

The Law Applicable to Electronic Signatures Comparative Study

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Abstracts

This study dealt with one of the most important legal subjects in private international law that relates to the topic of law applicable to electronic signature and is problematic by the lack of clear and explicit texts to determine the law required on the topic. The main objective of the study was to reflect the legal regulation in private international law of such a problem, as well as to address some practical and applicable problems relating to the topic of the study, including the legal nature of an electronic signature. When preparing this study, the researcher relied on the inductive approach by extracting legal texts on the subject of the letter in accordance with Jordanian legislation. In addition to the analytical approach where the researcher analysed and described the legislative and doctrinal positions and international conventions associated with the subject matter of the letter, The prescriptive approach, through a statement of the legal nature of the electronic signature. The researcher produced a series of results, the most important of which was the absence of clear and explicit texts specifying the law applicable to the electronic signature. This result was reflected in the recommendations of this letter, which were the most important recommendation to the Jordanian legislature that legal rules should be drawn up to determine the law applicable to the subject matter of the study.

Keywords: Internet service, service provider, conflict of laws, electronic signature, regular signature.

Introduction

Electronic signature has enjoyed a prominent, important and vital place in electronic contracts, as it plays an important role in the conclusion of electronic contracts as a means of expressing the will to consent to such act or legal conduct and is confiscated by those who are bound by the content of this contract and at the same time is considered a means of proof in electronic editions. Without electronic signature, their authenticity in proof is weak to the standard of ordinary or official papers.

These various functions of electronic signature have led legislators and jurists to give this means and performance clear attention both at the technical and legal levels. Most legislation has sought to establish the legal rules governing electronic signature. Rather, it has evolved into a concerted international effort to conclude international conventions to regulate electronic signature because of its prominent place in electronic contracting.

This endeavor of national legislation to establish legal rules that are capable of paying attention to electronic signature has created a situation of confusion because of the different legislation governing electronic signature between States in the light of the international nature of the electronic signature. No doubt, this difference highlights the importance and need to find a solution to the conflict. The outcome of the final resolution of the dispute is linked to the law to which it applies.

Electronic signature has taken its place in electronic contracts in the electronic environment that are not subject to specific geographical boundaries or territorial area, making it difficult to indicate the legal rules governing electronic signature either in the event of a dispute or in the absence of a dispute. In both cases, there must be legal rules governing electronic signature in order to achieve the functions and objectives for which this means, and performance was established to encourage individuals to resort to this electronic environment.

Based on the foregoing and in view of the importance of electronic signature in electronic contracts and simultaneously in electronic editions and as a tool for achieving reliability, this study seeks the law applicable to disputes involving a foreign element to an electronic signature of an international character in order to achieve legal and economic standards.

Our study of the law applicable to electronic signature is due to an obvious lack of legislation to reflect the law applicable to electronic signature in most legislation, including the Jordanian legislature, despite the national and international legal attention, but the legislative and legal texts have not regulated this important aspect of electronic signature.

So, the researcher in this study will study and analyze the electronic signature by indicating what the electronic signature is in the first research and then in the second study the role of attribution rules in solving the problem of conflict of laws.

What is an electronic signature?

An electronic signature will be defined in section I and then the conditions to be met in an electronic signature in section II will speak of the role of an electronic signature in electronic contracts, electronic editions and, finally, the functions of an electronic signature.

In view of the importance of electronic signature in this electronic medium, the technical and technological capabilities and the ability to perform the duties entrusted to it, which are imposed on States, in particular those involved in the process of growth, and the use of such entities to encourage electronic transactions, in particular electronic commerce, As an electronic signature may have more than one nationality, whether because of the owners with whom it relates or the issuer of the electronic signature or license. and that they are foreign to the State conducting its contracts, Thus, in order to determine the law applicable to electronic signature relations and linkages, it is necessary to indicate and define the concept of an electronic signature. In accordance with certain jurisprudence, the foreign character of an electronic signature follows any person who enjoys the nationality of a State other than the granting State. However, the criterion by which an electronic signature is used to indicate that an electronic signature is not national has not been agreed upon by scientists, including the criterion of the establishment of an electronic signature or the legal rules on which the electronic signature was established and the other has been to adopt the nationality of the electronic signature's escort.

2.1 The concept of an electronic signatory

To define the concept of an electronic signature precisely in scientific terms, the electronic signature must first be defined in jurisprudence and legislation by mentioning the provisions of the legislation as well as the opinions of the scholars in this field to accurately define this body.

The data to be available in the electronic signature and the data required by the authenticator of the electronic signature applicant must also be addressed as follows:

Section I: Definition of electronic signature

Section II. Electronic signature provider's photographs.

Definition of electronic signature and conditions to be met in an electronic signature.

In this requirement, the definition of electronic signature will be indicated in (section I) and then we will address the terms of electronic signature in section II.

2.1.1: Definition of legal electronic signature (I) and definition in electronic national legislation II and legal definition in conventions and treaties

1: Legal definitions of electronic signature

Defined as: "References, symbols or letters authorized by the competent authority to adopt a signature that are closely linked to legal conduct, permit the identification and identification of a person, and express, without ambiguity, his or her consent to such legal conduct.

He was also known as "the set of technical procedures that allow for the identification and acceptance of the identity of the person issuing such proceedings by the content of the conduct on which the signature is issued".

It was also said that) (an electronic written statement, consisting of private and distinctive letters, number, symbol, signal or code resulting from the pursuit of a security device, which is appended to or linked to the e-bond data (data message) to indicate the location's identity on the bond and satisfaction with the secured document((

2.1.2 Definition of electronic signature in national legislation

a. Jordanian Law

Article 2 of the Jordanian Electronic Transactions Act defines Electronic signature as: "Data in the form of letters, numbers, references etc. which are electronic or any other similar means in the electronic record or are added to or associated with it with the aim of identifying or singling out the signatory's use and differentiation."

b. Emirati law

Article (2) defines electronic signature :Signature consisting of letters, numbers, symbols, audio or processing system in electronic form and accessory or logically linked to an electronic message and with the intention of documenting or adopting that message.

Egyptians Law

Article 1 defines Electronic signature as: "Data with letters, numbers, symbols, signals or otherwise that are electronic, digital, optical or any other similar means are included in, necessarily added to or associated with an electronic document or record and have a character that permits the identification of the person who signed it and distinguishes it from others"

d. British law

"Electronic signature" means information in electronic form that a person has created or adopted for the signature of the registry and which is contained in the registry or which is attached to Howe associated with it.

e. South African law

"Electronic signature" means data attached to, incorporated into or logically associated with other data to which the user is intended as a signature)

2.1.3: Global definitions of electronic signature

A. Model Law

The Model Law on Signatures defined as: "Electronic data included in, added to or logically associated with a data message may be used to identify the location in relation to the data message and to indicate the location's consent to the information contained in the data message".

B. European Directive on Electronic Signatures

Signature is electronic and used by the signatory to sign. [1] [[2] [3] This type of signature provides the same legal status for handwritten signature as long as it complies with the specific regulation requirements under which it was established (e.g., eIDAS in the EU, NIST- DSS in the USA or ZertES in Switzerland. [4] [5]

Electronic signatures are a distinct legal concept from digital signatures, an encryption mechanism often used to execute electronic signatures. While an electronic signature can be as simple as a name entered into an electronic document, digital signatures are increasingly used in electronic commerce and in regulatory filings to execute electronic signatures in a crypto-protected way. Standardization agencies such as NIST or ETSI provide standards for their implementation (e.g., NIST-DSS, XAdES or PAdES). [4] [6] The concept itself is not new, as common law authorities recognized the telegraph's mid-1800s signatures and faxed signatures from the 1980s.

Through the preceding definitions, we find that data of multiple images, types and forms, and the identification of the site, where they are electronically listed, are capable of identifying the location, through these data in the position of signature. The requirements of these data are as follows:

1. The content of the message relates to the electronic record by linking signature data with the message's data, thereby giving confirmation that the message was issued by the signatory.
2. Be linked to the content of the message and cannot be isolated from it, and therefore any change in the content of the message will change and differ from the original message that it signed.
3. Be attached in the data message, thereby facilitating the work of the authenticator, who has a duty to prove the signature's signature.

Based on the definitions of electronic signature in section I, we have shown the importance of signature In view of the gravity of the tasks and duties entrusted to him, this requires conditions for such an electronic signature to be granted such authenticity and legal force as an instrument of reliability and security and at the same time as a means of establishing the right to electronic transactions, Therefore, these conditions will be set out in Jordanian legislation and in comparison:

2.1.4: Conditions to be met in electronic signature

A. : The UNESTRAL Model Law

Article VI, paragraph 3, of the UNESTRAL Model Law on Electronic Signatures

The conditions to be met by electronic signature as follows:

- 1.The means used to create the signature must be linked to the site without anyone else.
- 2.The means used to create an electronic signature shall be subject at the time of signature to the control of the signatory without any other person

3. Any change in the electronic signature made after the signature occurs must be detectable.

4. Any change in that information occurring after signature must be detectable.

b. European Directive on Electronic Signatures

The European Directive on Electronic Signatures in the Advanced Signature has established a strong link between the signature and the signatory, the ability to identify the signatory's personality, the creation of the signature using means under the control of the signatory, the ability of the recipient to verify the signature, and to detect any modifications to the signed document.

C. American Law

United States law did not require certain conditions in an electronic signature to have legal validity. The reuse of any means of forming an electronic signature is sufficient to meet the legal requirements of a signature.

d. French Conseil d'état

In the second paragraph of article 1 of Decree No. 272/ 2001, the French Council of State affirmed that a secure electronic signature is an electronic signature that meets the automatic requirements:

1. Be specific to the site.
2. It is created by means under the control of the site alone.
3. is intricately linked to the editor so that each edit amendment is detectable

f. Jordanian Law

The Jordanian legislator's requirement for electronic signature is as follows:

- a. " The signatory's solitary distinction.
- b. To identify the owner
- c. The private key must be controlled by the signatory at the time of the signature procedure.
- d. To link to the electronic record in such a way as not to permit an amendment to that electronic record after signature without any change to that signature

Sixth: South African Law Communications and Electronic Transactions Act No. 25 of 2002

Based on the foregoing, there is a wide and significant difference in the conditions to be met by the signatory's person or the conditions relating to the manner in which the signature was created, which would affect the applicable law in the event of a dispute between the parties involved in the electronic environment.

After the discussion of the conditions to be met in a signature has been completed, the importance of an electronic signature in proof and the authenticity of an electronic signature in proof must be demonstrated.

2.2: Importance of electronic signature

- a. Identification of customer parties through the encryption system that uses a dedicated software that alters the electronic message whether it is through encryption using the identical key, the public encryption system or the combination of the public key systems and the public key, as these systems remain unquestionable by knowing the personality of the signatory parties or the personality of the site.
- b. To reflect the contractor's true will, by following the security method of encrypting the e-mail.
- c. Key element for the completeness of the information message's legal effect.
- d. Legalization and satisfaction of contractual obligations.

2.3. The Authenticity of the Electronic Signature in Proof

The message from the site contains data regardless of its nature or form that expresses the will and choice of the site. These statements, which differ in their images or forms if the requirements are met, are considered proof of the issuance of the message and when the data are accurate from the electronic authenticator, they will return to the site; Because it identifies the personality and identity of those who send messages because they are considered distinctive to them. And so, these procedures give unquestionable indication that it was the site whose identity was installed in the content of the message that sent the message.

2.4 Electronic signature controls:

Electronic signature as and when it comes to expressing the instrument in the conclusion of the electronic contract.

The parties' agreement to conclude the contract is made only with acceptance and affirmative action unless the law requires a particular form, and in electronic contracts concluded through the Internet in the form of data messages for the exchange of expression, where the expression of acceptance is equally express or implied as stipulated by the Jordanian legislature, which states: "The expression of will shall be verbal, in writing....." Thus, writing is a way of expressing will, but in order for writing to be used as a way of expressing the instrument, it must be signed, appended and signed by the electronic signatory. This sign indicates the identity of its owner and the disposition of the instrument to agree with the apparent document. From the United Nations Commission's project to enact uniform rules for electronic signature, an electronic signature is an expression of will that includes consent to this obligation.

In the event of a dispute or objection to such signature expressed by the signatory's will, what is the applicable law, whether the nationality law of the signatory is applied in relation to the signatory's capacity or the law of the place of conclusion of the contract, which will be answered in the second examination.

2.5 Electronic signature in electronic editions

In order to be used as a complete proof, the electronic editor must be endowed with the signature of the person protesting against it. This sign, which the person has placed on a written document expressing his physical presence in the conduct, confirms the content of the document from which he has been discharged. Article 2/1 of European Directive No. 93/1999 of 13 February 1999 also states that an electronic signature is used as a means of establishing the validity of the contract.

On the basis of the foregoing, the researcher considers that there is a wide and significant difference between whether a signature is regarded as passive and means of expressing will and as a means of establishing an obligation, which is reflected in the applicable law.

2.6 Electronic signature to achieve reliable security

After the search has shown the electronic signature photographs, which include the protected signature and the electronic signature as a means of expressing the instrument, and at the same time by means of proof of the electronic contract, we will in this section research and analyses the role of the electronic signature by achieving reliable security by indicating the electronic signature images.

Electronic signature photos:

1. Protected electronic signature
2. Authenticated electronic signature
3. Regular electronic signature

2.7 Parties to transaction in electronic signature:

Article II of the European Directive of 20 May 1997 on Consumer Protection states in contracts concluded remotely, which defines an electronic contract as: "A contract for goods and services is made between a supplier and a consumer through the regulatory frameworks for remote sales or the provision of services organized by the supplier using one or more electronic means of communication until the conclusion of the contract."

The parties involved in an electronic signature differ and multiply depending on the type of electronic signature, where the relationship is triple in the electronic signature protected or documented where it is binary in the simple signature

Based on the foregoing, the electronic signature parties consist of:

1. signatory originator (signatory): the person for whom the e-authentication certificate has been issued by electronic authentication, the holder of the public key and the private key, whether he or she has signed himself or through his or her representative.
2. Electronic dependant (addressee)
3. Electronic documentation authority: "Licensed or approved by the Telecommunications Regulatory Authority or legally authorized to issue certificates and provide services related to

such certificates in accordance with the provisions of this Law and the regulations and instructions issued thereunder "

Based on the foregoing, the researcher considers that an electronic signature is multilateral. of those associated with this electronic signature, which may result in a multiplicity of laws governing the provision of the relationship or association relating to an electronic signature. The author of the electronic signature may be resident in a country and possess a nationality different from that of the breadwinner or the addressee of the electronic signature. In addition, the electronic signatory may be subject to laws and regulations different from the legal rules governing both the signatory and the dependant or the addressee. The law applicable to the conditions to an electronic signature must be searched for as an integral part of the problem.

The role of attribution rules in the statement of law applicable to an electronic signature as a means of expressing will.

he researcher in the first examination described what is an electronic signature and the definition of an electronic signature and the conditions to be met in an electronic signature. Indicating the importance of electronic signature Section IV: Authenticity of electronic signature in evidence Section V: Electronic signature controls:

The researcher concluded that although there was a clear and obvious interest in electronic signature in national and international legislation, lack of ambiguity and ambiguity were a feature of these legal rules, which highlighted the importance of finding a solution to conflict by knowing which laws should be applied to an electronic signature that has acquired international character because of the relationship it has been regulated. (Electronic contracts) As soon as there is a foreign element in the relationship, a judge is paid to search for the applicable law through the attribution rule in the event of a dispute over the applicable law in order to stand up and access the applicable law.

The different legislation, regulations, and even international conventions in the conditions to be provided by electronic signature. This instrument enables contracting persons to infer the signatory's personality and to comply with their wishes in accordance with their obligations under this signature. It requires the search for the applicable law on the law applicable in relations tainted by a foreign element.

The search for applicable law requires the researcher's first statement: the international nature of an electronic signature.

Secondly, the role of attribution rules in determining the law applicable to an electronic signature.

If there is a dispute between the parties dealing or contracting parties over the validity of the electronic signature from its invalidity, this problem must be resolved through certain rules, how will these rules be determined if it occurs, especially if the dispute is tainted by a foreign element related to the electronic signature.

First, the role of the law of will in determining the law applicable to an electronic signature.

Transactions between individuals belonging to different States via the Internet are of an international nature. One of the parties to the Internet user residing in a State and the second party is a subscription provider resident in a second State. The company entering and processing information may be located in another State and the signature applicant may be in a State. Thus, many laws compete with the international electronic signature provision in both form and subject matter, such as the seller's personal law or the buyer's personal law, the law of their home country, the law of the country where the contract was concluded, or the law chosen by the contractor

Since these transactions are of an international nature, in particular an electronic signature, this requires addressing and identifying the law applicable to an electronic signature. as well as the possibility of choosing more than one law to govern an electronic signature, The extent to which the law selected relates to the electronic contract.

3.1 Methods for selecting the law applicable to an electronic signature.

3.1.1 Express Choice

The law gives individuals the freedom to choose the law applicable to an electronic signature, where the law applicable to the conditions applicable to an electronic signature is opted for explicitly, such as by agreement of the parties or on the surface of the electronic page. or by agreeing to establish a clause in the electronic contract or by adding such clause in the model clauses attached to the electronic contract How much may the parties agree in a subsequent contract to determine the law applicable to an electronic signature, and therefore the applicable law agreed to applies retroactively, how much is not prevented from making an immediate impact on the contract There is nothing to prevent it from being agreed to determine the law applicable to an electronic signature during the course of the proceedings If the law of a multilateral State is chosen, it is preferable for the parties to determine the applicable domestic sharia. Therefore, Apple Store states on its website: "All sales contracts that are Apple Store are governed by California law."

3.1.2 Implicit selection

Determination of the law applicable to an electronic signature may often not be contemplated by the parties. If the law applicable to an electronic signature is not expressly specified, it may be implied by the judge in question to derive it from the facts and circumstances of the contract. This is what some national legislation has adopted. These laws allowed the judge access to the parties' intention Where the judge can devise the collateral choice through several indicators accompanying the contract ", such as the place of performance of the contract, the requirement to grant jurisdiction or the use of a particular language, These references and evidence give the judge access to the law applicable to the dispute or dispute relating to an electronic signature as a means of proof of its validity and the availability of the conditions to be met on the electronic signature. or a model contract clause or through the parties' referral of only certain matters in the contract to the law of a State or through their subsequent conduct, such as the determination of the type of currency Authenticator's location or electronic signature certifier

3.1.3 Compulsory choice of applicable law (by law)

If there is a clear absence of the will of the parties dealing in the electronic environment In this case, the legislation differed in the determination of the law applicable to an electronic signature, including who referred to the application of the contractor's common home law if they were united, A difference applies to the law of the place of conclusion of the contract where the contract is concluded, while some legislation is the place of conclusion of the contract and some legislation leaves it to the judge to determine the applicable law

3.2 Law applicable to electronic signature as a means of proof

The assertion of the alleged right is only through the establishment of an argument and proof to obtain the truth in order to establish the validity of a contested fact between the parties or the existence of the right through the methods prescribed by law before the courts. How much has it been defined as: affirming a disputed right has a legal effect with the evidence authorized by law to establish the right

Two trends have emerged in the legal organization of the first proof. The rules of evidence are governed by the law of the court before which the dispute is brought as a case and the other direction divides these rules into two types that are related to the subject of the right and the other to the idea of the proceedings.

The rules of evidence fall within the range of proceedings where the judge establishes his conviction. rights ", because the right to be established is independent of it, and the merits of the case are not included in it. and therefore, not subject to the law governing the subject matter of the right, but to the law of the presiding judge of the dispute, but this trend is not taken to trigger it, it is the proportion of the merits that determines the applicable law regarding the scope of proof. and therefore the judge's law does not apply to the burden and place of proof, It is the law governing the subject matter of the dispute that applies to the source from which this right arises, either with regard to the admissibility of evidence, and the determination of its legal value, that the law of the judge in question applies. .However, a distinction must be drawn between an authenticated and protected electronic signature and an undocumented or protected electronic signature. In the first type of origin to refer to the law on which it was created, In the second type, the judge acts in his or her own national law in terms of his or her consideration and probability. But in the case of private or public contracts guaranteeing agreements between the parties that are used for proof, the value of an electronic signature is determined by the law governing the form.

3.3 Jordanian legislature's position on the law applicable to means of proof

Jordanian law is not subject to the law applicable to means of proof, whereas the Syrian legislature stipulates in article 23 of the Syrian Civil Code: "Evidence in advance shall apply to the law of the country in which the evidence was prepared."

The legal protection arranged by the law obliges those who are aware of this to establish the legal event in question, and in section I we have set forth the rules of attribution that determine the law applicable to demonstrating the correct will of an electronic signature.

Conclusion

The electronic contract has been found to be of a special nature, because of its use on the Internet, it is internationalized in principle. Legal rules governing it should therefore have been established, and we have found that the legal rules governing and governing it vary in part by the nature of an electronic signature, which may be a means of convening a contract and may be a means of proof, thereby differing rules of attribution.

If an electronic signature is a means of concluding a contract as a means of expressing the instrument, most legislation, including Jordanian law, applies the law of will.

However, if an electronic signature is a means of proof, the applicable law is the law of the judge dealing with the dispute, although individuals can agree on the applicable law regarding the means of proof.

Despite the importance of electronic signature in Internet transactions and the internationalization of an electronic signature, most legislation has not established specific rules for determining the law on electronic signature in disputes involving a foreign element.

The research findings have produced a series of findings, including:

1. The importance of electronic signature in transactions through the Internet comes from the multiple and distinct functions of electronic signature to identify the customer.
2. An electronic signature is internationally recognized because an international standard applies to it.
3. The researcher has found that an electronic signature plays a functional role as a means of expressing the instrument and as a means of proof.
4. Lack of clear legal rules for determining the law applicable to electronic signatures, mostly in national legislation and in international conventions

Recommendations

1. We call for legal rules to determine the law applicable to a dispute involving a foreign element to an electronic signature as a means of expressing will.
2. We call on Jordanian legislation and international legislation to establish a basis for determining the law applicable to an electronic signature as a means of proof.

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- The French Court of Cassation decided that "the substantive conditions are due to the judge's law for determining pre-prepared methods of evidence. However, it provided an exception to this principle: if the domestic law (the law of the place of conclusion of conduct) does not require pre-prepared proof (writing)".