

**THE ELECTRONIC SIGNATURE IN ELECTRONIC CONTRACT  
IN IRAQI LEGISLATIONS**

**SHATHA ALI AHMED AL-RASHADI**

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IN IRAQI LEGISLATIONS

By

Shatha Ali Ahmed Al-Rashadi

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(i) Nama/Name :

Dr. Harlida Abdul Wahab

Penyelia Utama (Principal Supervisor)

Tandatangan  
(Signature)

**DR. HARLIDA ABDUL WAHAB**  
Senior Lecturer  
School of Law  
JUM College of Law, Government and  
International Studies  
(UUM COLGIS)

(ii) Nama/Name :

Tandatangan  
(Signature)

Tarikh:  
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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Introduction**

This study will discuss on the electronic signature in electronic contract in Iraq. In this chapter, the researcher provides the background to the study, basically about the information technology (IT) development that has resulted the emergence of the electronic contract. The research then highlights the issues involved in the problem statement. It later mentions about the research objective, i.e the aims to be achieved by having this study. Under this part also, research questions and significance of the study are laid down. Moreover, research methodology is presented whereby the approach used to the doctrinal research. At the end of this chapter, a summary of chapterisation is given.

#### **1.2 Research Background**

In the field of information technology (IT), modern communications network that is overshadowed by the Internet, covered the rest of computer networks has made the concept of the network, and became synonymous with internet connection active human being worthy of legal treatment. The first thing that needs treatment is this connection which includes a transaction between two parties may be civil or commercial and it may be what became known as the contract online, a world where time and cut short near the place.

Given the current features and the advent of the computer and the internet, the new terms and concepts that did not exist prior to the current electronic development are appearing regularly. And as such the electronic transactions and the electronic signature are also becoming relevant and its features are meeting the electronic money and electronic bill of exchange and electronic checks<sup>1</sup>.

In the banking sector, internet is widely used to provide banking services to the clients virtually. This phenomenal development in information and communications systems, so called as that information revolution or the third industrial revolution. However, the new technology appeared lately is called the (Remote Computer)<sup>2</sup> which might link many computers via phone lines or through separate lines of communication. Thus allowing the exchange of information and the data between multiple devices. The information and communications revolution, have benefited greatly from world featured e-commerce. The UAE legislature adopted this description of the electronic commerce when it gave a definition of it in Electronic Transactions and Commerce Law No. 2 of 2002 as "Commercial transactions which are concluded through Electronic Communications"<sup>3</sup>.

To achieve the greatest benefit to mankind, it is necessary to organize these actions of the electronic commerce, and find the appropriate legal bases Facilitating and removing any impediments to electronic commerce and other electronic transactions that may result from uncertainty on the writing and signature requirements. Hence the importance of electronic commerce law is the law that governs their works, which includes terms and limits of online contracting. The other

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<sup>1</sup> Benaomr, Zainab, 2011, The legal effect of electronic documents in the Moroccan legislation. *In* Commercial Court of Appeals. Marrakech.

<sup>2</sup> Remote Computer is a simple, cost effective solution for accessing the workstation from anywhere in the world, over any Internet connection! With compressed data transfer, it's fast-- even over a dial-up connection.

<sup>3</sup> UAE Transactions and Commerce Law No. 2 of 2002 Article 2.

most important issue is about its safety as well as to give or prove the authentic evidence.

Revolving within a network of information, technical enforcement mechanism has dominated the commercial activity in the field of electronic commerce (that is the effect of use of electronic contract on the website). By this does not include physical signature by the parties or their issuers anymore, thus use the electronic signature techniques, usage will be accepted with guarantee the authenticity of signatures and legal force.

The underlying assumption and confirmation of the authenticity of electronic contracts and electronic signatures are subject to engagements to correspondence with the reliability as evidence in litigation. To ensure that the model requiring an equal value among traditional regular signatures and electronic contracting, the law on electronic commerce 1996-UNCITRAL on the replicated set of legislation, including the law on the electronic signature and electronic transactions Inc. No. 87 of 2012 became the rules of engagement.

### **1.3 Problem Statement**

There are several key steps involved in the research process, beginning with the selection of the topics through electronic means using modern communication techniques, notably the most sophisticated international information network "Internet" and electronic contract concluded via electronic media. This study will provide a discussion of facts, principles; trends and practices to which the present study is related. This study will emphasize the importance of the study in Iraq, focus

of the significance of the problem, its scope and context, provide a general background and anticipates that with the development of modern technology and electronic signature bond that appeared as tools to establish electronic transactions made via modern means of communication in various forms.

This in turn creates a set of questions, with the legislation governing electronic transactions and ways to prove that. Therefore, study on this subject in Iraqi is very significant due to the new prusions and laws recently introduced namely, the Electronic Transactions and Electronic Signature law No. 78 of 2012. To assist us in answering those questions referred to and the approach of the relevant rules in the Iraqi Evidence law N.107 of 1979, to recognize the extent of absorption of these rules to contract by modern means of communication.

To build a theoretical and conceptual framework of the proposed study, it will provide proof and defines as a" directory to eliminate the methods specified in the law on true fact follows legal proved, the need to recognize the right arising the reform"<sup>4</sup>. Known evidence, that are presented before the courts in ways specified in the law on the health of legal consequences are incidents that proved the need to recognize the emerging right, and the evidence is of the great importance.

It should be noted that the question of proof in the traditional contracts may face some challenges or difficulties relating to such contracts as these challenges take a special dimension within the electronic contracts concluded via the internet. Due to the absence of materials in the intermediary contract it is edited and then taken

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<sup>4</sup> Al-Mahdi, Hussein bin Muhammad. "The Probative Force of Electronic Transactions." *Judicial Research Journal*, no.7 (2007).

Another form which is e-props<sup>5</sup>, where the problem is given the technical information storage authenticity that means normal storage. In addition, the electronic document does not include handwritten signature. It took another form of signature, it is an electronic signature, and thus shows the challenge is how equality electronic signature to sign the normal, especially if taking electronic signature format and personal separation from its owner helps pirates and hackers via the internet to penetrate information systems and the discovery of signature or unlocked and grab it, leading to its use without the knowledge or consent of the owner or may fire viruses via the Internet, leading to destruction the files, which leads to a reduction of the value of the electronic signature as evidence of proof. Moreover, the electronic contract 's problematic is the discount in a lawsuit that collects the evidence for it.

Since the electronic signature performs the same functions performed by traditional signature, the recognition of electronic signature as proof of the document is not that easy. Iraqi legislation was not given the freedom to use the special law regulating electronic contracts and electronic signature until the enactment of the Electronic Signature and Electronic Transactions Law No. 78 of 2012. This law addresses the possible problems that appear when using electronic signature and it gives the importance to signature as a proof. But despite issuing the law it was over several months that it was not enacted and have so far failed to take the expected role reason as Dr. Mansour Hatem optimizer<sup>6</sup> : "electronic signature act began in 2012 and not executed as hoped, because of the lack of awareness and trust of society through private banks and merchants and members of the community in electronic

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<sup>5</sup> A way of showing recognition. Better than regular props; they can be accessed anywhere in the world via internet.

<sup>6</sup> "Electronic Contracts and Electronic Documents". In *Legal Reading in the Electronic Signature and Electronic Transactions Law No. 78 of 2012*. College of Law University of Babylon, 2013.

Trading, rather than the traditional paper business to catch up with the developed societies which preceded us in this field"

The Conference held by the Faculty of law, University of Babylon, discussed the Electronic Signature and Electronic Transactions Law N.78 2012, Dr. Ibrahim Ismail Ibrahim describes this law as "a big jump in Iraqi legislation to keep pace with the developments in Iraq dealing through modern means of communication and the importance of electronic signature as a means of electronic contracts"<sup>7</sup>. In this law: "electronic signature has an argument of proof for approved ratification"<sup>8</sup>. Given this contrasts and its well-known evidence, the opponent cannot provide the evidence for themselves. Because the computer extracts under the general management of the user, it means that all information will be made available, and the burden of proof might fabricate evidence against its opponent.

#### **1.4 Research Questions**

The study is design to answer the following questions:

1. What is the significance of electronic signature as a proof of evidence for the electronic contract in Iraq?
2. Whether the Iraqi legislation prepared the electronic signature in electronic contracts as complete evidence?
3. What are the challenges or difficulties relating to the issue of proof in the electronic contracts?

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<sup>7</sup> "Electronic Contracts and Electronic Documents". In *Legal Reading in the Electronic Signature and Electronic Transactions Law No. 78 of 2012*. College of Law University of Babylon, 2013.

<sup>8</sup> Iraqi Electronic Signature and Electronic Transactions Law No. 78 of 2012 Article 5.

## **1.5 Research Objectives**

The objectives of this study are to:

1. Examine the legislations and regulations dealing with electronic contract in Iraq.
2. Study the use of electronic signature in electronic contract as a proof of evidence under Iraqi law.
3. To compare the laws on electronic contract in few selected countries such as USA and UAE, as well as Model law on Electronic Commerce (UNCITRAL) 2001.
4. Provide suggestions for improved practices in the field of electronic contract in Iraq.

## **1.6 Significance of The Study**

The significance of this study is in removing some of the mysterious stuff of electronic signature under the electronic contract, particularly in Iraq, that this law is a modern relatively measure SA other laws, It is anticipated that this research provides information and recommendations to the Iraqi parliament and legislators, and all those interested in this field, to encourage them to amend the legislation to get along with the new Iraqi Electronic Transactions and the Electronic Signature law No 78 of 2012.

The proposed of this study is to help lawyers, judges and all the legal profession to have a deeper understanding and understand the legal status of of Electronic Transactions and the Electronic Signature law No 78 / 2012.

For Iraqi society, the law Iraqi Electronic Transactions and the Electronic Signature law No 78 of 2012 is a new law, and there are many caveats to use it, so the study will be a way to define community by the law and its importance as well as encourage the community to resort to handle electronic being one of the transactions organized by the Iraqi law now. To future researcher, the study will benefit and help the future researcher as their guide. The study can also open in development of this study.

## **1.7 Research Methodology**

This section presents the methodology and the procedure used in this study including the research design, data collection methodology and the types of data, procedure, the scope of the study as well as data analysis. This study will be conducted to investigate the importance of the electronic signature in the electronic contract as a proof evidence in the Electronic Transactions and the Electronic Signature law No. 78 / 2012.

### **1.7.1 Research Design**

According to Parahoo<sup>9</sup> qualitative studies allow the author to explore behavior, perspectives, feelings, and experiences in depth in both quality and complexity of a situation through a holistic framework. In contrast, quantitative research is a formal systematic approach which incorporates numerical data to obtain information about

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<sup>9</sup> Parahoo, Kader. "Nursing Research: Principles, Process and Issues." *Palgrave MacMillan*, (2007).

the world<sup>10</sup>, which would not be suitable to gain the information required for this study.

The design selected for research should be the one most suited so as to achieve an answer to the proposed research question. For the purpose of the proposed research question the author has chosen to carry out a qualitative research. Qualitative research is a systematic, subjective approach to describe life experiences and give them meaning<sup>11</sup>; the aim of qualitative research is to ascertain opinions, attitudes behavior, likes or dislikes. Its main purpose is to ascertain how people feel, what they think about a certain phenomenon or why they behave in a certain way. The main forms of qualitative research include field observation, content analysis, group studies, and in-depth interviews. The data collected in qualitative research are in the form of field notes or some form of textual material. Qualitative research basically involves data in the form of words, description or narratives. As for this study, the researcher used content analysis approach in analyzing the laws on e- contract and e-signature. The role of data analysis in qualitative research is to extract meanings from what the researcher has studied what and how something happens or exists<sup>12</sup>. This method can then be used to seek empirical evidence and support for such research hypotheses.

Doctrinal research (also referred to as the *orca*, pure legal, academic, traditional, armchair research) is essentially a library-based study, which means that the materials needed by a researcher may be available in libraries, archives and other databases. The basic aim of such research is to discover, explain, examine, analyses

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<sup>10</sup> Grove, Nancy Burns & Susan. "The Practice of Nursing Research" *Appraisal, Synthesis and Generation of Evidence* no. 6 (2009).

<sup>11</sup> Grove, Nancy Burns & Susan. "The Practice of Nursing Research" *Appraisal, Synthesis and Generation of Evidence* no. 6 (2009).

<sup>12</sup> Yaqin, Anwarul. "Legal Research and Writing" *Malaysialaw Journal Sdn Bhd* (2007).

and present, in a systematic form, facts, principles, provisions, concepts, theories or the working of certain laws or legal institutions. On this account, the researcher has referred to mainly secondary data namely test books, articles from journals, government reports and the provisions of the relevant laws and legislations. Generally, the objectives of such research are achieved through these approaches.

### **1.7.2 Data Collection**

Reliability and consistency are always determining the method of data collection used for a study. In order to further enhance the overall value of this study, both primary and secondary sources of data will be used. Primary source: Main text or work that is discussed as actual data or research results, or historical (speeches, interviews, government records, records of organizations, minutes, reports, correspondence, books and, laws). Secondary sources: Records generated by an event but written by non-participants in the event. Based on or derived from primary sources - but they have been interpreted, or analysed (Most journal articles, most published books journals, newspaper, and articles). The armchair method will be used by the author in accessing the required information in conducting the study, which are readily available through online from the Iraqi Virtual Library. Other legal websites and the UUM Virtual Library will be the source for the author. Furthermore, all data obtained from the above sources then is critically analyzed by the author.

In order to achieve complete data saturation, thorough reading and re- reading is necessary to ensure all recurring information and variations are identified and only when no new information can be obtained is this achieved <sup>13</sup>. Volumes of data will be gathered throughout the data collection process which requires the researcher to complete a reduction in data through categorizing and identifying similar themes. This process allows the researcher to interpret findings more easily.

### **1.7.3 Research Scope**

The scope and context of this study covers discussion on the electronic signature in Iraqi legislations. Its focus is on the importance of electronic signature in the electronic contract, and the use of electronic signature as an evidence of proof in the Iraqi Electronic Transactions and the Electronic Signature law No. 78 / 2012 , and Iraqi Evidence Law No. 107/1979.

"The General Secretariat of the Council of Ministers proposed the according to the evolution of electronic, and the draft law adopt on the work of a model law for electronic signature and electronic transactions and prepared by a specialized committee of the United Nations has been available on similar laws in some countries in this area such as law the U.S, England, the UAE, Jordanian and French to be drafted in accordance with the requirements of the need for technology electronic explained the bill is intended to electronic transactions which applications, documents and transactions carried out by electronic means". According to the

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<sup>13</sup> Wheeler, Immay Holloway & Stephanie. "Qualitative Research in Nursing." *Blackwell Publishin* no. 2nd (2002).

statement of the Iraqi Minister, the Iraqi law has taken from the experience of other countries when issuing this law, therefore, this project will study the laws in the USA as it a development law on this topic and also the law of United Arab Emirates UAE as one of the first Arab countries, which focused on this law. So this study addresses the issue of electronic contracts, electronic commerce and electronic signature legislation such in the UNCITRAL Model Law on Electronic Commerce (MIEC).

## **1.8 Summary Of Chapterisation**

The work presented in this research will essentially examine the role of electronic signature in electronic contract in Iraq as proof of evidence. This study will be carried out and distributed over five chapters, within different subtopics that are discussed. The background relevant to the benefit of the network communication for the growth the electronic commerce, the electronic contract and electronic signature are given in the general introductory chapter. The justification for carrying the present study, research questions, stating the research objectives, etc. is also given priority. Overview of the general methodological approach followed for the whole study is presented with an introduction about this methodology, the research's design and the data collection methods. Chapter one concludes stating the summary of chapterisation.

A literature review is provided in chapter two, where the previous works are reviewed to primarily draw attention to the knowledge and understanding of legislations of electronic signature in different countries. The third chapter focuses

on the development of the contract in Iraqi law, Include the contract in Iraq Civil Law N.40 of 1951 and Iraq Electronic Signature and Electronic Transactions Law No. 78 in .2012. The fourth chapter will deal with issues related to the electronic contract and electronic signature, showing the status of using an electronic signature as evidence in electronic contracts. Conclusion and Recommendations are enclosed in a separate chapter at the end (chapter five) to draw the attention of responsible authorities. In each chapter a similar pattern is followed and each chapter is provided with a summary which presents the key findings in the light of the objective being discussed.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Many articles have been proposed to explain what the electronic signature and electronic contract are. Although the literature covers a wide variety of such articles, this review will focus on many articles which emerge repeatedly throughout the literature reviewed. These articles are (UNCITRAL Model Law on Electronic Signatures with Guide to Enactment, Legal Aspects of Electronic Signatures, Electronic Signature, Comparison between French & U.S Law, Electronic Signatures in Practice, Canadian Center of Science and Education, The Legal Nature of the Liability of the Certification Service Provider in EAU Electronic Transaction Act, Electronic Signature as Proof of the Evidence in the Light of the Provisions of the Iraqi Evidence Act No. 107 of 1979, Email - Legal Study and President Approves Law on Electronic Signature and Electronic Transactions). The literature review presents the laws relative to a variety of contexts. This chapter will primarily focus on the Iraqi legislations which deal with the electronic contract and electronic signature.

#### **2.2 Literature Review**

An electronic contract is an agreement created and "signed" in electronic form, in other words, no paper or other hard copies are used, it is done by electronic media, using modern communication techniques, most notably and most

sophisticated international information network "Internet"<sup>14</sup>. Iraqi Electronic Signature and Electronic Transactions Law<sup>15</sup> define the electronic contract as: electronic contract link positive issued by one of the contractors to accept the other in the face of proven impact in meeting him and that is by electronic means, while Jordanian Electronic Transaction Law<sup>16</sup> defines it as the agreement which is to take place by electronic means in whole or in part.

(Electronic signature in a legal view is a means whereby electronic identification of the person attributed to him signing with the intention to produce legal effects)<sup>17</sup>. The benefit of electronic signature shows in the form of business transactions that require a signature, such as sales orders, purchase, signing the inventory of goods and signing bill receipt, buy tickets, records installed for payment and others. For the importance of the using of electronic signature and electronic transactions, many countries have initiated already legislating the laws to those issued, to allow the provision of confidence in these electronic documents and signature, these countries has enacted laws and regulations that address the issue of electronic signature to lend it mandatory character and give it the full authentic proof.

The increased use of electronic authentication techniques as substitutes for handwritten signatures and other traditional authentication procedures suggested the

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<sup>14</sup> "Electronic Contracts and Electronic Documents" In *Legal Reading in the Electronic Signature and Electronic Transactions Law No. 78 of 2012*. College of Law University of Babylon, 2013.

<sup>15</sup> Iraqi Electronic Signature and Electronic Transactions Act No. 78 /2012 section 7

<sup>16</sup> Jordanian Electronic Transaction Act 85 of 2001, Section 2

<sup>17</sup> Namaa, Ammar Karim Kadim & Narman Jameel. " Legal Force of Electronic Document." *College of Law - University of Kufa*, (2007)

need for a specific legal framework to reduce uncertainty as to the legal effect that many results from the use of electronic means<sup>18</sup>.

In response to these needs, the United Nations (1999)<sup>19</sup> promulgated the UNCITRAL Model Law on Electronic Commerce with Guide to Enactment 12 June 1996, The UNCITRAL Model Law on Electronic Commerce (MLEC). This law was designed and purported to enable and facilitate the commerce conducted using the electronic means. This also is providing a set of internationally accepted rules aimed at removing legal obstacles and increasing legal predictability for electronic commerce. In particular, it is intended to overcome obstacles arising from statutory provisions that may not be varied contractually by providing equal treatment to paper-based and electronic information. Such equal treatment is essential for enabling the use of paperless communication, thus fostering efficiency in international trade.

Parry, James, Graves and Altinok<sup>20</sup> listed the historical development of the "Model Law on Electronic Signatures". After five years, the Model Law on Electronic Signatures was approved in July 2001 at the UNCITRAL meeting and Published Model Law on Electronic Signatures, (MLES) which aims to enable and facilitate the use of electronic signatures by establishing criteria of technical reliability for the equivalence between electronic and handwritten signatures. Thus, the MLES may assist states in establishing a modern, harmonized and fair legislative framework to

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<sup>18</sup> "Uncitral Model Law on Electronic Signatures with Guide to Enactment 2001" edited by 2002 United Nations New York, 2002

<sup>19</sup> "Guide to Enactment 1996 with Additional Article 5 Bis as Adopted in 1998." edited by United Nations PUBLICATION. New York, 1999.

<sup>20</sup> Glenn Parry, M. James, A.P. Graves and O. Altinok. "Legal Aspects of Electronic Signatures." *University of Bath, School of Management*, (2008.02).

Address effectively the legal treatment of electronic signatures and give certainty to their status". The Directive European Union removes obstacles to cross-border online services in the European Union and provides legal certainty to business and citizens alike.

The Directive European Union 2000/31/EC<sup>21</sup> created the basic legal framework for online services, including electronic commerce in the internal market. This Directive is included in its article 2: The development of electronic commerce within the information society offers significant employment opportunities in the Community, particularly in small and medium-sized enterprises, and will stimulate economic growth and investment in innovation by European companies, and can also enhance the competitiveness of European industry, provided that everyone has access to the Internet". The Directive imposes on the member states is to amend its legislation containing requirements and in particular as form while are likely to curb the use of contracts by electronic means.

The examination of the legislation requiring such an adjustment should be systematic and should cover all the necessary system and acts of the contract, the result of this amendment should be to make, the legal effect of electronic signature is dealt with Directive 1999/93/EC of the European parliament and the council of 13 December 1999 on a community framework. Birnbaum and Darques<sup>22</sup> examines the electronic signature in France: "In France an electronic signature serves as a writing

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<sup>21</sup> "Directive 2000/31/Ec of the European Parliament and of the Council of 8 June 2000." Official Journal of the European Communities, no. L 178/1 (17.7.2000).

<sup>22</sup> Darques, Laurence Birnbaum and Florence. "Electronic Signature ,Comparison between French & U.S. Law." *International Business Law Journal*, (April 2001).

or other mark which served to identify the person making the mark, which is placed on a document for the purpose of authenticating the document or giving it legal effect. As a legal matter, a signature also expresses the intent of the signatory to be bound by the terms of the contract. But may take different forms such as electronic sounds, symbols, or processes attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record".

Therefore, as commentators in the field note, an electronic signature may be a simple one such as a name at the bottom of an electronic mail message or a more complex and secure one involving biometric technologies such as fingerprint or retinal scans. In Civil Law of 2000, (with the 2000-230 numbered law) there is an Electronic Signature Law in 1316-4 by law. To apply this by law in 2001, (2001-272 numbered decree) an arrangement was made and brought into force of action. In France, the electronic signature usage is not as desired as some other countries, because of the querying authorization of the courts for the commercial agreements that are signed with an electronic signature.

French courts have taken a more restrictive approach, although it should be noted that the case mentioned below pre-dates the introduction of the French law on electronic signatures, and the decision may well be different now. Mason<sup>23</sup> explained the case of *Société Chalets Boisson vs. M. X*<sup>24</sup> the council of the Society Chalets Boisson entered an appeal before the Court d'Appel of Besançon against a decision of a council due prud'hommes (employment tribunal). The notice of appeal was sent to the office of the clerk of the court by e-mail, bearing an electronic signature. The

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<sup>23</sup> Mason, Stephen. "Electronic Signatures in Practice" *British Institute of International and Comparative Law*, no. UK (April 2006).

<sup>24</sup> Cour de Cassation, Cass.2e civ. chambre civile 2, April 30, 2003, Case No 00-46467.

defendant sought to have this appeal declared invalid, because the electronic signature was deemed not to identify the signatory. The Court d'Appel de Besançon accepted this argument and then declared this appeal inadmissible.

The Court de Cassation approved the Court de Besançon decision. For an order to be valid, an appeal must be signed by its author and that an electronic signature, at the material time of these events, was deemed insufficient to identify the author. The comments by Philippe Bazin bear repeating:

*“Judges at the time (and unfortunately still today) did not have any technical understanding about what these nations concretely represent. Those that they know, they have practiced for a long time, and they have to do with paper, not the electronic environment. In the 30th April 2003 decision, the Court adopted a systematic position of mistrust with respect to the electronic signature. It confirms that – culturally – it is the paper, and only the paper, that constitutes the only solid legal guarantee”.*

In some jurisdictions, it may well be that this attitude might persist for some time. English law consistent with French law in the position of the electronic signature, Parry, Graves and James<sup>25</sup> shows that the English Electronic Communications Act 2000 promotes the legal validity of electronic signatures and provide guidance on data storage, encryption services, and electronic

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<sup>25</sup> Glenn Parry, Andrew Graves and Mike James. "Legal Aspects of Electronic Signatures." *University of Bath, School of Management*, (2008).

communications for residents of England, Scotland, and Wales. The English Electronic Communications Act has three stated aims: to clarify the status of electronic signatures; to remove legal barriers to electronic communication and transaction, and to build confidence in public key cryptography. In order to achieve these aims, the act implements legal recognition of electronic signatures, provides a framework for the removal of legal obstacles to electronic documents replacing paper documents, and proposes a statutory voluntary approval scheme for suppliers of cryptographic services. The act permits electronic signatures to be legally admissible in legal proceedings and to provide the authenticity and integrity of the communication or the data in accordance with the provision of section 7 (1) of the act which states: "In any legal proceedings:

- (a) An electronic signature incorporated into or logically associated with particular electronic communication or particular electronic data, and;
- (b) The certification by any person of such signature, shall each be admissible in evidence in relation to any question as to the authenticity of the communication or data or as to the integrity of the communication data".

The Malaysian legislations have been interested with the electronic commercial and its electronic signature for a long time and has used the Malaysian Digital Signature Act 1997, Rokiah Kadir gave his opinion on this act<sup>26</sup>, "The Digital Signature Act 1997, as its name implies is solely focused on the issue of digital signature. Section 62 (1) of this provides that "where a rule of law requires a signature or provides for certain consequences in the absence of a signature, that rule

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<sup>26</sup> Rokiah Kadir. "Malaysian Dsa 1997: A Review of Some Unresolved Issues." *Canadian Center of Science and Education*, (2012).

shall be satisfied by a electronic signature”. The Act goes on prescribing the necessary characteristic of electronic Signatures, stating which must be fulfilled if the signature were to replace the paper signature. What is obvious from the provision is that other forms of electronic signatures such as biometric or simple or low technology electronic signatures could in no way satisfy the legal requirement of signatures for documents prepared electronically.

In 2006, Malaysian Parliament enacted Malaysian Electronic Commerce Act 2006<sup>27</sup>, to provide for legal recognition of electronic messages in commercial transactions, the use of the electronic messages is to fulfill legal requirements, to enable and facilitate commercial transactions through the use of electronic means and other matters connected therewith, this act defined the electronic signature in part 1 as: “electronic signature” means any letter, character, number, sound or any other symbol or any combination thereof created in an electronic form adopted by a person as a signature; and in the same part defined “commercial transactions” means a single communication or multiple communications of a commercial nature, whether contractual or not, which includes any matters relating to the supply or exchange of goods or services, agency, investments, financing, banking and insurance.

The act states that: the means of creating the electronic signature is linked and under the control of that person only, and the act keeps the active of the Electronic Signature<sup>28</sup>, this act shall continue to apply to any electronic signature

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<sup>27</sup> Malaysia Electronic Commerce Act 2006 [Act 658 ] section 9 (2) (a).

<sup>28</sup> Malaysia Digital Signature Act 1997 [Act 562] .

Used as an electronic signature in any commercial transaction. Salhi<sup>29</sup> explained: "Arab legislations were not isolated from these developments where EAU and Jordan issued organizations and legislations for electronic transactions, recognizing authoritative of electronic documents and their equality with traditional written documents in proof", Jordan issued the Electronic Transactions Act of 2006. EAU launched Dubai Electronic Transactions and Commerce Law No. 2 of 2002 and United Arab Emirates Federal Electronic Commerce and Transactions No.1 of 2006. Salhi added: United Arab Emirates (UAE) was the forefront of Arab countries that practiced electronic commerce, as it was one of the first countries that issued a law regulating commercial transactions and electronic commerce.

UAE issued also Dubai<sup>30</sup> Electronic Transactions and Commerce Law N.2 of 2002 which deals organized contracts and electronic commerce transactions, encouraged trade and push it towards growth and prosperity that it is stated in this law<sup>31</sup>: "This Law shall be construed consistently with what is commercially reasonable in electronic transactions and commerce, and which will lead to the attainment of the following objective: (1)Facilitate and eliminate any barriers to Electronic Commerce and other electronic transactions which may result from uncertainties over writing and signature requirements, and (2)to promote the development of the legal and business infrastructure necessary to implement secure".

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<sup>29</sup> Salhi, Kamran. "The Legal Nature of the Liability of the Certification Service Provider in Emirati Electronic Transactions Act No. 1\ 2006." In *Electronic Transactions Conference (E-Commerce - E-Government)*. College of Law - University of United Arab Emirates.

<sup>30</sup> Dubai is one of the seven emirates stat, that make up UAE. It has the largest population in the UAE and the second-largest land territory by area after Abu Dhabi.

<sup>31</sup> Dubai Electronic Transactions And Commerce Law No.2 in 2002 Article 3 (2).

Dubai Electronic Transactions and Commerce Law, stressed the importance of the use of electronic signature in electronic transactions, it stated the objectives of this law is<sup>32</sup>:" Enhance the development of Electronic Commerce and other transactions on the national and international level through the use of electronic signatures". This law was preceded by the project diversion Dubai government to electronic government, and as such went into effect at the beginning of 2002<sup>33</sup>. The project aims are to provide a safe legal environment for the conduct of official transactions and work to achieve legal credibility of the electronic documents.

Salhi<sup>34</sup>Justifies the reasons for issuing UAE Federal Law No.1of 2006: "The availability of a powerful network connection with the UAE deal via internet world, the desire of public and private institutions for development of electronic commerce continued issuance and regulatory decisions and laws which have contributed to the development of general principles in the development of transactions and electronic commerce in the United", the government issued UAE Federal Law No. 1 of 2006 on the Electronic Transactions and Commerce "Electronic Commerce Law", the objects of this law are<sup>35</sup>: to protect the rights of persons doing business electronically and to determine their obligations to encourage and facilitate electronic transactions and communications by means of reliable electronic records; and to establish uniform rules, regulations and standards for the authentication and validity of electronic communications. Promoting public confidence in the validity, integrity and reliability of electronic transactions, communications was another aspect of the law.

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<sup>32</sup> Dubai Electronic Transactions and Commerce Law N.2 of 2002Article 3 (7)

<sup>33</sup> Salhi, Kamran. "The Legal Nature of the Liability of the Certification Service Provider in Emirati Electronic Transactions Act No. 1\ 2006." In *electronic transactions Conference (e-commerce - e-Government)*. College of Law - University of United Arab Emirates.

<sup>34</sup> Salhi, Kamran. "The Legal Nature of the Liability of the Certification Service Provider in Emirati Electronic Transactions Act No. 1\ 2006." In *electronic transactions Conference (e-commerce - e-Government)*. College of Law - University of United Arab Emirates.

<sup>35</sup> UAE Federal Law No.1 of 2006 section 3.

The records keeping and promoting the growth of electronic commerce and other electronic transactions on the national and international level through the use of Electronic Signatures is also considered a significant aspect of the law.

In Jordanian law, there has been a trend in the expansion of the text on the application of document-mail to include electronic contracts in addition to the signature and legal records. Jordan Electronic Transactions Law<sup>36</sup> issued to facilitate the use of electronic means in conducting transactions, subject to the provisions of any other law, and it shall apply to the following:

A- Electronic transactions, electronic records, electronic signatures and any electronic data messages.

B- Electronic transactions adopted in whole or in part by any governmental department or public institutions.

For the electronic signature: Jordan Electronic Transactions Law<sup>37</sup> includes "Where legislation requires a document to be signed or stipulates consequence for non signature, an electronic signature on an electronic record shall satisfy the requirements of this legislation". As for Iraqi legislations, Iraqi legislature soon, lacks of a special law for electronic documents and electronic signatures.<sup>38</sup> Reported the opinion of the Iraqi doctrine starting with writing the electronic was compared with writing paper "there was a view in the Iraqi doctrine that goes to the equality between writing electronic with writing paper and gives authentic same legal in evidence<sup>39</sup>.

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<sup>36</sup> Jordan Electronic Transactions Law N0 (85) of 2001 Section 4.

<sup>37</sup> Jordan Electronic Transactions Law N0 (85) Of 2001 Article 10 (A).

<sup>38</sup> Zarzor, Wasen Khadem. "Electronic Signature as Proof of the Evidence in the Light of the Provisions of the Iraqi Evidence Act No. 107 of 1979." Rights Message journal, no. 2 (2011).

<sup>39</sup> In terms of section 104 of Iraqi Evidence Law No. 107/1979: "A judge may make use of means of scientific progress in the elicitation of legal evidence".

The Iraqi Minister of State and Government Spokesman Ali al-Dabbagh announced that<sup>40</sup> "The General Secretariat of the Council of Ministers proposed the according to the evolution of electronic, and the draft law adopt on the work of a model law for electronic signature and electronic transactions and prepared by a specialized committee of the United Nations has been available on similar laws in some countries in this area such as law the U.S, England, the UAE, Jordanian and French to be drafted in accordance with the requirements of the need for technology electronic explained the bill is intended to electronic transactions which applications, documents and transactions carried out by electronic means".

So, the provisions of the Iraqi Evidence Law accommodate modern technological developments, taking into account the evolving interpretation of the law and the wisdom of the legislation when applied, the basic principle is freedom of proof in that allow financial transactions to prove legal actions all methods of proof without the evidence held. And the application of this principle requires that the judge is given estimate the value of evidence derived from modern means, and if the traditional direction of handwriting requires manual that affixed the signature, it accepts signed by others, such as by the seal and signature footprint, while the signing by this ways lacks of safety elements, because the soul is separate from its owner and can be accessed by a third party and used in legal actions, as well as a thumbprint, that can be taken from thumb of a asleep person or unconscious.

Legality of electronic transactions in the Iraqi Federal Supreme Court addressed the legal researchers Kandil & Sarhan<sup>41</sup> "The Iraqi Federal Supreme Court has merely by giving legitimacy to the recipe transactions that take place through e-

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<sup>40</sup> "Start Working Electronic Signature and Electronic Transactions", Najaf News .

<sup>41</sup> Mohammad, Asaad Fadel Kandil & Akil Sarhan. "Email - Legal Study."

mail as provided for in Article 21 of the rules of procedure for conducting the functioning of the Court (1) in 2005: The Supreme Federal Court may be action communications in its area of competence by email, fax and telex addition to other means of notification set forth a Civil Procedure Law".

Recently, the Iraqi President has approved a law on electronic signature and electronic transaction statement. He said the office of the president received the agency (news) stating that: Based on what passed through the House of Representatives in accordance with the provisions of item I of Article 61, the item III of Article 73 of the Constitution decided and the President issued the Law No. 78 of 2012 that includes, electronic signature and electronic transactions<sup>42</sup>, as well as Electronic Signature and Electronic Transactions law<sup>43</sup>: An electronic signature within the scope of civil, commercial transactions and administrative authentic has an assessments for the written signature if created taking into consideration the conditions stipulated in Article 5 of this law.

### **2.3 Conclusion**

From this literature review it notice that all these authors have written about the subject of the electronic contract and electronic signature in their own countries, they give ideas of the laws govern this business, in this research will be studied for the electronic signature in the electronic contract in Iraq, where it was a new topic of the Iraqi law and needs to a deep search and intensive study in this area.

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<sup>42</sup> Dinarvets. 2012 "President Approves Law on Electronic Signature and Electronic Transactions".

<sup>43</sup> Electronic Signature and Electronic Transactions law No. 78 in 2012 Article 4 (2).

## **CHAPTER THREE**

### **DEVELOPMENT OF CONTRACT LAW AND ELECTRONIS CONTRACT LAW IN IRAQ**

#### **3.1 Introduction**

Contract, in the simplest definition, a promise enforceable by law. The promise may be to do something or to refrain from doing something<sup>44</sup>. The making of a contract requires the mutual assent of two or more persons; one of them is ordinarily making an offer and accepting another. If one of the parties fails to keep the promise, the other is entitled to legal recourse. In the early twentieth century, like many other countries in the Middle East, the legal landscape of Iraq was characterized by various, diverse laws and legal laws, legislation for a new and unified civil law became a necessity. The Iraqi Civil Law was enacted on September 8, 1951 and became effective two years later on September 8, 1953, to regulate matters relating to contracts in Iraqi law at the time. The law is still in force at the present time on the traditional contracts.

In order to secure a sound application of the provisions of the law, in order to reach a fair judgment in the case being considered in the conflict that arise during the implementation of the contracts were a law of proof has been passed in 1979, it is Iraq Evidence Law N.107 of 1979.

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<sup>44</sup> Moneim, Farag Abdel. *Civil Law, Contract Theory in the Arab Country's Laws: Lectures Delivered by Students in the Department of Legal Studies*: University of Arab States, the Institute of High Studies, 1958.

Iraqi legislation was free of the specific law of electronic contract. Until recently, Iraq issued Electronic Signature and Electronic Transactions Law N. 78 of 2012, this law includes the meaning of Electronic contract, and shows that the electronic contracts may be offered and accepted in contract by electronic means. In this chapter, the researcher will seeks to analyze, inter alia, the general principle of contracts in Iraq law , traditional and electronic contracts.

### **3.2 Paper Based Traditional Contract**

The Iraqi Civil Law N.40 of 1951 defines a contract as" the unison of an offer made between two parties to affect a certain object"<sup>45</sup>. An Iraqi contract consists of three main elements: consent, a valid object, and a lawful cause. A valid contract is one that is lawful, concluded by parties with full capacity, free of defects, has a lawful cause, and has a lawful object<sup>46</sup>. It can be made for sale, gifts, loans, rent, or for a certain act or service<sup>47</sup>. Further, a contract is considered valid so long as its object is not forbidden by law, to the prejudice of public order, or against morals<sup>48</sup>.

One of the rules established in the jurisprudence that writing alone is not an argument below unless reinforced by the signature, then become legal effect makes it an argument about the impact and establish his legal obligation to them and therefore the task of the signature is to appoint the person attributed to him signing as well as the commitment of the site what is signed. The Iraqi legislator follow this rule in order to resolve matters of any possible conflict arise between the parties after the contract , included Iraqi evidence Law No. 107 of 1979, the importance of signing

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<sup>45</sup> Iraq Civil Law N 40 of 1951 section 73

<sup>46</sup> Ibid section133(1).

<sup>47</sup> Ibid section 74.

<sup>48</sup> Ibid section 75.

the document and enact in this law that the documents shall have no authoritativeness except that of ordinary documents as evidence, if the respective parties have signed them with their signatures and/or stamped them with their thumbprints.<sup>49</sup>

The Iraqi Civil Law states that the terms offer and acceptance are used to denote the creation of a contract the first expression of a will to contract being considered the offer and the second being considered the acceptance<sup>50</sup>. For an Iraqi contract to be concluded, the acceptance must conform to the terms of the offer<sup>51</sup>. Acceptance conforms to the offer when both parties agree to all of the essential elements of the agreement<sup>52</sup>. However, where both parties agree on all the essential terms of a contract and reserve negotiation on secondary matters for a later date (without stipulating that a contract shall not be formed until agreement on those secondary matters), then the contract will be considered to have been formed upon agreement to the essential terms<sup>53</sup>.

The Iraqi Law's emphasis on the need for an offer and acceptance in order to form a contract should be underscored. The Iraqi articles make it clear that a unilateral expression of one's will is generally not binding absent some provision to the contrary<sup>54</sup>. Those situations appear limited to circumstances in which a person has offered consideration to whoever performs a certain law<sup>55</sup>. Parties may enter into a preliminary agreement wherein they stipulate that they will enter into a contract if

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<sup>49</sup> Iraq Evidence Law N.107 of 197 section 21 second

<sup>50</sup> Ibid section 77(1).

<sup>51</sup> Ibid section 85.

<sup>52</sup> Iraq Civil Law N 40 of 1951 section 86(1).

<sup>53</sup> Ibid section 86(2).

<sup>54</sup> Ibid section 184(1).

<sup>55</sup> Ibid section 185(1)

certain circumstances exist within a certain period of time<sup>56</sup>. Where the law prescribes a certain form of a contract, the preliminary agreement must also adhere to that form. Offer and acceptance may be oral, written, or by some sign which in common usage indicates a desire to contract<sup>57</sup>. A contract may be formed over the telephone or similar means of communication<sup>58</sup>. The contract will be deemed concluded in the place and at the time that the offer or becomes aware of the acceptance<sup>59</sup>. The display of goods along with their price is considered an offer<sup>60</sup>. However, the publishing, listing, or advertising of current dealings is not<sup>61</sup>, ontracts may also be concluded at auctions, wherein a bid (acceptance) can be vitiated by a higher bid<sup>62</sup>. Silence can be considered acceptable in situations in which there is a need for expression<sup>63</sup>. Silence is expressly deemed to be accepted in situations in which a purchaser receives goods and remains silent or in which there have been past dealings between parties and the offer was related to those past dealings or ways to the benefit of the person to whom it was addressed<sup>64</sup>. The Iraqi Civil Law states that every person is considered to have the capacity to enter into contracts unless the law states otherwise<sup>65</sup>. Examples of those deemed to be without legal capacity to contract are minors and insane people<sup>66</sup>.

The written evidence is the most important evidence in the law, as it is characterized by the other evidence that it could be set up since the emergence of the

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<sup>56</sup> Iraq Civil Law N 40 of 1951. Section 91(1).

<sup>57</sup> Ibid section 79.

<sup>58</sup> Ibid section 88.

<sup>59</sup> Hassan, Haider Falih. "The Moment of Conclusion of the Contract According to the United Nations Convention on Contracts for the International Sale of Goods (1980)." *Iraqi Academic Scienific Journal* 25, no. 2 (2010).

<sup>60</sup> Iraq Civil Law N 40 of 1951 section 80(1).

<sup>61</sup> Ibid section 80(2).

<sup>62</sup> Ibid section 89.

<sup>63</sup> Ibid section 81(1).

<sup>64</sup> Ibid section 81(2).

<sup>65</sup> Ibid section 93.

<sup>66</sup> The age of majority under the Iraqi Law is eighteen full years, Iraqi Civil Law section106.

right before the conflict. It also provides several guarantees of the Parties of the most important set of existing rights, whether before or after a dispute, in addition to the fact that writing is less vulnerable to the impact of factors time.

The tremendous development of the communications revolution and modern techniques in addition to modern general technological development<sup>67</sup>. The using of electronic transaction forms, such as, electronic commerce by Iraqi citizens to keep pace with the global modern developments, has led to the emergence of electronic contract and through that the electronic contract in Iraq.

During this period the Iraqi legislation is free of a specific law on electronic contract and transactions, where the Iraq Civil Law and the Iraq Evidence Law which governing traditional contracts became applied to modern electronic contracts, and Iraqi judiciary has tended to equate the electronic signature with traditional signature and give it the same legal force as evidence. The Iraq Evidence Law No. 107 of 1979<sup>68</sup> state tha "A judge may make use of means of scientific progress in the elicitation of legal evidence", because the electronic signature and electronic documents is one of the means of scientific progress, based on this, the electronic signature considered as proof of evidence in the electronic contract. Thus shows the challenge is how equality electronic signature to sign the normal, especially if taking electronic signature format and personal separation from its owner helps pirates and hackers via the internet to penetrate information systems and the discovery of signature or unlocked and grab it, leading to its use without the knowledge or consent of the owner or may fire viruses via the Internet, leading to destruction the

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<sup>67</sup> Salhi, Kamran. "The Legal Nature of the Liability of the Certification Service Provider in Emirati Electronic Transactions Law No. 1\ 2006." In *Electronic Transactions Conference (E-Commerce - E-Government)*. College of Law - University of United Arab Emirates

<sup>68</sup> <sup>68</sup> Iraq Evidence Law No. 107 of 1979 section 104

files, which leads to a reduction of the value of the electronic signature as evidence of proof.

One stumbling block relates to formation of electronic contracts, there remains uncertainty whether the traditional principles of contract law can be adapted to the needs of electronic contracting. Consequently parties might disagree as to what point and in which country an e-contract is formed. This issue needs to be addressed to boost the integrity of electronic transactions. The electronic contract trigger various new legal issues even at the initial stage of the contract to meet this challenge , Iraq enacted the Electronic Signature and Electronic Transactions Law N.78 in 2012, which Iraqi parliament hope will achieve both goals not just domestically, but internationally as well.

### **3.3 Electronic Contract**

Recently, The Electronic Signature and Electronic Transaction Law N.78 of 2012 were passed by the Council of Representatives. A crucial component of an enabling legal environment e-governance is a law that recognizes the equivalence of electronic signatures and traditional signatures<sup>69</sup>.

The provisions of the current Law shall apply to<sup>70</sup>:

- a- Electronic transactions made by natural or legal persons.
- b- Transaction whose parties agree to be made electronically.
- c- Electronic financial and commercial documents.

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<sup>69</sup> Abraham, Sunil. "Review of the Legal Environment in Iraq for Effective E-Governance." *Centre for Internet and Society*, (2012).

<sup>70</sup> Electronic Signature and Electronic Transactions Law, Chapter 2, Article 3.

The section puts into place two important preconditions with connected positive consequences. The recognition by law of legally binding agreements and contracts between government and citizens allows for trade amongst all sections of society via networked technologies. Individual entrepreneurs, small businesses and big corporations both indigenous and foreign will be able to conduct economic and financial transactions. This law included the meaning of Electronic contract<sup>71</sup>: "electronic contract link positive issued by one of the contractors to accept the other in the face of proven impact in meeting him and that is by electronic means", So the electronic contract did not differ from the traditional contract in the elements of contract, conditions of its validity and its consequences in terms of responsibility, but differs in the way that is entered into the electronic character acquires, meets the offer and acceptance by to interaction between contractors visually audible through an international network of remote connection according to the Iraq Electronic Law<sup>72</sup>, the offer and acceptance in the electronic contract can be contract in any electronic means. Accordingly, the message is to be effective against the other party when the message was received and entered by the addressee's information system. The acceptance will be effective once the acceptance is entered into the offer or information system. This provision implies that the data message communication is instantaneous.

As for eligibility in electronic contracting where distance is contracted, it may be difficult for one of the contracting parties verify the eligibility of the other contracting, and this may result in the spatial separation between the parties to electronic transactions not know all the basic information about each other. It is also

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<sup>71</sup> Electronic Signature and Electronic Transactions Law N 78 /2012 chapter 1 section 10

<sup>72</sup> Electronic Transactions And Electronic Signature Law No 78/2012 section 18 first .

possible that the website which deals with the contractor is a placebo, the contract mail must to be held true to be issued by the contractors are available, where the capacity to contract, and the researcher agrees with the Iraqi legislature in the Law of Electronic Signature and Electronic Transactions No. 78 for 2012<sup>73</sup> include a provision defining point of certification: "moral person authorized to issue electronic signature certificates of ratification in accordance with the provisions of this law, and in my opinion that the authorities of publicity, which is a neutral third party trusted by both parties" is an option to be taken into consideration. This Law defines an electronic signature<sup>74</sup> "a sign of personal take the form of letters or numbers or symbols or signs, sounds or other has the character of a singularly demonstrates attributed to the site and be dependent on the ratification". From this definition it can be seen that the Iraqi Electronic Signature and Electronic Transactions law gives the electronic signatures legal standing, and this standing increasing with the passage of various state and national laws to become the equal (or more) of handwritten signatures .

### **3.3 Conclusion**

The summary of this chapter that human Proceed in his life a large number of actions involve words of real or legal implications arising binding obligations. At the forefront of actions that give rise to an obligation the agreement or so-called contract which paid the Iraqi legislature in the early twentieth century, like many other countries in the Middle East, to enact the Iraqi Civil law N.40 of 1951, to regale and organs all the issues related to the traditional contract, The codification Iraq

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<sup>73</sup>Iraqi Electronic Transactions and Electronic Signature Law No. 78 for 2012 Article 1, fourteenth

<sup>74</sup>Electronic Signature And Electronic Transactions Law No. 78 of 2012 Article 1 fourth

Evidence Law has been in Iraq under N 107, of 1979 which include sections for proof the contract. When the Internet the world has become in a state of permanent contact, and even it was described as “the small global village”. This network was used as a mean to make different kinds of contracts, and it imposed itself as a modern alternative to the Traditional contracting.

Iraqi legislation remained free of a special law for the electronic transactions; the judges in their judgments adopted the laws of traditional contracts.

But this case and faced a lot of challenges, forcing the Iraqi legislature to finally pass Iraq Electronic Signature And Electronic Transactions Law No. 78 of 2012. this section includes the Iraqis law for the traditional and electronic contract.

## **CHAPTER FOUR**

### **ELECTRONIC SIGNATURE IN ELECTRONIC CONTRACT**

#### **4.1 Introduction**

There is no doubt that the tremendous development of the communications revolution and modern techniques in addition to modern general technological development, has led to the emergence of electronic commerce and through that the electronic contract. As the Iraqi legislature recently passed the law, several domains are needed to shed light on this type of electronic contracts to indicate what provisions governed by laws which provides legal protection for customers in this area.

As such for the research indicates the reason for addressing the issue in this chapter and to highlight the significance of electronic signature in the electronic contract that needs to be substantiated and will address the topics covered in two sections accordingly. The first section describes the contract, explaining the basic elements of the contracts, includes the offer, acceptance, intention to create legal relation and consideration. This section will further describe the explain as well as the eligibility for the electronic contract.

The second section will deal with the issue of proof of electronic contract. Throughout this chapter, a further discussion is done by the researcher on the methods of proof and the electronic signature. Also there will be discussion about what are the electronic signature and the types of electronic signature (electronic

signature, biometric signature and PIN code) to be used. Compared with the traditional signature which has been explained thus far, this section will elaborate the legal effects of electronic signature in proving the electronic contract, and conclusion will be drawn presented at the end of this chapter.

## **4.2 Electronic Contract**

Various laws have been passed internationally for electronic contract, contracting by the use of electronic contract, and the elements of this contract will be examined in this chapter.

### **4.2.1 Definition of the Electronic Contract**

The World Wide Web (WWW) has brought new opportunities and challenges to various people. The businesses utilize it for their benefits by expanding their activities not only in physical space but also in virtual space in search of the potential customers<sup>75</sup>. Thus contracting becomes a fundamental element in the electronic commerce world. The electronic contracting raises various new legal issues.

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<sup>75</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment." *Study Mode* (April 2011).

“Electronic contracts is defined by Hamid<sup>76</sup> as" legally enforceable promises or set of promises that are concluded using electronic medium". The UNICITRAL Model Law on Electronic Commerce 2001, instead of defining an electronic contract, "merely states that a contract can be made by exchanging data messages and when a data message is used in the formation of a contract, the validity of such contract should not be denied"<sup>77</sup>. However, the US Uniform Commercial Code which was later incorporated into the Uniform Computer Information Transaction Act 1999 states that, an electronic contract is a transaction formed by electronic messages in which the messages of one or both parties will not be reviewed by an individual as a routine step in forming the contract. This explanation replaces the “writing” requirement with a "record” to equate electronic record with paper records and accepted electronically formed contract as valid<sup>78</sup>. So, the US Act does not define electronic contract but only discussing the methods of forming a valid contract<sup>79</sup>.

In the first type of contract the sender of an offer sends an electronic mail address and sends it to the recipient as it is done in an offline environment. The electronic contracts may take the form of electronic mail contracts or web contracts. The difference in e-mail related contract is that the e-mail requires the technical assistance of a third party that is called as the Internet Service Provider (ISP). The ISP provides electronic mail accounts and stores the message until the message is downloaded. A contract can be concluded exclusively by electronic mail, or it can be a mixture of web offer and electronic mail acceptance.

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<sup>76</sup> Ibid.

<sup>77</sup> The UNICITRAL Model Law on Electronic Commerce 2001 article 11

<sup>78</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment." *Study Model* (April 2011).

<sup>79</sup> Uniform Computer Information Transaction Act 1999 Section 202

A web contract is concluded by mouse click only. In a virtual shop the supplier will usually place an electronic catalogue. The customer or purchaser then has to tick a box to select a particular item. In order to complete the order, the purchaser has to provide the credit card number and click “Pay” or “I Accept” or similar button.

Most countries have their national law to regulate contracts including electronic contract. USA, UAE, Iraq and most of other countries had amended their existing contracts related legislation following the (UNICITRAL Model Law on Electronic Commerce 1996). The Uniform Electronic Transaction Act and the Uniform Computer Information Transactions Act 1999 of the USA were passed to regulate the electronic contractual commerce issues. A central goal of this project to codify a commercial law for use across multiple political status is to advance the harmonization and unification of laws. This process frequently can invoke difficult balancing issues and choices. The states often may have vastly different social cultures and legal systems which operate under different historical traditions. Alternatively, the various states may be relatively homogenous in attitudes, as is the case in the United States with respect to some issues. Their economic systems may be highly developed, such as in the West, or maybe yet emerging, such as in many parts of the world. Such disparities in legal traditions, cultures, and economic development make any harmonization project a complex task, most particularly so at the international level. However, only through such harmonization can the

uniformity of law that is so crucial to support efficient and fair commercial transactions be advanced<sup>80</sup>.

It is perhaps in the area of electronic commerce (e-commerce) in which the search for a unification and harmonization of commercial laws will face its greatest challenge. Seeking to harmonize the laws of multiple political states in any one particular area of international business transactions is a daunting enough task, given the wide range of legal approaches that those states may have taken in an area, regardless of whether it be insolvent, the sale of goods, or payments<sup>81</sup>: A contract may be formed in any manner sufficient to show agreement, including offer and acceptance or conduct of both parties or operations of electronic agents which recognize the existence of a contract<sup>82</sup>.

Dubai Electronic Transactions and Commerce Law<sup>83</sup> defines the electronic contract as: (transactions that are concluded or performed, wholly or partly, through Electronic means or records, where these activities or records are not subject to any follow-up or revised by a natural person, as is the case in the context of the conventional establishment and performance of contracts and transactions), this definition shows that Electronic contracts are created during online buying and selling on electronic markets. Electronic Markets are platforms, which offer support for market transactions for online selling or buying of goods and services. Electronic contracts document the expressions of willingness during market transactions.

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<sup>80</sup> Overby, Brooke. "Uncitral Model Law on Electronic Commerce: Will Cyberlaw Be Uniform?" *Tulane Journal of International and Comparative Law*, (1999).

<sup>81</sup> Overby, Brooke. "Uncitral Model Law on Electronic Commerce: Will Cyberlaw Be Uniform?" *Tulane Journal of International and Comparative Law*, (1999).

<sup>82</sup> "Electronic Contract Law & Legal Definition ", <http://definitions.uslegal.com/e/e-contract/>

<sup>83</sup> Dubai Electronic Transactions and Commerce Law No. 2 of 2002 in chapter 2, definition of the electronic contract

" Review the Iraqi laws governing, the contracts of various kinds such as civil law, the trade law, transport law, company law and evidence law, note that all of them did not appear in texts refers to "electronic contract" despite the enormous technical development and accelerated in the presence"<sup>84</sup>, this means that Iraqi legislation was free of the specific law of electronic contract. Until recently, Iraq has issued the Electronic Signature and Electronic Transactions Law N 78 of 2012 that includes the meaning of electronic contract<sup>85</sup>. It says that "electronic contract link positive issued by one of the contractors to accept the other in the face of proven impact in meeting him and that is by electronic means." Also the law shows that the electronic contracts may be offered and accepted in contract by electronic means<sup>86</sup>.

#### **4.2.2 Elements of Electronic Contract**

Electronic contract is not differ from the traditional contract in terms of the elements of contract<sup>87</sup>, conditions of its validity and its consequences in terms of responsibility. (but differs in the way that is entered into the electronic character acquires, meets the offer and acceptance by to interaction between contractors visually audible through an international network of remote connection).

For a contract to be valid, the essential ingredients of a contract must present. It is the common requirements in most cases where the contract must have offer,

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<sup>84</sup> Al-Khazraji, Jabbar Abdul Khaliq. "Electronic Contracts and E-Mail, Does Not Work in Iraq." 2012.

<sup>85</sup>Electronic Signature and Electronic Transactions Law N 78 of 2012 Chapter 1 article 10

<sup>86</sup> Chapter 5 Article 18, The Uniform Commercial Code (UCC), a comprehensive code addressing most aspects of commercial law, is generally viewed as one of the most important developments in American law.

<sup>87</sup> Sahib, Ali Mutashar Abdul. "Protect the Consumer to Make an Electronic Contract " *Iraqi Academic Scientific Journal* 27, no. 1.

acceptance, consideration, and capacity for an enforceable contract. In other words, technology does not change the necessities of these elements to form a valid contract. However, with it creates new problems and challenges.

The applicability of the existing law to the new problems without modification is questionable, that makes it difficult to establish the elements of a contract. When the human elements in the processing of the transaction are removed, the contracting is performed electronically. Realizing this, the US government had amended the Uniform Commercial Code (UCC)<sup>88</sup> to clarify that "contract can be performed by intelligent agents without human involvement" The Iraqi Civil Code N. 40 of 1951<sup>89</sup> states that "the terms *offer* and *acceptance* are used to denote the creation of a contract the first expression of a will to contract being considered the offer and the second being considered the acceptance".

Note that both the Iraqi civil law and UCC have stipulated the presence of a function in the contract, However the difference between the American laws, this UCC has explicitly mentioned the possibility of the conclusion of the contract even without human intervention, (while not provided in this law, the Iraqi legislature is suggesting this topic).

#### **4.2.2.1 Offer**

The Offer is one of the essential elements of a contract. It expresses the willingness of one party to do something. This party is called the offeror. Such a

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<sup>88</sup> Uniform Commercial Code 1952 Article 2B.

<sup>89</sup> The Iraqi Civil Code N. 40 /1951 Section 77.

declaratory act will not have any legal effect if there is no person who accepts the offer. This party who accepts the offer is called the offeree. This shows the two roles in a contract:

- The *offeror* is the person who makes an offer,
- The *offeror* is the person who accepts an offer<sup>90</sup>.

The offer can be made to a specific person or to a group of persons or to the public at large. When the offer is made to a specific person or a group of person it is called as bilateral and when it was made in public at large, it is called unilateral contract.

The electronic offer<sup>91</sup>: "is an expression of the will of wanting to contract through an international communications network by means of audible and Visual (Internet) with this expression must contain all the elements necessary for the conclusion of the contract to send to the person concerned or the other party accepts the contract immediately". From here we can find the difference between offerer in the electronic contract and traditional offerer, according to the means used to express it, either done by email by sending e-mails, and apply them describe offeror required to include obligations that are contracted for in this case the consignee has aware of this offer when informed of the e-mail box, in this moment you start effectively yes, where the addressee will be free to accept the offer by sending an email to consent to the conclusion of the contract. Or maybe offer-mail via the Web site in this case it has different from offered not issued through newspapers or TV that it will be at 24-hour.

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<sup>90</sup> Greunz, Michael Gisler & Katarina Stanoevska-Slabeva & Markus. "Legal Aspects of Electronic Contracts." *Infrastructures for Dynamic Business-to-Business Service Outsourcing (IDSO'00)*, (2000).

<sup>91</sup> "Electronic Contract Law & Legal Definition", <http://definitions.uslegal.com/e/e-contract>.

The display of goods with a price tag attached, an advertisement, and action can be considered as examples of invitation to treat. One may argue that usually the advertisement on the website is considered as an invitation to treat and not an offer. "It is true that normal web advertisements which only receive the citizens' offer can be considered as an invitation to treat but there are other types of web advertisements that require positive action from the other party like providing with the credit card numbers and once provided the transaction is confirmed. Due to this type of webvertisments, one impact of the internet is that the line between advertisements and legal affairs has been blurred"<sup>92</sup>. That means there is confusion and lack of understanding between online advertising and legal offer via the internet. To resolve this problem, on the internet, thousands of web sites advertise their products but they also make offer that are legally binding if a customer clicks the "yes" or "I accept" button, signifying the assent to the offer.

The internet advertisement may be considered as offers capable of creating a contract if a customer assents to the advertisement. For example, Amazon.com, a virtual bookstore advertises its books; prospective buyers browse the website of amazon.com and select the books which they intend to purchase. Once selected they will make payment through credit card. With this a purchase is completed and the buyer merely waits for the books to be delivered. If the web store is considered as not making an offer, there would be no contract until the store owner either informs the buyer his intention of performance or performs the contract by sending the books ordered which will eventually slow down the internet transactions.

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<sup>92</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment." *Study Mode* (April 2011).

The Dubai law allows to offer and acceptance, partly or wholly, for any electronic contract by means of Electronic Communication, Dubai Electronic Transactions and Commerce Law No. 2 of 2002<sup>93</sup> :

(1) For the purpose of contracting, it is permissible to express offer and acceptance, partly or wholly, by means of electronic communication.

(2) A contract shall not be denied validity or enforceability on the sole ground that it was concluded by means of one or more electrons Communications.

An offer can come to an end in a number of ways<sup>94</sup>:

1. Once the offer is accepted by the offeror;
2. By rejecting. It can be rejected if:
  - A. The offeree informs the offeror that he is not accepting the offer;
  - B. The offerer wants to accept but subject to certain conditions and,
  - C. The offeror makes a counter offer.
3. By lapse of prescribed or a reasonable time of acceptance.
4. Failure to fulfil the conditions required death or mental disorder.

Revocation may be effective any time before the offeree accepts the offer provided that the revocation is communicated to the offeree. If the acceptance is to be made by post like e-mail, the revocation must be communicated before posting. To keep up with the developments in the electronic world, Iraq legislator added a new method to display the purpose of contracting by electronic means, Dr. Mansur Mohan explains: "The New Electronic Transactions and the Electronic Signature law

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<sup>93</sup> Iraqi Electronic Transactions and Electronic Signature Law No. 78 of 2012 Article 13

<sup>94</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment."

No. 78 of 2012 added a method of issuing electronic offer by the site, and how the offerer could issue an electronic offer, and inform others that it wants to be associated with the document-mail and it is not an ordinary paper that he publish but this document mail through a network repay or his email".

#### **4.2.2.2 Acceptance**

Once a valid offer is made the next stage for the formation of a valid agreement is an acceptance of the offer. The acceptance must be made while the offer is still open. when the person to whom the proposal is made signifies his assent thereto, and the proposal is said to have been accepted. A proposal, when accepted, becomes a promise. The acceptance must be absolute and unqualified, meaning that, the offerer agrees to each and every term in the offer and does not add additional terms<sup>95</sup>.

An acceptance may take any form; it can be given orally or in writing. But silence cannot normally amount to an acceptance<sup>96</sup>. It is expressly deemed to be accepted in situations in which a purchaser receives goods and remains silent or in which there have been past dealings between parties and the offer was related to those past dealings or ways to the benefit of the person to whom it was addressed<sup>97</sup>. It can also be implied from a person's conduct. The acceptance must be made within the prescribed time or within a reasonable time from the date of the offeror. The general rule is that an acceptance must be communicated to the offeror. The contract

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<sup>95</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment." (2000).

<sup>96</sup> The Iraqi Civil Code N. 40 /1951 section 81(1).

<sup>97</sup> The Iraqi Civil Code N. 40 /1951 section 81(2).

is formed at the place and time the acceptance is received by the offeror<sup>98</sup>. If the post is used for acceptance, the acceptance is effective immediately upon its receipt by the offeror regardless if the letter is delayed or lost provided it is properly stamped, addressed and posted. The postal rule is applicable to telegram too, but not to more instantaneous means of communication such as telex, and telephone.

If the offeree adds additional terms in the acceptance or requests a change in the offeror, the offeror has made a counter offer which becomes the offeror if the e-retailer introduced new terms when he delivered the goods with an option of cancellation of the contract, the acceptor can accept the new terms or reject it by returning the goods within the specified period. (If he fails to comply with, the court may hold that a valid contract was formed on the seller's term). In *Caspi v. Microsoft Network, L.L.C.*, the U.S. court accepted the validity of an additional clause after conclusion of a contract. Similarly, in *Rich and Enza Hill v. Gateway 2000 Inc*<sup>99</sup>,<sup>28</sup> the plaintiffs purchased a Gateway 2000 computer based on a telephone conversation. When the plaintiffs received the computer, the box contained additional terms including an arbitration clause. The plaintiffs were given the option to accept the additional terms within 30 days. When the computer did not function effectively, the plaintiffs filed a lawsuit in the court arguing that they should not be bound by the terms of the arbitration clause because they did not know about it when they signed the contract. The Court of Appeal held that the terms are enforceable because the plaintiffs were given with an option of returning the items within a specified 30 days which they failed. By not returning the item, the buyer implicitly accepted the

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<sup>98</sup> Sahib, Ali Mutashar Abdul. "Protect the Consumer to Make an Electronic Contract " *Iraqi Academic Scientific Journal* 27, no. 1.

<sup>99</sup> U.S. Court of Appeals for the Seventh Circuit 105 F. 3d 1147 (1997).

seller's conditions. Therefore, the plaintiffs should refer the case to the arbitration. Applying these decisions to an e-transaction if the e-retailer introduced new terms when he delivered the goods with an option of cancellation of contract, the acceptor can accept the new terms or reject it by returning the goods within the specified period of time. If he fails to comply, the court may hold that a valid contract was formed on the seller's term.

The acceptance is effective only when it comes to the knowledge of the offeror, "with the advent of information technology, the issue of communication of acceptance needs to be revisited as regards to e-mails and web based acceptance. An e-mail communication is first sent to the Internet Service Providers (ISP). The ISP will then send that message to the actual recipient, when the recipient sends a request to his ISP to download the messages that it has received and are addressed to the recipient only. Once the downloading is completed, the message actually will reach the recipient. Looking at the manner in which an e-mail communication operates one may say that e-mail is akin to postal rule. The offeree is bound by the acceptance once the acceptance is put on a course of transmission to the proposer so as to be out of the power of the acceptor. Thus once the message is sent by the acceptor to his ISP, the message can be considered out of the control of the offeree"<sup>100</sup>.

One might also argue that the e-mail communication should not be considered as an instantaneous, because, in post office, it is a manual work to send the letters to the addressee which may take long time and might be lost without any record being made. However in an e-mail system, the sender is notified if the e-mail

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<sup>100</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment."

could not be sent to the recipient and the sender also may know when the email is received by the recipient by adopting updated technology in the email system. This argument is always supported by the UNCITRAL Model Law on Electronic Commerce<sup>101</sup> which states that "an offer and acceptance will be effective at the moment the message enters an information system outside the control of the originator". So accordingly, the message is to be effective against the other party when the message was received and entered by the addressee's information system. The acceptance will be effective once the acceptance is entered into the offer or information system. This provision implies that the data message communication is instantaneous.

However, "it is to be noted that the notification of non-delivery of e-mails and return receipt confirmation are not always common. One may receive or may not receive depending on the network and server. There are so many instances where the mails were lost in the cyberspace. Therefore, it is safe to argue that e-mail communications can be considered as postal because there is an ISP as a third party who may delay the delivery or the mails may get lost without notifying the sender"<sup>102</sup>.

In addition, communication with a server using a program that makes offers and receives acceptances will likely be considered as instantaneous. Many web sites employ forms to receive comments and sometimes commercial orders from browsers. These sites allow browsers to fill in the forms and submit them, by clicking on a submit button. An instant replay will appear stating that the form has

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<sup>101</sup> Internet Service providers article 15.

<sup>102</sup> Hamid Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment.

been received. As such the nature of this transaction is instantaneous and the acceptance will be complete upon knowledge of its acceptance.

As long as the contract entered, it is effective regardless if the acceptance was downloaded or not. The UNCTRAL Model Law further states that if there is a designated information system but the message was sent to another system the data message is received when it was retrieved. The Article gives the impression that as long as the message is retrieved the message is received regardless the message is read or not.

The acceptance can be revoked before the acceptance comes to the knowledge of the affair. If the acceptor used the post then he has to communicate the revocation i.e. inform the offeror, before the acceptance reaches the offeror. However, if he uses an instantaneous mode of communication, he will have no opportunity to revoke the acceptance as it is effective once it comes to the knowledge of the affair. For example, B e-mailed acceptance of the offer made by A. B can revoke his acceptance before the mail reaches.

Iraqi civil law (Amended) No. 40 of 1951, gives the parties the right to undo an offer before acceptance or issuance of any act, have demonstrated the irreversibility of the offer or acceptance. Article 83 of the same law includes: “parties have the right to opt after another offer to the Council.

#### 4.2.2.3 Intention To Create Legal Relation

The agreement itself does not create a binding contract. It must be shown that the parties have the intention to be legally bound. The general presumption is that the business agreements are intended to face the legal consequences unless the parties specify otherwise. However, an unclear or deceptive web site may dupe a consumer into making an unwanted contract. "For example, an online merchant offering a electronic service may construct a web site which gives no purchasing information and merely displays the product and a "Save" or "Download Now" button. An unsuspecting customer will assume that the service is free and has no intention of creating a contract when the customer clicks the button. After the electronic service has been delivered, the online merchant cannot demand payment because of the customer's absence of intention to create legal relation"<sup>103</sup>. To avoid this, the law should ensure that commercial web sites explicitly state the prices and terms of their electronic services. The customer should go through a sub sequence of web pages detailing the terms and conditions of the transaction before making a purchase.

The expresse of the electronic contract can be: Electronic "record" or "document" and the "Automated Electronic Agent". For the electronic record, UNCITRAL Model Law on electronic commerce defines it as<sup>104</sup> "the information generated, sent or stored by electronic, optical or similar means including, but not limited to, electronic data interchange, electronic mail, telegram, telex or telecopy.

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<sup>103</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment." (2000).

<sup>104</sup> UNCITRAL Model Law Section 1 article 2

Dubai Electronic Transactions and Commerce Law No. 2 of 2002<sup>105</sup> gives Definitions to the electronic record as: "A record or document created, stored, generated, copied, sent, communicated, received by electronic means, on a tangible medium or in any other electronic medium, and is retrievable in perceivable form"

From this laws, it is seen that the importance of the electronic record is its possibility of being regarded as a system of expressing the will. Therefore the validity of the contracts to be concluded through the exchange of electronic record has become as a matter of legally recognized, so it finds that the laws which were exposed to organize this issue has stated explicitly that it is permissible adoption of an electronic record a way to express mail will, whether positively or acceptance or merely an invitation to negotiate or contract.

The second way to express an electronic contract is, the automated electronic agent. generally, it is Electronic media refer to devices programmed and prepared to enter into electronic transactions including contracts automatically without the need for direct intervention by the Contracting Parties or one of them, it "is became commonly used in e-commerce environment resulting in electronic commerce legislation should pay attention"<sup>106</sup>.

The Dubai Electronic Transactions and Commerce Law No. 2 of the 2002<sup>107</sup> shows" an Electronic program or system to a computer capable of acting or responding to an act, independently, wholly or partly, without any supervision by

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<sup>105</sup> Dubai Electronic Transactions and Commerce Law No. 2 of 2002 Article 2

<sup>106</sup> Moroccan, Fatima Nawaf&Naim Alaa Mohammed Aldriue& Noor rare. "E-Commerce Contracts, Via the Internet." *Islamic University - Gaza*, (2011).

<sup>107</sup> Electronic Transactions and Commerce Law No. 2 of the 2002 chapter 1 article 2

any natural person at the time when the act or the response has taken place". So, it is an intermediary used as a spontaneous expression of will on e-commerce environment. As a result, common electronic contracts gave the majority of legislation regulating e-commerce paid great attention to the legal issues raised by the contract through an intermediary, especially if it is known that civil planning generally does not include contract provisions special legal provisions from the contract through electronic media, based on that, the Iraqi legislature in law of Electronic Signature and Electronic Transactions Law No. 87 of 2012<sup>108</sup>:" the mediator is a program or computer system or any other electronic means used to implement or make or respond to, to create, send or receive information messages".

#### **4.2.2.4 Consideration**

After the offer, acceptance and intention to create legal relation a valid contract, needs the element of consideration. Each party to the contract must promise to do or give something to the other side. "The element of exchange is known as consideration. And any contract without consideration is void"<sup>109</sup>. The consideration is of three types, they are<sup>110</sup>: Executor, executed and past consideration. In executor consideration the parties exchange promises to perform acts in the future. Past consideration is where one party voluntarily performs an act and the other party then makes a promise. The consideration for the promise is said to be in the past.

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<sup>108</sup> Electronic Transactions and Commerce Law No. 2 of the 2002 chapter 1 article 1 eighth

<sup>109</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment." (2000).

<sup>110</sup> Ibid.

These, another possible situation for consideration in online contract is the “click-wrap” agreements. A website which offers free of charge services requires a customer to agree to certain terms and conditions, which exclude the liability or prohibit commercial use, before allowing the customer to download the digitized service. The concern is whether a click-wrap agreement of such nature has any consideration. Since free software or access to a web site represents a benefit, there is a possibility to hold that there is a consideration.

#### **4.2.2.5 Capacity**

The next issue worth mentioning information by e-contract is the capacity. It is assumed that everyone is capable of entering into a contract. However, minors, and mental patients are in need of legal protection because of their age or inability to appreciate their own actions<sup>111</sup>. Therefore, they are generally not competent to enter into a contract <sup>112</sup>.

All agreements are contract if they are made by the free consent of the parties competent to contract. The main concern in an online contract is the possibility of minors entering into commercial contracts as a common saying is that “on the Internet, no one knows who you are and what is your capacity”<sup>113</sup>. „Minors“ refer to individuals who have yet to attain the status of an „adult“. A minor is regarded as incapable of entering into a contract as he or she is unable to fully comprehend the

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<sup>111</sup> The age of majority under the Iraqi Law is eighteen full years, Iraqi Civil Law section 106.

<sup>112</sup> Naemah Amin, Roshazlizawati Mohd Nor. "Issues on Essential Elements of Formation of E-Contract in Malaysia: E-Consumers" Perspective." *Journal of Applied Sciences Research* (2011).

<sup>113</sup> Zarzor, Wasen Khadem. "Electronic Signature as Proof of the Evidence in the Light of the Provisions of the Iraqi Evidence Act No. 107 of 1979." *Rights Message journal*, no. 2 (2011).

seriousness of the contract. Only adults who are mentally capable can make legally binding contracts.

Every person is competent if he is major, of sound mind and not disqualified from contracting by any of the existing law. A valid contract requires those who have the capability of entering into a contract. Electronic contracts made through the internet are being held valid if issued by who has the legal capacity necessary for legal actions.

In traditional contracts, it is easy to be sure about the capacity of the contractors in which the contractors are gathered in same council maybe by confirm the identity of the contractors through the identity card of a natural person or a certificate of registration of the company for the legal entity person. However there is a difficulty in electronic contracts is the exchange of information electronically<sup>114</sup>. From here there is a question: How can it be sure of civil contractors in contracts through the Internet? Because a lot of dealers across the network may be underweight eligibility and baptize to hide a lack of competence, or that there are those who claim contrary to the reality he is a representative of the company or by the agent" <sup>115</sup>

To verify the identity of the contractor and the eligibility of electronic contracts is mainly a technical issue basis and need a common understanding between professionals in the field of computer and Internet and specialists in the field of law

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<sup>114</sup> Hamid, Sarabdeen Jawahitha & Noor Raihan Ab. "Electronic Contract and the Legal Environment." (2000).

<sup>115</sup> Rashid, Enas Hashim. "Expression of Will in Electronic Contracts." *Rights Message Journal* first volume, no. Second Issue (2009) .

In Iraqi legislation, a contract is void if there is some defect of the will, if there is a defect in its formation (such as a defective offer or acceptance), if any parties is not competent to contract, or if there is an impossible or invalid object this. This is mentioned in Iraqi Civil Code Law No. 40 of 1951<sup>116</sup>. As for eligibility in electronic contract, where distance is contracted, it may be difficult for one of the contracting parties verify the eligibility of the other parties. This may result in the spatial separation between the parties to electronic transactions not know all the basic information about each other. It is also possible that the website which deals with the contractor is a placebo, the contract mail must to be held true to be issued by the contractors are available, where the capacity to contract, and the researcher agrees with the Iraqi legislature in the law of Electronic Transactions and Electronic Signature No. 78 of 2012<sup>117</sup> to include a provision defining point of certification: "moral person authorized to issue electronic signature certificates of ratification in accordance with the provisions of this law, and in my opinion that the authorities of publicity, which is a neutral third party trusted by both parties" is an option to be taken into consideration.

### **4.3 Electronic Signature**

Various laws have been passed internationally to facilitate commerce by the use of electronic records and signatures in interstate and foreign commerce. In this chapter, the researcher will shows what is the electronic signature and its types ,also the similarities and different between the electronic and traditional signature will offered.

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<sup>116</sup> Iraqi Civil Code, Law No. 40 of 1951 section 137.

<sup>117</sup> Electronic Transactions and Electronic Signature No. 78 of 2012 article 1, fourteenth.

### 4.3.1 Definition of The Electronic Signature

The electronic signature to electronic means that indicates either that a person adopts the contents of an electronic message, or more broadly that the person who claims to have written a message is the one who wrote it (and that the message received is the one that was sent). By comparison, a signature is a stylized script associated with a person. In commerce and the law, a signature on a document is an indication that the people adopt the intentions recorded in the document<sup>118</sup>. Both are comparable to a seal. Various laws have been passed internationally to facilitate commerce by the use of electronic records and signatures in interstate and foreign commerce. The intent is to ensure the validity and legal effect of contracts has entered into electronically.

In 1996, the United Nations has published the UNCITRAL Model Law on Electronic Commerce<sup>119</sup> this was highly influential in the development of electronic signature laws around the world, including in the US, Its code<sup>120</sup> defines an electronic signature for the purpose of US law as "an electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record." It may be an electronic transmission of the document which contains the signature.

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<sup>118</sup> Elfadil, Nazar. "Graphical and Digital Signature Combination for Fulfilling the Cultural Gap between Traditional Signature and Current Smart Card Digital Certificate/Signature." Oman: College of Engineering, Sultan Qaboos University

<sup>119</sup> United Nations published the UNCITRAL Model Law on Electronic Commerce

<sup>120</sup> US Esign Act of 2000.

The general intent of US E-SIGN Act 2000 is spelled out in the very first<sup>121</sup>

- (1) A signature, contract, or other record relating to such transaction may not be denied legal effect, validity, or enforceability solely because it is in electronic form; and*
- (2) A contract relating to such transaction may not be denied legal effect, validity, or enforceability solely because an electronic signature or electronic record was used in its formation.*

This simple statement provides that electronic signatures and records are just as good as their paper equivalent, and therefore subject to the same legal scrutiny of authenticity that applies to paper documents. An electronic signature can be as basic as a typed name or a digitized image of a handwritten signature. Consequently, electronic signatures are very problematic with regards to maintaining integrity and security, as nothing prevents one individual from typing another individual's name. Due to this reality, an electronic signature that does not incorporate additional measures of security (the way electronic signatures do,) is considered an insecure way of signing the documentation.

The Iraqi legislator follows the UNCITRAL Model when initiated Electronic Signature And Electronic Transactions Law No. 78 of 2012<sup>122</sup> and this law defines an electronic signature: "a sign of personal take the form of letters or numbers or symbols or signs, sounds or other has the character of a singularly demonstrates attributed to the site and be dependent on the ratification". The law

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<sup>121</sup> Electronic Signature in Global and National Commerce Act [E-SIGN] 2000 section (101.a).

<sup>122</sup> Electronic Signature And Electronic Transactions Law No. 78 of 2012 Article 1 fourth

considers the electronic signature as one of the electronic document: <sup>123</sup> electronic documents - papers and documents that arise or integrate store or transmit or receive wholly or partly by electronic means, including electronic data interchange or electronic mail, telegram or telex or telecopy carries electronic signature.

### **4.3.2 Types Of Electronic Signature**

Simple electronic signature is data in electronic form which is linked to other data which is used to authenticate the signature. An electronic signature is "an electronic, encryption-based, secure stamp of authentication on the document"<sup>124</sup>. This signature confirms that the document originated from the signer and has not been altered. It has the following additional features: (i) it is assigned exclusively to the signature key owner, (ii) it enables the signature of the key owner to be identified, (iii) it is produced by means kept under the sole control of the key owner and (iv) it is linked to the data to which it relates in such a way that their subsequent alteration can be identified.

#### **4.3.2.1 Electronic Signature (Private Key Infrastructure, Certificates, etc..)**

"A electronic signature (standard electronic signature) takes the concept of traditional paper-based signing and turns it into an electronic fingerprint. This "fingerprint," or coded message, is unique to both the document and the signer and

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<sup>123</sup> Electronic Signature And Electronic Transactions Law No. 78 of 2012 Article 1 ninth .

<sup>124</sup> Namaa, Ammar Karim Kadim & Narman Jameel. " Legal Force of Electronic Document." *College of Law - University of Kufa*, (2007).

binds both of them together"<sup>125</sup>. Electronic signatures ensure the authenticity of the signer. Any changes made to the document after it has been signed invalidate the signature, thereby protecting against signature forgery and information tampering. As such, electronic signatures help organizations sustain signer authenticity, accountability, data integrity and the non-repudiation of signed electronic documents and forms.<sup>126</sup>

An authentication method that uses the rhythm of a person's typing on the computer, the "dwell time" between pressing a key down and letting it up, as well as the "flight times" between one key down and the next key down and one key up and the next key up, produce a rhythm unique to the individual. This rhythm is recorded when typing in username and password and compared against future logins<sup>127</sup>. An electronic signature may also refer to electronic forms of processing or verifying identity through the use of biometric "signatures" or biologically identifying qualities of an individual.

Such signatures use the approach of attaching some biometric measurement, of said measurement, in a document as evidence of signature. For instance, fingerprints, hand geometry (finger lengths and palm size), iris patterns, or even retinal patterns. All of these are collected using electronic sensors of some kind. Since each of these physical characteristics has claims to be the uniqueness among humans, each one is to some extent useful as a signature method. Unfortunately,

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<sup>125</sup> Hijazi, Abdel Fattah Bayoumi. *The Legal System of Electronic Signature*. Egypt: Dar Al kuteb Alqanonyaa, 2007.

<sup>126</sup> Zarzor, Wasen Khadem. "Electronic Signature as Proof of the Evidence in the Light of the Provisions of the Iraqi Evidence Act No. 107 of 1979." *Rights Message journal*, no. 2 (2011).

<sup>127</sup> TheFreeDictionary, 10 May 2013.

each is easily spoofed able by a replay of the electronic signal produced and submitted to the computer system responsible for 'affixing' a signature to a document. Wiretapping techniques often suffice. In the particular case of fingerprints, a Japanese professor and some graduate students managed to spoof all of the commercials.

Available fingerprint readers are available to the users with some ordinary kitchen chemistry (gummy bear candy gel) and a little ingenuity. No actual fingers were needed to successfully spoof every reading device. Biometric measurements of this type are useless as passwords, as they can't be changed if compromised. However, they might be serviceable as electronic signatures of a kind - except that, to date they have been so easily spoofed able that they can carry little assurance that the person who purportedly signed a document was actually the person who did.

#### **4.3.2.3 Signature Using The Electronic Pen**

The culture signed culture method using an electronic pen my account (pen-on ) can be about the way which to write on the computer screen through the using of a particular program leads to two points: first include signature capture and the second lead to the signature verification "It is taken on this type of signature that it weakens the confidence in the documents signed electronically and therefore it reduces the argument of the document in proof that the consignee can keep a copy of the signature Link and puts it on another document "<sup>128</sup>.

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<sup>128</sup> Zarzor, Wasen Khadem. "Electronic Signature as Proof of the Evidence in the Light of the Provisions of the Iraqi Evidence Act No. 107 of 1979." *Rights Message journal*, no. 2 (2011).

### 4.3.3 Comparison Between Electronic and Traditional Signature

Nowadays, the shift towards electronic commerce is an inevitable trend. Electronic signatures are designed in e-commerce to fulfil the functions of traditional signatures for authentication, data integrity, and non repudiation purposes. Historically, documents have always relied on a recognizable visual stimulus for verification. However, electronic or electronic signature does not like a traditional one. "One of the primary problems with current electronic signatures is that a electronic signature does not “feel” like or resemble a traditional signature to the human observer, as it doesn't have the same sense of visualization. This is because electronic signatures are attached to the end of a computer document as a stream of binary data. These binary data are then displayed in a hexadecimal nature form which appears to the average user as a long incomprehensible string of random characters offering no sense of identity or ownership"<sup>129</sup>. The current electronic signature overlooks the importance of visualization and sense of personal identity and ownership in many cultures.

To overcome the cultural gap between the traditional signatures and electronic signatures, this work investigates signature cultures in the context of electronic signatures, identifying the need to develop a new culturally friendly, visual electronic signature that can be imbedded into a smart card.

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<sup>129</sup> Al-Shatti, Firas Fadhil. "Conclusion of the Electronic Contract." *Kuwait Institute for Judicial and Legal Studies*.

#### **4.3.3.1 Electronic and Traditional Signatures Similarities**

Although electronic and traditional signature are objectively different, they still have certain similarities in some aspects. Their similarities are as follow

1. Both provide the security services of authentication, data integrity, and non repudiation.
2. Both handwritten and electronic signatures have legal standing, and the legal standing of electronic signatures is increasing with the passage of various state and national laws to become the equal (or more) of handwritten signatures.

#### **4.3.3.2 Differences Between electronic and Handwritten Signature**

Since electronic signature is different from handwritten signatures, there are differences between them, that include:

1. A handwritten signature is biologically linked to a specific individual, whereas an electronic signature relies on the protection afforded a private signature key of the signer, and the procedures implemented by a Certification Authority (CA)<sup>130</sup>.
2. Handwritten signatures are under the direct control of the signer, whereas electronic signatures must be applied by a computer commanded by the signer.

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<sup>130</sup> Certification authority (CA), is an entity that issues digital certificates. The digital certificate certifies the ownership of a public key by the named subject of the certificate. This allows others (relying parties) to rely upon signatures or assertions made by the private key that corresponds to the public key that is certified. In this model of trust relationships, a CA is a trusted third party that is trusted by both the subject (owner) of the certificate and the party relying upon the certificate.

Although, it is difficult to quantify the strength of handwritten signatures. It seems that the level of assurance that one can place in a handwritten signature depends largely on the technical expertise of the forensic document examiner used to investigate the signature. Certainly, expert forgers have succeeded in some cases, but handwritten signatures continue to be used, because they generally provide a strength of security services sufficient for the purposes to which they are applied. Where stronger authentication mechanisms are required, notarized, witnessed signatures are used - sometimes in elaborate "signing ceremonies," such as those associated with signing bills into law, and entering into treaty agreements. The basis of the assurance provided by an electronic signature is fundamentally different than that of a handwritten signature. Whereas the judgement of whether a handwritten signature is valid or not depends on the skill of the examiner (be it the clerk comparing the credit card against the sales slip, or the forensic document expert), the judgement of whether an electronic signature is valid depends on a great many processes and procedures working correctly<sup>131</sup>.

3. The data integrity service provided by electronic signatures is much stronger than that provided by handwritten signatures. Assurance that data has not been modified since the signature was applied. While a handwritten signature does not in itself provide data integrity services, the security practices traditionally surrounding handwritten signatures, including the use of indelible ink and tamper-evident paper, provide some measure of data integrity. Electronic signatures provide excellent data integrity services by virtue of the electronic signature value being a function of the

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<sup>131</sup> Fillingham, David. "A Comparison of Digital and Handwritten Signatures." *Ethics and Law on the Electronic Frontier*, (1997).

message digest; even the slightest modification of electronically signed messages will always result in signature verification failure<sup>132</sup>.

4. A fundamental difference, then, between electronic signatures and handwritten signatures is that electronic signatures require the intervention of a computer to be applied and computers are subject to both accidental errors and malicious subversion. Handwritten signatures, by virtue of their simplicity, are not subject to these vulnerabilities.

#### **4.3.3.3 Consequences of The Differences Between Electronic And Handwritten Signatures<sup>133</sup>**

The differences between handwritten and electronic signatures have caused some practical consequences:

1. The use of electronic signatures for high-value financial transactions outside the protection of trading partner agreements is likely to proceed relatively slowly, until the experience with the risks associated with the use of electronic signatures is accrued.
2. To solve the problems associated with media deterioration, technological obsolescence, and the infrastructures ceasing operations, documents that require long-term archival should be sent to digital archivists. If the record has been

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<sup>132</sup> Fillingham, David. "A Comparison of Digital and Handwritten Signatures." *Ethics and Law on the Electronic Frontier*, (1997).

<sup>133</sup> Elfadil, Nazar. "Graphical and Digital Signature Combination for Fulfilling the Cultural Gap between Traditional Signature and Current Smart Card Digital Certificate/Signature." Oman: College of Engineering, Sultan Qaboos University.

digitally signed, then the archivist verifies the signature upon receipt, and generates a statement indicating who signed the record. Thereafter, the archivist is responsible for ensuring the availability and integrity of the archived digital data. During this final phase of long-term data archival, preservation of the originally applied digital signature and the precise bit-patterns of the original data need not be maintained. The originator's digital signature will probably be unverifiable after five to ten years anyway. The archivist would be responsible for implementing procedures to ensure the content of the archived data is not changed - though format changes would be allowed<sup>134</sup>.

3. Applications requiring high levels of non repudiation assurance will likely require the use of electronic time-stamping (or notary) services. These services may be provided by commercial or Government entities.

#### **4.3.4 The Importance of Electronic Signature**

The electronic signature is "a technical means to prove the identity of person in the scope of the electronic treatments. Signatures must ensure that the appropriate form of electronic signature is used to meet the requirements"<sup>135</sup>. The functional requirements of a signature include:

1. Evidence: A signature function as the evidence that the document or contract in come from that particulare person or it is related to that individual in other

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<sup>134</sup> Fillingham, David. "A Comparison of Digital and Handwritten Signatures." *Ethics and Law on the Electronic Frontier*, (1997).

<sup>135</sup> Makya, Hanan. "The Legal System of Electronic Signature in the Light of the Law Syrian Electronic Signature " *Damascus University Journal for Economic and Legal Sciences* 26, no. 2 (2010).

word, a signature authenticates writing by identifying the signer with the signed document. When the signer makes a mark in a distinctive manner, the writing becomes attributable to the signer.

2. Ceremony: The ceremony for the signing the document may have its psychological effect to the parties of the contract. The act of signing a document calls for the signer's attention of the legal consequence of the signer's act, and thereby helps prevent inconsiderate engagements.
3. Approval: By having the document signed, it is an approval by the signer of that particular that he/she approved or agree with the contract or terms and conditions stipulated in the contract. In certain contexts, a signature expresses the signer's approval or authorization of the writing, or the signer's intention that it has legal effect.
4. Efficiency and logistics: A signature on a written document often imparts a sense of clarity and finality to the transaction. It may also lessen the subsequent need to inquire beyond the face of a document. Negotiable instruments, for example, rely upon formal requirements, including a signature, for their ability to change hands with ease, rapidity, and minimal interruption.

Comparable to the traditional signature, an electronic signature should also fulfil some or all of these functions. Agencies should determine which are pertinent to their business processes before selecting a particular electronic signature technology. Signature has a great significant role in evidentiary. Commonly, the evidence rules do not acknowledge customary documents if they are not clearly certified certificate by signatures. The documents which are not marked with a clear signature are regarded as being rejected unless they are associated with evidence demands

additional written attestation because legally the law requires electronic contracts be electronically signed as an authentic document to avoid any a possible conflict that arises may.

Formerly, the law of evidences involve objective requirements in addition to formal ones, where signatures on documents were exclusively performed by means of stamping and fingerprinting. Such procedures provide an idea that other convention does not have any legal consequence<sup>136</sup>. However, because of the importance of the interactions as a standing fact in our modern era and, moreover, because of the increase speed in the electronic commerce and the emergence of new conceptions such as electronic governments, therefore, the lawmakers enact laws certifying a legal framework for electronic signatures through objective requirements. As indicated by the UNCITRAL 2001 through<sup>137</sup> concerning the electronic signatures of the condition that an individual authentic signature is of necessity if it meets his/her information including any relevant contracts.

The Iraqi legislator follows the UNCITRAL Model when initiated Electronic Signature and Electronic Transactions Law No. 78 of 2012<sup>138</sup> and this law defines an electronic signature: "a sign of personal take the form of letters or numbers or symbols or signs, sounds or other has the character of a singularly demonstrates attributed to the site and be dependent on the ratification". The law considers the electronic signature as one of the electronic document: <sup>139</sup> electronic documents - papers and documents that arise or integrate store or transmit or receive

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<sup>136</sup> Saad, Assem Abdel Jabbar. "Evidence in the Electronic Transactions Act and Civil and Commercial Transactions Act." (2013).

<sup>137</sup> UNCITRAL 2001 Article (6)

<sup>138</sup> Electronic Signature And Electronic Transactions Law No. 78 of 2012 Article 1 fourth

<sup>139</sup> Electronic Signature And Electronic Transactions Law No. 78 of 2012 Article 1 ninth .

wholly or partly by electronic means, including electronic data interchange or electronic mail, telegram or telex or telecopy carries electronic signature.

The electronic signature is described as being authentic in the following situations<sup>140</sup>:

- 1- (If the signature information is connected with the context where they are not used by any other individual)- This requirement aims to stop any other individual who creates comparable electronic signature. Therefore, the signature remains in connection with the real individual exclusively. There are different types of electronic signatures through which a requirement can be fulfilled such as finger-print, iris-scan, voice-recognition and the electronic signature which depends mainly on both the general and the private key.
- 2- (If the signature information is connected with the context where they are not used by any other individual)- This requirement aims to stop any other individual who creates comparable electronic signature except himself. Therefore, the signature remains in connection with the real individual exclusively. There are different types of electronic signatures through which a requirement can be fulfilled such as finger-print, iris-scan, voice- recognition and the electronic signature which depends mainly on both the general and the private key.

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<sup>140</sup> Ahard, Taha Mohammed. "Research on the Electronic Signature." (2010). <http://mhamoo.mousika.org/t104-topic> [accessed 3May 2012].

#### 4.4 The Legal Effects of Electronic Signature To Prove Electronic Contract

In establishing legal effects of electronic signatures, which are equal to the effects of handwritten signatures, therefore, electronic authentication should be within the scope of the legislation. On the other hand, something like a simple password should not be within the scope of legislation as a matter of course, because it is not regarded as functionally equivalent to a handwritten signature<sup>141</sup>.

Signature has a great significant role in evidentiary. Commonly, the evidence rule does not acknowledge customary documents if it is not clearly certificated by a signature. However, The documents which are not marked with a clear signature are regarded as being rejected unless they are associated with evidence demands additional written attestation( because legally the law requires electronic contracts be electronically signed as an authentic document last a possible conflict arises)<sup>142</sup>.

This condition requires subjecting electronic signature creation tools for the control of the documented signature without others as if the private key in the electronic signature under the control of the users of this sign, therefore authentication procedures must show the extent to which this requirement. It follows that the user can not evade signature and what the consequences of this signature due to lack of control over the means for signing at the time of this signature.

The importance of this condition is to highlight the scope of institutions, where the institution is the location but it belongs to a number of people who are able to

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<sup>141</sup> Benaomr, Zainab. "The Legal Effect of Electronic Documents in the Moroccan Legislation." *Commercial Court of Appeals* 2011.

<sup>142</sup> Iraqi Electronic Signature And Electronic Transactions Law N.78 Of 2010 section 4

sign on its behalf, and it is noted that this condition aims to ensure that the use of a tool electronic signature at any time, shall be signed only one<sup>143</sup>. The deployment of modern means leading to the prevalence of so-called contracts, electronic latter has become today's modes of operation<sup>144</sup>. It also poses a range of questions, legal, especially the part concerning the proof, given the complexity of the relations resulting from this kind of contracts, and the different intermediate material through which the writing identifies the contract and its clauses.

This kind of contract(e-contract), poses a series of questions marginal and central at the same time, such as the extent to which what is a codification of the means (media) is not paper, whether it is by such means as evidence, and how authoritative this writing, and the situation is getting complicated as if it wanted the parties adhering to the document decade-mail as a full book, also poses an electronic signature as one would like this type of transaction<sup>145</sup>.

Most often the relevant legislations require the rules of written evidence and the existence of support written document (Original). To avoid certain actions of d and certain legal problems, electronic transactions based on the contract without paper documents cannot be considered valid. The issue of proof may constitute an obstacle to development, then, that the requirement of a paper document is not in accordance with the nature of electronic commerce, which aims to get rid of piles of paper documents and replaced by documents electronically saved on computers or on CD

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<sup>143</sup> Ahard, Taha Mohammed. "Research on the Electronic Signature." (2010).

<sup>144</sup> Hijazi, Abdel Fattah Bayoumi. *The Legal System of Electronic Signature*. Egypt: Dar Al kuteb Alqanonyaa, 2007.

<sup>145</sup> Al-Mahdi, Hussein bin Muhammad. "The Probative Force of Electronic Transactions." *Judicial Research Journal*, no. 7 (2007).

storage. As such requirements oblige dealers to retain documents for all the actions they make, including everyday actions which are difficult task of conducting business.

Iraqi Electronic Signature and Electronic Transactions Law No. 78 of 2012 stated" An electronic signature within the scope of civil and commercial transactions and administrative animate authentic assessments for the written signature. If appalled Article -5 - holds electronic signature authentic proof"<sup>146</sup>. Therefore the legislator has made electronic signature an authentic proof. Prove electronic contract according to the conditions of the written evidence:

Iraqi Evidence Law No. 107 of 1979 <sup>147</sup>stated "A claimant shall need to present evidence and a defendant (denier) shall need to take the oath" and the same law includes: <sup>148</sup>"A judge may not adjudicate according to his personal knowledge that he has acquired from outside the court, but, however, he may consider what he obtains the knowledge about public affairs that is presumed to be known by all", from previous texts its learned that the parties to the lawsuit they cannot prove their claim except by the evidence contained in this law and the judge binding in his building where it cannot be judged based on personal knowledge regardless of knowledge of the subject or the lawsuit<sup>149</sup>. The written evidence is the most important evidence in the law, as it is characterized by the other evidence that it could be set up since the emergence of the right before the conflict. It also provides several guarantees of the

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<sup>146</sup> Iraqi Electronic Signature and Electronic Transactions Law No. 78 of 2012 Section 4 secondly

<sup>147</sup> Iraq Evidence Law No. 107 of 1979 section 7 First

<sup>148</sup> Ibid section 8

<sup>149</sup> Zarzor, Wasen Khadem. "Electronic Signature as Proof of the Evidence in the Light of the Provisions of the Iraqi Evidence Act No. 107 of 1979." *Rights Message journal*, no. 2 (2011).

Parties of the most important set of existing rights, whether before or after a dispute, in addition to the fact that writing is less vulnerable to the impact of factors time.

The law puts several conditions must be met in the written evidence of the esteem in evidence, but there are some exceptions that are written in the traditional sense of proof, whether explicit provisions in some of the relevant laws or under the legal principles as freedom of proof and principle of trade. The terms of written evidence to be accepted as evidence and availability in The Iraqi Evidence Law No. 107 of 1979 gave written evidence an advantage over the rest of the other evidence, so its finding on the written evidence topped with the evidence set forth in the law. It requires handling the manual writing until they are accepted into the evidence of proof to be in writing, and signed.

#### **(a) Evidence Should Be Written**

This basic requirement stipulates that the evidence should be codified in writing, its relation to the document, and posed an obstacle to approval authoritative e- document. Writing to prove by the jurisprudence, means : the original document. This document may be the official paper, the paper may be customary, The main difference - in terms of form - between the official and customary paper is that first one issued by a public officer or person in charge of a public service, and be competent in their establishment in terms of subject and place, while the customary securities are not available where the elements of the official paper as they are not issued by a public officer and with this formality difference, the evidence, written officially was or customary, must - even sign legally -includes writing installed to act

legally and be signed by the person alleged, so the two guide element guide written permission namely: writing on the one hand and the signature on the other.

Here comes a question: Is the document resulting from the electronic treatment including writing and signature? The custom settled to codification of official documents and customary on the leaves with special characters in the language used for the liberation of the decade, the use of notation document in the electronic media through flashes of electricity and converted to the language that is understood by the computer raises questions about the extent to which the document -mail, such as writing. Before answering this question it is necessary to recall that there is nothing in the law or in the necessary language into believing that writing can only be done on paper<sup>150</sup>. And a lot of international conventions to adopt this view, United Nations Convention On Contracts For The International Sale Of Goods 2010<sup>151</sup> provide: "For the purposes of this Convention "writing" includes telegram and telex".

Therefore, it is clear that writing is not perceived as its relate to mediator used in blogging means specific physical, but its function in the preparation of evidence of disposition legal and determine its content, Therefore, it is clear that writing is not perceived as they relate to mediator used in blogging means specific physical, but its function in the preparation of legal evidence of disposition determine its content as enable Parties to the reference in the event of a dispute have agreed jurisprudence that, until you write this role it must be legible and that the mediator blog writing is characterized by continuity and consistency.

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<sup>150</sup> Namaa, Ammar Karim Kadim & Narman Jameel. " Legal Force of Electronic Document." *College of Law - University of Kufa*, (2007).

<sup>151</sup> Convention On Contracts For The International Sale Of Goods 2010 act 151

So and so can protest the contents of the document written in the face of others, the document should be legible, and therefore must be codified in letters or symbols known and understood by the person who intended to protest it this document, If we go back to the documents electronic, we find that it is recorded on the media machine language does not can be seen by the human directly, but must deliver information in the computer, which is supported programs have the ability to translate machine language to language readable to humans, though, given that ensures read these document in all cases, the CNC<sup>152</sup>, which means met the requirement can read and understand as long as the language that appears on the screen is the language understandable and legible to the parties to the contract.

Nevertheless, some of the outputs of the computer does not raise any difficulty in this regard, for example card and tapes perforated, and means of paper- related, including, without doubt, "writing" in the traditional sense of the rules of evidence proof , however, in contrast, there are some output that looks doubtful, for example, magnetic tapes, magnetic discs, and micro-film, for micro film can say that it takes legally sentenced writing, traditional differ by only one, lies in the material and the substrate guide it from the paper for writing regular and plastic material for micro film, but for the tapes magneto and the like, because it does not seem so simple, it contains information that is stored directly on memory computer-mail without having an origin written and it cannot so acquainted with them only through the display on the computer screen, have said that they do not include writing at all ,

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152 CNC: Computer Numerical Control machines are automated milling devices that make industrial components without direct human assistance. They use coded instructions that are sent to an internal computer, which allows factories to fabricate parts accurately and quickly. There are many different types of CNC machines, ranging from drills to plasma cutters, so they can be used to make a wide variety of parts. Though most are used industrially in manufacturing, there are also hobby versions of most of the machines that can be used in private homes.

but are closer to the audio recording. However, the confirmation of the foregoing, the International Standards Organization ISO<sup>153</sup>, and regarding specifications for documents confirmed that the document is: "a set of information and data recorded on the physical console. Easy to read by human or using a machine dedicated to it.

If the paper media by virtue of the physical composition of these conditions allow for the use of electronic media raises the question of the duration verify this condition which can even be considered, such as the written document, and in this regard, the physical characteristics the mediator-mail may represent an obstacle to achieve this requirement<sup>154</sup>. So that the configuration of physical and mechanical segments of magnetic disks date used in the contract via the Internet is characterized by a degree of sensitivity, including displays of damage quick at different power voltage or very different in temperature removes these arguments, and thus are less able than the leaves on the retention of information for a long time.

However, this technical difficulty has been overcome by using the media and devices more capable and therefore can retain information for a long time may exceed the capacity of ordinary securities which are also affected by factors of time has been eroded by moisture as a result of poor storage. Means that the obstacle to keep the document written for a long period of time that allows access whenever it is necessary possible modern technology to overcome them, which means that the

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<sup>153</sup> International Organization For Standardization (IOS), a voluntary, non-treaty federation of standards setting bodies of some 130 countries. Founded in 1946-47 in Geneva as a UN agency, it promotes development of standardization and related activities to facilitate international trade in goods and services, and cooperation on economic, intellectual, scientific, and technological aspects. ISO covers standardization in all fields including computers and data communications.

<sup>154</sup> Namaa, Ammar Karim Kadim & Narman Jameel. " Legal Force of Electronic Document." *College of Law - University of Kufa*, (2007).

document cognitive fulfils itself and when these technologies are used writing requirement of continuity of the Intermediary .

Written evidence to signify as an evidence in addition to being legible, and distinct stability and continuity must also not be adjustable writing only destroyed the document or leave a material effect upon, on the point documents blog on paper, it cannot be modified unless destroyed or material changes easily identifiable, whether by regular or by reference to technical expertise<sup>155</sup>. The writing on the electronic media discs and magnetic strips are missing, according to the origin of this capability, Indeed its lack is the reason for its superiority on the leaves in terms of practical use to them, the basic principle is blogging on electronic media is the ability of each of the parties to modify the content of the document and re-formatted addition or cancellation or without erasure to appear for this amendment will have no material impact can be seen or detected. It follows that the physical difference between the papers and electronic media that the electronic document lacks according to the original condition of the most important conditions that relate to the document written in function of proof, which aims to achieve confidence in the dat.

However, technological development has led to a solution to this problem also through the use of computer software converts the text in which it can be modified to a static image cannot be interfered with or modified, this program is known as (Document image processing). Also has been possible to save the documents electronically finalized and are not accepted through the switch saved in

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<sup>155</sup> Saad, Assem Abdel Jabbar. "Evidence in the Electronic Transactions Act and Civil and Commercial Transactions Act." (2013).

the electronic boxes that can only be opened with a special key-dominated views are supported by the state, so try to lead parties dealing modify the document to the electronic destroyed or erased completely. As the documents blog on securities acceptable to the judge as evidence of full when was signed by the parties because of this property feature writing the papers and attendant characteristics other than are available in the documents electronic and so as not to weaken confidence in the documents electronic by clients as proof it value and authentic legal written document on the papers, the legislature expressly protects electronic document adequate protection that make it meet the requirement inability to modify except in accordance with legal controls .

#### **(b) Evidence Should Be Signed**

Conditions to be provided in the signature and the extent achieved by the electronic signature is a second element of the signature elements of written evidence for adoption as evidence for civil and commercial transactions<sup>156</sup> the term signature uses two senses: first, it is a sign or signal capable of distinguishing one site, and the second is the act or process of signing itself, meaning placed on a document that contains certain information, and is the first meaning is the meaning of the signing of the scope of proof". From this definition signature elements can be drawn is that the core be a sign of personal sin, and who is credited with the document, and then have a distinct impact remains not disappear .

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<sup>156</sup> Saad, Assem Abdel Jabbar 2013 Evidence in the Electronic Transactions Act and Civil and Commercial Transactions Act.

The signature can be either in writing and either be a fingerprint, a seal or a finger, signing of written, however, be attributed to the document to be selected for a personal site even if the document writes in his own handwriting . As an electronic or electronic signature is a particular procedure carried out by the person to be his signature on whether it is in the document that keeps the number or code in a safe and confidential to prevent its use by others, and gives confidence that the release stating that it has already issued owner.

An electronic signature has two basic functions:

A - Electronic signature proves the person who signed the document and the departure of its will to comply with the signed .

B - Electronic signature determines thing or document that has been signed is not likely to change.

So that whenever the image is clearer and more precise information, it was the most comprehensive legal framework and generally meets the need for the legislature. And also the legislator who holds any full legal recognition of electronic signature and the creation of the necessary legislation to ensure work and healthy development only if it is found in the fact that the benefit of its use. The importance of the electronic signature of the legal effect of electronic document the emergence and use of an electronic signature in electronic commerce and other transactions

intended to achieve three main objectives to be highly influential in the authentic electronic document to be acceptable as evidence in proof.:

1. Authenticity of electronic message: by ensuring that the electronic message has been issued from the real sender, they provide reassurance for the future that this message does not come or send only the real sender. Thus the sender of this kind of signed messages cannot be denied.
2. Electronic message integrity of any fraud or amends integrity : by ensuring that the electronic message has been received by the future with the same content, which got out of a sender without being amended or changed or add any new content .
3. Confidentiality of electronic message: by ensuring that the electronic message signed this way cannot be read by anyone who is not authorized, which sends a reassuring message to the ends of (consignor and consignee).

The question that arises here is whether achieves an electronic signature the same function achieved by the normal signature? This is because the question to the unique physical characteristics, which is characterized by an electronic signature compared to the traditional sign that a person puts it in his own handwriting written to the document that is configured to be evidence in proof, Perhaps the most important reasons that calls into question the value of electronic signature due to the separation of this kind of signature on the personality of its owner and the possibility of repeated without his consent or knowledge, if not the use of complex technological techniques in order to unlock it.

Also, this signature even if it carries the same characteristics as that enjoyed by the signing of the traditional will not be linked to materially document written which are configured as evidence to prove unless there is technology to ensure that recognized by law and approved by the judiciary, and in light of that much of the jurisprudence has refused to consider signing mail similar to the traditional handwritten signature, despite the that the signatures difference lies in the way and not in the intended purpose or function of it. And so is - an electronic signature - like that of the traditional signature issued by the owner for the disclosure of his personality and the expression of their will to accept the act, which is signed and commitment as it is of terms .

And thus face the only difference between them lies in the extent to which the sign of the trust that builds upon the legislator authentic signature of proof, the trust are available in the electronic signature it even with the traditional signature with authoritative proof. This confidence are numerous in the type of technology used to secure the signing and relying on tools and methods public key encryption, and the issuance of certificates of authentication electronic organs of the recognized dubbed the third person approved This represents a third-party neutral in individuals, companies or independent neutral play the role of mediator among dealers to authenticate electronic transactions, in addition to the certification documentation to the identification of dealers in electronic trading, and determine their legal capacity to handle and compact, and verification of the content of this deal, and safety as well as the seriousness and after about cheating and fraud.

has been given of the electronic authentication to the competent authority, which pointed that the third party intended ratification is the moral person licensed electronic signature certificates of ratification in accordance with the provisions of this law. However, the question is the extent to which an electronic signature in the expression of the will of the owner in contracting satisfaction and acceptance of the commitment?

Where he sees the side of jurisprudence it is not permissible equation Signature manual electronic signature, it cannot verify the presence of the site and the presence of physical actually the time of signature, a key element in the signing of the manual cannot, for example to emphasize that from the sign electronically away from behind the offender automation is already a person the same who knew his identity as there is no definitive confirmation about the identity of the site, while the latter is not physically present at the time of signature. But In order to prevent this from happening, it is resorting to the technique used in secure electronic signature by the number of the approved by the documentation, which holds the issuance of the private key is the most important methods of use of key special link between the sign and between the document and secured amendment resorting to technology known as "HACHAGEIRREVERISIBLE "and through which convert mail document (like the signature) to a mathematical equation cannot be understood and read only the private key that is being handed over to the client as a contractor under the supervision of mediator personal goal in the documentation.

This electronic signature superior for the signing of the traditional view to ensure personal his signature is routinely every time he use the PIN number or

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<sup>157</sup> Iraqi Electronic Signature and Electronic Transactions Law No.78 of 2012 Article 1 (13)

private key, and therefore there is no room to wait until it happens to the conflict to discuss the validity of the signature as is the case in most cases for document signed handwritten. However, the question is the extent to which an electronic signature in the expression of the will of the owner in contracting satisfaction and acceptance of the commitment? Where he sees the side of jurisprudence it is not permissible equation signature manual electronic signature, it cannot verify the presence of the site and the presence of physical material is actually the time of signature, a key element in the signing of the manual cannot, for example to emphasize that from the sign electronically away from behind the offender automation is already the same person who knew his identity, as there is no definitive confirmation about the identity of the site, while the latter is not physically present at the time of signature.

But In order to prevent this from happening, it is resorting to the technique used in secure electronic signature by the number of the approved by the documentation, which holds the issuance of the private key is the most important methods of use of key special link between the sign and between the document and secured amendment resorting to technology known a "HACHAGEIRREVERISIBLE" and through which convert mail document (like the signature) to a mathematical equation cannot be understood and read only the private key that is being handed over to the client as a contractor under the supervision of mediator personal goal in the documentation .

In this technique, the document is mixed with the signing of nearly inseparable and cannot be for a non-owner document blogger as such intervention modify its content and this will be in the hands of each of the parties to the contract

copy document and signed by the other party, which could be submitted as evidence in writing a full proof<sup>158</sup>. In spite of this possibility in the linkage between the documents and between the signature and securing of manipulation in which it have reservations so that the acceptance of the document by the judge as evidence in writing requires initially that the judge decides the efficiency of the technique used in meeting the conditions that qualify signing to play its role in the proof, which is weakens the strength of the electronic document and lead to the threat of confidence that must be provided to customers<sup>159</sup>. Thus, while the document customary site is full proof in writing, the acceptance of mail as evidence in the document of proof is subject to the discretion of the judge, which is practically equal with a request that the burden of proof regarding the health of the written evidence.

#### **4.5 Conclusion**

The contract is an agreement between two or more persons joining the offer and acceptance via remote communication techniques in order to create a legal bond or modify or terminate it. The traditionally accepted commercial contract does not differ in the legal effect of the contract as a written contract with the electronic elements of civil contract (offer, acceptance, intention to create legal relation and consideration). However, the unique electronic contract vehicle that meets the concluding state via the Internet or

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<sup>158</sup> Namaa, Ammar Karim Kadim & Narman Jameel. " Legal Force of Electronic Document." *College of Law - University of Kufa*, (2007).

<sup>159</sup> Al-Mahdi, Hussein bin Muhammad. "The Probative Force of Electronic Transactions." *Judicial Research Journal*, no. 7 (2007).

other electronic means of communication. Electronic contract has many characteristics that distinguish it from other written contracts, and are as follows :

First: in the conclusion of a distance contract is a collection of audio and video technical procedures for sending and receiving the information.

Second: If the electronic contract is a contract business traditionally does not differ in the legal effect of the written contract electronic contract, however it is unique in the way it is concluded via the Internet or other electronic means of communication.

Third: The e-contract held cross-border. It is between two people, each in different States, or countries.

The electronic signature is a way to prove the contract and is no different from other legal means of proof. There are many types of electronic signatures include (Electronic Signatures, Biometric Signatures and Signature using the electronic pen).

Electronic signature features:

- A. It determines the identity and character of the site and sets it apart from other people.
- B. It allows remote contracting.
- C. It achieves a measure of security and confidence in the validity of the signature and affiliation.
- D. The electronic signature gives the document as the original document and thus makes it a guide, intended to provide evidence of the same home directory is written before the dispute between the parties arises.

Relevant legislations require the rules of written evidence and the existence of support document written (Original). To avoid certain legal problems, electronic transactions based on the contract without paper documents cannot be considered valid. The issue of proof may constitute an obstacle to development. Therefore the requirement of a paper document is not in accordance with the nature of electronic commerce, which aims to get rid of piles of paper documents and replaced by documents electronically saved on computers or on CD storage.

Legally the law requires electronic contracts be electronically signed as an authentic document last a possible conflict arises. As indicated by the UNICITRAL model 2001 through the text Article 6 concerning the electronic signatures of the condition that an individual authentic signature is of necessity if it meets his/her information including any relevant contracts. Iraqi Electronic Signature and Electronic Transactions Law No. 78 of 2012 has made electronic signature an authentic proof. Prove electronic contract according to the conditions of the written evidence. Iraq Evidence Law No. 107 of 1979 stated "A claimant shall need to present evidence and a defendant (denier) shall need to take the oath.

## **CHAPTER FIVE**

### **RECOMMENDATIONS AND CONCLUSION**

#### **5.1 Introduction**

This chapter concludes the findings that have been compiled from the data collected and the procedure used for this study. The scope of the study as well as data analysis gives us additional information to draw conclusion. This study was conducted to investigate the importance of the electronic signature in the electronic contract as a proof evidence in the Electronic Signature and Electronic Transactions law No. 78 of 2012. Based on the finding which had been discussed in the previous chapters, same recommendations are presented here. This chapter ends with a conclusion.

#### **5.2 Recommendations**

1. The electronic signature shall perform the functions performed itself into a traditional sign of the fact that significant on the character of the site and contract Signature Editor in addition to the justification and rationalization function is to realize the site to do the legal goal of the signing of the editor and approval.
2. The electronic signature can provide confidence and safety. It is convenient and easy to deal with through encryption techniques. It provides an

environment of trust. For the purpose of strengthening cooperation between the republic of Iraq and the arab countries in the field of regulation of the terms of the electronic signature as one of the elements of arab economic integration in the framework of the economic are reasons for issuing the Iraqi Electronic Signature and Electronic Transactions Law No. 78 of 2012 stated: Unity between the countries of the universe and for Iraq to join this unity it is important to join and ratify the convention on the regulations and the provisions of electronic signature in the field of electronic transactions in the arab countries. The suggested recommendation by a number of member countries to hold a series of seminars on electronic signature in different parts of the arab world and to exchange experiences and interactive applications for publishing the arab interest and spread the thought of electronic transactions seems to serve a useful purpose.

3. The Iraqi legislations namely the Electronic Signature and Electronic Transactions Law No. 78 of 2012 need to be revised and amended by expanding the concept of (writing) including symbols, any other electronic method of electronic bond and is identical to the original paper if it had been sent to the receivers which is supposed to be prescribed by law.
4. To amend the article 79 of the Iraqi Civil Law No. 40 of 1951 to be as follows: true expression of the will of modern means of communication. To be in compatible with the Electronic Signature Law No. 78 of 2012 all renewed on the level of communication and means of modern contract, for example, the Internet.
5. To develop special electronic sites on the web offering advice and guidance to provide protection to the party with less experience in the electronic

contract. Iraqi government Must take over the task that create and develop such webs, with the preparation of specialized staf site management.

The head of the Commission services and reconstruction in Iraq's parliament Vian Dkhal said<sup>160</sup> : "electronic signature is not an easy way or the command is not easy and cannot be applied in one or two years, we need at least six to seven years to accomplish this task. However, she suggested that:" as a first step, the sooner application will provide for e-government, and electronic signature law which greatly contributes and end unnecessary bureaucracy in government institutions that has plagued Iraq for decades."

The great importance that the Law of the electronic signature and the electronic transactions referred to by Ms. Vian states that the "Proposes of publishing information awareness among members of the community. She also suggests the importance training and the establishment of training curricula to encourage individuals to use modern means of communication to conclude contracts. It is especially important that because this law is a modern version in Iraq and because it was not implemented so far, although permissible issuance months, is still time to start.

Provide computer technology, software, computerized information systems and encryption widely in the community of the Faculty of Law in general and in particularly to the judiciary institutes where lawyers, judges, and all workers in this field are given full and updated information on the treatment of ceremonial and

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<sup>160</sup> "Iraqi Parliament: Electronic Signature Needs 7 Years and the Government Will Succeed Digital."  
*Kurdish Youth combine*2013.

informatics systems and therefore it becomes easier for them to know the nature of their work and what the electronic contracts and electronic signature as a legal presumption to prove its usefulness as stated in the Electronic Transactions law 2012.

### **5.3 CONCLUSION**

The summary of what has been concluded from the findings is presented in this section. The findings clearly suggest that there is an immediate need for the use of electronic trading and a positive function of the relinquishment of the traditional means of document, and replaces paper with electronic documents in order to enact and provide Iraq the opportunity to deal with the global development electronic mail.

Electronic contracts represent a form of dealing through technical means of modern communication networks and computers informatics. These contracts are signed by electronic signature, which may be a number, or symbols or signs. However, the letters used by the person him/herself in electronic transactions and indicate the person has acted alone without the other.

It shows that the offer in electronic contracting is the expression of the person wanting to compact distance where it is through an international network of contacts means audible visible and includes all the required elements necessary to conclude the contract. It provides the receiver the opportunity to orient himself with the content of the contract and accept the contract directly. This of course is different

from the offer of traditional contract but the medium used only with the survival as well as the role of certification authorities and documentation in the electronic signature. The protection from manipulation and the responsibility in cases of detection and tampering with an electronic signature is granted.

There is variation among the legislations themselves for the recognition of electronic signature and its role in proving the electronic contract. Legislation has two aims relevant to this issue: The first purpose is to regulate the electronic signature law independently, such as United Nations Law (UNCITRAL) and the Malaysian digital signature Act, While the second aim is choosing the direction serving to organize an electronic signature within a unified law for electronic transactions such as Jordanian law, the UAE and that is what the Iraqi legislature did in stating Electronic Signature and Electronic Transactions No. 78 of 2012. This law provides the documented notion which is in accordance with the procedures specified in the documentation and evidential legal effect. Therefore his argument in terms of the normal signature shall be obligated to its owner and its validity in proving an electronic contract concluded between the parties.

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