fact that it takes place between

<sup>39</sup> Z. J. A. KESSI, *The legal system of documentation authorities (electronic certification)*, Algeria, 2012, p. 5.

<sup>40</sup> Executive Regulations No. 109, *Ibid*.

<sup>41</sup> Directive 2000/31/EC of the European Parliament and of the Council on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce) (2000), EU, available at: <https://www.wipo.int/wipolex/ar/text/181678>.

<sup>42</sup> I. A. ABOU EL-LAIL, *Electronic transactions documentation and the responsibility of the documentation authority towards third parties*, Seventh Annual Scientific Conference on Electronic Banking Transactions between Sharia and Law, United Arab Emirates, 2003, p. 1870.

<sup>43</sup> United Nations Commission on International Trade Law (2001), *Ibid*.

<sup>44</sup> A. K. MUSAADA, *Digital signature and authentication certificate*, *Al-Manara Journal for Research and Studies*, vol. 11, no. 4, 2005, p. 10.



two parties who do not know each other and through an open and insecure medium in a way that lacks any physical evidence of what actually happened.

Therefore, there has become an urgent need for electronic mechanisms and procedures to be followed for authentication and certification that inspire trust and security in identifying the identity of the parties to the transaction, ensuring the integrity of the content of data exchanged over the network, ensuring confidentiality, and preventing the denial of data messages issued by either party. This mechanism is embodied in the presence of a neutral person with high technical and technological capabilities to ensure the integrity and validity of the electronic signature in the electronic arbitration agreement<sup>45</sup>.

### Electronic Signature

Undoubtedly, the signature embodies consent and plays a fundamental role in expressing the signer's consent and commitment to what they have signed in terms of a contract or agreement, and through it, the signature can be attributed to its owner. Perhaps the signature is the most important condition required by the judiciary for the validity of an ordinary document and granting it legal authority, such that if the document lacks the signature of one of the contracting parties, it does not have legal authority<sup>46</sup>.

Thus, the traditional method of proving and authenticating contracts, which is the handwritten signature, is no longer suitable for electronic transactions and exchanges, with which this signature cannot be available due to the replacement of the paper medium. Hence, an urgent need arose to find an electronic alternative to replace the handwritten signature and serve the same purpose and function in terms of authentication and proof; therefore, electronic signatures emerged to authenticate electronic transactions.

The Egyptian legislator defined in Law No. 15 of 2004 regarding the regulation of electronic signatures in Article (1) that it is what is placed on a document in any form, number, letters, or symbols, which in turn allows distinguishing the signature owner from others and considering it unique to them<sup>47</sup>.

The Egyptian legislator introduced an amendment to the provisions of the Civil Code related to written evidence to include electronic documents within the scope of this evidence, in line with many European countries for the directives that call on EU countries to complete the national legislative system in a way that accommodates the use of non-paper media in proving electronic transactions within the limits that ensure coordination between national legislations.

Thus, the French legislature approved the principle of equality between electronic documents and written documents. It established the possibility of having non-paper writing on non-paper media, and data can be placed and stored on electronic media so that they can be accepted as evidence of proof like paper written evidence. It also gave the judge the authority to resolve conflicts between written evidence regardless of the medium on which it falls. It allowed the official document to be placed on an electronic medium with certain controls, expanded the concept of signature, defined what is meant by it, and the conditions for its validity<sup>48</sup>.

The electronic signature is characterized by the following: Uniqueness: where this signature can only be created by its user. And difficulty of forgery: Anyone wishing to use it without permission faces significant difficulties in terms of time and resources during the forgery attempt, and ease of verification: where the recipient of the information can easily identify the sender or who created the

<sup>45</sup> Z. H. MOQADDAM, Means and guarantees of electronic authentication, Bahri University Journal of Arts and Humanities, 3(6), 2014, p. 12.

<sup>46</sup> B. A. BADAWI, Electronic arbitration as a means of resolving e-commerce disputes, Egypt, 2006, p. 60.

<sup>47</sup> Law No. 15 of 2004 on E-signature and Establishment of the Information Technology Industry Development Authority (ITIDA), Egypt, available at: <https://www.wipo.int/wipolex/en/legislation/details/13546>.

<sup>48</sup> H. BAKHFAWI, Problems of electronic arbitration in traditional rules, Morocco, 2011, p. 11.

information, even after a period. Also, difficulty of denying the signature: where the owner of the electronic signature finds it difficult to deny their signature even after a period<sup>49</sup>.

The researcher notes that the electronic arbitration process must be carried out. The electronic signature must be available for parties to sign all transactions related to the arbitration process, showing their complete consent to resort to electronic arbitration. There must be legal evidence showing that the persons who signed the arbitration agreement are the same, united in place and cause, which obliges them to implement the arbitration decisions issued by the arbitration panel so that this signature enjoys complete legal authority.

### The Extent of Legal Authority of Electronic Signature

It should be noted that the Egyptian Electronic Signature Regulation Law in Article (14) stipulated that "the electronic signature within the scope of commercial, civil, and administrative transactions has the same authority established for signatures in the provisions of the Evidence Law in civil and commercial matters if the conditions stipulated in this law and the technical and technological controls determined by the executive regulations of this law are observed in its creation and completion." Article (15) of the same law also stipulates that "electronic writing and electronic documents within the scope of civil, commercial, and administrative transactions have the same authority established for writing and official and customary documents in the provisions of the Evidence Law in civil and commercial matters, when they meet the conditions set for them in this law according to the technical and technological controls determined by the executive regulations of this law"<sup>50</sup>. It is noted that electronic documents - which include the arbitration agreement - must be extractable on paper so that they can be submitted to courts to request its confirmation, certification, and enforcement and to give it full legal authority<sup>51</sup>.

The Egyptian legislator also referred to the conditions that must be met in the electronic signature, electronic writing, and electronic documents to have evidentiary authority, according to Article (18) of the Electronic Signature Regulation Law, which are: (A) The signature's connection to the signer alone and no one else. (B) The signer's sole control, without others, over the electronic medium. (C) The possibility of detecting any modification or alteration in the electronic document's data or signature. The executive regulations of this law determine the technical and technological controls necessary for this." The Egyptian legislator considers these conditions sufficient for the electronic signature to achieve its intended objectives and ensures its complete equality with the handwritten signature regarding the effects of each<sup>52</sup>.

As for the UNCITRAL Model Law on Electronic Signatures, it recognized electronic signatures provided that the signature indicates the identity of the signing person. It was also indicated that the Model Law on Electronic Signatures recognized the legal authority of the signature, stipulating that when the law requires a signature from a person, that condition is met for a data message if an electronic signature is used that is reliable to the extent appropriate for the purpose for which the data message was created or communicated, in light of all circumstances, including any relevant agreement<sup>53</sup>.

As for the Model Law on Electronic Commerce, it indicated in Article (7) that when the law requires a person's signature, that condition is met if a method is used to identify the signer and indicate the signer's intention to be bound by what they signed<sup>54</sup>. Thus, the electronic signature is characterized by

<sup>49</sup> G. HAZBOUN, Electronic signature and its validity, Egypt, 2011, p. 8.

<sup>50</sup> Law No. 15 of 2004 on E-signature and Establishment of the Information Technology Industry Development Authority (ITIDA), Egypt, available at: <https://www.wipo.int/wipolex/en/legislation/details/13546> .

<sup>51</sup> E. AL-KHALDI, Arbitration, Egypt, 2009, p. 299.

<sup>52</sup> Law No. 15 of 2004 on E-signature and Establishment of the Information Technology Industry Development Authority (ITIDA), Egypt, available at: <https://www.wipo.int/wipolex/en/legislation/details/13546> .

<sup>53</sup> United Nations Commission on International Trade Law (2001), Ibid.

<sup>54</sup> UNCITRAL Model Law on Electronic Commerce (1996), UNCITRAL, available at: [https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/ar/ml-ecomm-a\\_ebook\\_1.pdf](https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/ar/ml-ecomm-a_ebook_1.pdf).



several features, the most important of which can be summarized as: The signature is done through electronic means, via computers and the Internet, or on a cassette or disk, also, no specific form is required for the signature; it can come in the form of a letter, symbol, number, sign, or even a sound. What is important is that it has a unique character that allows distinguishing the person who owns the signature, identifying them, and showing their desire to approve the legal action and consent to its content<sup>55</sup>, unlike the traditional signature, which is limited to handwritten signature and may be accompanied by a stamp and fingerprint<sup>56</sup>.

Based on this, it is noted that the electronic signature is equivalent to the traditional signature in terms of function, purpose, and legal authority, not in form. The fundamental difference between them is that the signature is done by electronic means and modern electronic media, unlike the traditional signature. Thus, the parties' signing of the arbitration agreement by means of their signature is valid and produces all its legal effects if the conditions required by the laws are observed.

The laws under study and research have recognized that the legal authority of the electronic signature in evidence is equivalent to the recognized authority of the traditional signature, provided that it is created by means specific to the signing person and subject to their control alone and that it is linked to the document data in a way that reveals any subsequent change to the document data or to the signature itself. The signature must also identify its owner and express their consent to the document's content; finally, it must be uniquely linked to the person concerned.

### 3. CONCLUSION

Electronic arbitration is of great importance in our current era, as it serves as an optional means of resolving disputes through specialized arbitrators using electronic means via the Internet, and the consequences of this process, such as authenticating and preserving the arbitration award and making it a binding decision for all parties.

Given the characteristics and advantages of arbitration, in terms of speed in resolving disputes, reduced costs, and other advantages, arbitration has become an effective means for parties to resort to, despite facing many legal obstacles, since it is conducted remotely through electronic means without the need for the physical and personal presence of the parties. It is noted that many of these obstacles have been overcome, as we clearly observe the spread of many arbitration centres and international arbitration institutions concerned with this subject, which in turn helps to unify these laws.

The arbitration process is carried out through electronic means of communication, where parties present their dispute to these centres, institutions, and arbitration bodies concerned with the arbitration. It is noted that electronic arbitration does not differ much from traditional arbitration, except in terms of using electronic means from the moment of agreeing to arbitration until the moment of issuing and implementing the arbitration award, and this is the fundamental difference between traditional arbitration and electronic arbitration.

The research presented the legal regulation of electronic arbitration in terms of authenticating the award issued by the arbitration panel and all transactions carried out by the parties, including procedures, requests, and others. Electronic arbitration plays a noticeable and effective role due to its many advantages. Additionally, specific international and national legal regulations enhance parties' confidence in this type of dispute resolution. Consequently, these factors encourage parties to use electronic arbitration to settle their disputes. However, there remains a continuous and necessarily need to develop these centres, bodies, and laws concerned with arbitration to keep pace with the technological developments, legal difficulties, and obstacles that appear in our day facing this type of arbitration.

<sup>55</sup> A. A. AL-ABOUDI, Challenges of evidence with electronic documents and the legal system's requirements to overcome them, Lebanon, 2017, p. 149.

<sup>56</sup> A. G. A. RABADI, Special rules on signatures, Egypt, 2006, pp. 15-16.



## Results

1. Electronic arbitration, like other legal systems, has many advantages and disadvantages. It is found that it does not differ in essence from traditional arbitration, except that it is limited to using electronic means in the arbitration process.
2. The electronic signature has the same legal authority as that granted to traditional documents if the conditions stipulated by the laws under study are observed, as the signature is considered the basis of the authentication process. Therefore, it is required to be considered electronic, as electronic methods do it.

## Recommendations

1. The researchers recommend recognizing the legitimacy of electronically concluded arbitration agreements and making them equivalent to traditionally concluded agreements, giving them the same legal authority. Also, recognizing the validity of electronic signatures and giving them the same authority as ordinary signatures, recognizing the validity of writing contained in electronic arbitration by equating it with traditional writing and giving it the same authority and legal force, and recognizing the freedom of parties to choose the law governing the arbitration dispute and others.
2. Working to create a special electronic network for settling electronic arbitration disputes between countries, such as the existence of permanent arbitration bodies specializing only in electronic arbitration, which in turn ensures providing strong legal protection with legal authority away from any manipulation or fraud in electronic arbitration awards issued by the arbitration panel, which enhances the parties' confidence in electronic transactions.

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