



Evidentiary Value of Electronic Transactions

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I. Introduction:

The twenty first century is belongs to science and technology. Advancement of communication and new digital technology has brought dramatic changes in functioning of people and the world. More particularly, due to the development of new technology, a revolutionary change has come in the field of trade, commerce and industry.

There is a rampant use of technology in conducting of business. Business houses and consumers are using computers to create, transmit and store information in the electronic form instead of traditional paper documents. Globalisation and the new information and communication technologies are reinforcing the linkages between internal and external trade¹.

The advent of new technology has also helped to increase the trade at international level. International trade through the medium of e-commerce is growing rapidly in the past few years and many countries have switched over from traditional paper based commerce to e-commerce. Therefore, international trade transaction can be carried out fast and more effectively by means of electronic data interchange and other means of electronic communication.

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European Commission defined E-Commerce as doing business electronically. It is based on the electronic processing and transmission of data, including text, sound and video. It encompasses many diverse activities including electronic trading of goods and services, online delivery of digital content, electronic fund transfers, electronic share trading, electronic bills of lading, commercial auctions, collaborative design and engineering, online sourcing, public procurement, direct consumer marketing, and after-sales service. It involves both products (e.g. consumer goods, specialised medical equipment) and services (e.g. information services, financial and legal services); traditional activities (e.g. healthcare, education) and new activities (e.g. virtual malls)³.



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In this back drop the paper examines what are the various Conventions or documents developed by the UNCITRAL to facilitate Electronic Commerce at international level. The other objectives are to examine the relevancy and admissibility of electronic documents, records, signature and communication under UNCITRAL Conventions and the United Arab Emirates Federal Law No. 1 of 2006 in respect of Electronic Transactions and Commerce. What are the advantages with regard to evidentiary value in use of electronic documents, communication or signature in place of traditional original, written, signed or paper based documents which have been well recognised for centuries in all legal systems.

II. What is E-Commerce?

Electronic Commerce can be simply defined as 'conducting business online'. The electronic commerce encompasses all kinds of commercial transactions that are concluded over an electronic medium or network, essentially, the Internet. It involves the use of alternatives to paper-based methods of communication and storage of information.

As defined by Organization for Economic Co-operation and Development (OECD)² Electronic commerce refers to generally to all forms of transactions relating to commercial activities, including both organisations and individuals that are based upon the processing and transmission of digitised data, including text, sound and visual images.

III. Benefits of New Technology

Digital technology has brought a revolution and breakthrough in human civilisation. Internet has become a powerful tool for marketing and selling products internationally. Following are the some benefits of new technology, like computers, internet and other electronic devices:

1. It has the potential to provide instant communication;
2. It has the potential to link the whole of human kind in an interactive network
3. It is cost-effective and low-cost to the user;
4. it provides a new way of accessing information with its ability to draw on complex data bases and information, and to process these and adapt them to the user's specific needs;
5. It facilitates interactive voice and video-communication.
6. sending of E-mails and other communication





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7. All information of service or services that company may offer to its customers over the net from pre-purchase information to after-sale service and support through e-service;
8. Internet use reduces transaction costs by increasing efficiency in the use of time and procedures;
9. It is a marketing tool to increase sales as well as to create new business through it.
10. The new technology will help to establish the relation between: (a) Business to consumer; (b) Business to Business; (c) Business to Government and (d) Government to Citizen and others.
11. The advantages of storing information in Electronic Form are: (a) It is speedier to communicate; (b) It saves time; (c) It cheaper; (d) easy to store and access; and (f) it can be retrieved anytime from anywhere

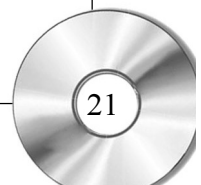
IV. International Conventions relating to E-Commerce

United Nations Commission on International Trade Law (UNCITRAL), a specialized agency of United Nations Organisation in the field of trade and commerce has been enacted several Conventions in order to facilitate electronic commerce. It is also helping the States in how to create a legal frame work to remove the obstacles for successful conduct of electronic commerce at national and international level. The UNCITRAL has provided the following Five (5) documents as a Model Law on E-commerce:

- 1985- Recommendation on the Legal Value of Computer Records
- 1996- UNCITRAL Model Law on Electronic Commerce
- 2001 UNCITRAL Model Law on Electronic Signatures
- 2005 United Nations Convention on the Use of Electronic Communications in International Contracts.
- 2007 UNCITRAL document Promoting Confidence in Electronic Commerce: Legal issues on international use of electronic authentication and signature methods.

1. Recommendation on the Legal Value of Computer Records (1985)

UNCITRAL has made the following recommendations to the State parties and to the International Organisations in respect of legal value of computer records:





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1. To review the legal rules affecting the use of computer records as evidence in litigation in order to eliminate unnecessary obstacles to their admission, to be assured that the rules are consistent with developments in technology, and to provide appropriate means for a court to evaluate the credibility of the data contained in those records;
2. To review legal requirements that certain trade transactions or trade related documents be in writing, whether the written form is a condition to the enforceability or to the validity of the transaction or document, with a view to permitting, where appropriate, the transaction or document to be recorded and transmitted in computer-readable form;
3. To review legal requirements of a handwritten signature or other paper-based method of authentication on trade related documents with a view to permitting, where appropriate, the use of electronic means of authentication;
4. To review legal requirements that documents for submission to governments be in writing and manually signed with a view to permitting, where appropriate, such documents to be submitted in computer-readable form to those administrative services which have acquired the necessary equipment and established the necessary procedures;

The General Assembly called upon Governments and International Organisations to take action where appropriate, in conformity with the Commissions' recommendations so as to ensure legal security in the context of the widest possible use of automated data processing in international trade⁴.

2. UNCITRAL Model Law on Electronic Commerce (1996)

The purpose of Model Law is to offer national legislators a set of internally acceptable rules as to how a number of such legal obstacles may be removed, and how a more secure legal environment may be created for what has become known as "electronic commerce". The principles expressed in the Model Law are also intended to be of use to individual users of electronic commerce in the drafting of some of the contractual solutions that might be needed to overcome the legal obstacles to the increased use of electronic commerce. The UNCITRAL Model Law provides a frame work for laws governing electronic commerce, it serves following purposes:



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1. Individual governments can use this law as a model or guide in drafting national legislation;
2. As a source of language for contract-drafting purposes or as a set of default rules incorporated into a contract by reference;
3. Arbitration panels and courts may use it in interpreting issues of electronic commerce.

SUMMARY OF UNCITRAL MODEL LAW

1. There should not be any discrimination between data message and paper document⁵
2. Data message is equivalent to writing and original.
3. Information shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of a data message or referred to in the data message.
4. Where the law requires information to be in writing, that requirement is met by data message if the information contained therein is accessible so as to usable for subsequent reference⁶.
5. Where law requires a signature of a person, that requirement is met in relation to a data message by following the electronic process⁷.
6. Where the law requires information to be presented or retained in its original form that requirement is met by a data message by following the criteria laid down in model law⁸.

Admissibility and Evidential weight of data message⁹

In any legal proceedings, nothing in the application of the rules of evidence shall apply so as to deny the admissibility of a data message in evidence:

- (a) On the sole ground that it is a data message; or
- (b) If it is the best evidence that the person adducing it could reasonably be expected to obtain, on the grounds that it is not in its original form.

Information in the form of a data message shall be given due evidential weight. In assessing the evidential weight of a data message, regard shall be had to the reliability of the manner in which the data message was generated, stored, or communicated, to the reliability of the manner in which the integrity of the information was maintained, to the manner in which its originator was identified, and to any other relevant factor.





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The purpose of Article 6 of UNCITRAL Model Law is to establish both the admissibility of data messages as evidence in legal proceedings and their evidential value.

With respect to admissibility, data messages should not be denied admissibility as evidence in legal proceedings on the sole ground that they are in electronic form. As regards the assessment of the evidential weight of a data message, the evidential value of data messages should be assessed depending on whether they were generated, stored or communicated in a reliable manner.

Carriage of Goods

In preparing the Model Law, the Commission noted that the carriage of goods was the context in which electronic communications were most likely to be used and in which a legal framework facilitating the use of such communications was most urgently needed. Articles 16 and 17 contain provisions that apply equally to non-negotiable transport documents and to transfer of rights in goods by way of transferable bills of lading. The principles embodied in articles 16 and 17 are applicable not only to maritime transport but also to transport of goods by other means, such as road, railroad and air transport.

3. UNCITRAL Model Law on Electronic Signatures (2001)

The purpose of this Convention is that the increased use of electronic authentication techniques as substitutes for handwritten signatures and other traditional authentication procedures has suggested the need for a specific legal framework to reduce uncertainty as to the legal effect that may result from the use of such modern techniques (electronic signatures). This Convention calls for uniform legislative provisions to establish the basic rules relating to electronic signatures.

The new Model Law equally reflects the principle that no discrimination should be made among the various techniques that may be used to communicate or store information electronically, a principle that is often referred to as 'technology neutrality'. Article 6 (1) of the Model Law provides that an electronic signature satisfies the requirement of an actual signature if the electronic signature is "as reliable as was appropriate for the purpose for which the data message was generated or communicated in light of all the circumstances. An electronic signature is deemed to be



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reliable if the signature creation data are linked exclusively to the signatory and under that person's exclusive control and if any alterations of the signature or accompanying data to which it relates are detectable.

4. United Nations Convention on the Use of Electronic Communications in International Contracts (2005)

The main purpose of this Convention is to offer practical solutions for issues related to the use of electronic means of communication in connection with international contracts. The Convention applies to international contracts, i.e. contract between parties located in two different States, but is not necessary for both of those States to be contracting States of the Convention. The Convention aims at following issues:

1. To enhance legal certainty and commercial predictability where electronic communications are used in relation to international contracts;
2. It addresses the determination of a party's location in an electronic environment;
3. It addresses the determination of time and place of dispatch and receipt of electronic communications;

The Convention provides that 'Communication' means any statement, declaration, demand, notice or request, including an offer and the acceptance of an offer, which the parties are required to make or choose to make in connection with the formation or performance of contract. It also defined the words like what is 'Electronic Communication', "Data Message", "originator", "Addressee", "information system", "Automated message system" and "Place of Business"¹⁰.

Legal recognition of electronic communication

A communication or a contract shall not be denied validity or enforceability on the sole ground that is in the form of an electronic communication¹¹. Where a law requires that a communication or a contract should be in writing, that requirement is met by an electronic communication¹².

The Conventions has addressed the issues of Time and Place of dispatch and receipt of electronic communications¹³, what constitutes an invitation to make offer¹⁴, Use of automated message systems for contract



formation¹⁵, availability of contract terms¹⁶ and consequences of error in electronic communications¹⁷.

5. UNCITRAL document Promoting Confidence in Electronic Commerce: Legal issues on international use of electronic authentication and signature methods (2007).

This publication analyses the main legal issues arising out of the use of electronic signature and authentication methods in international transactions. In this document it is observed that, from an international perspective, legal difficulties are more likely to arise in connection with the cross-border use of electronic signatures and authentication methods that require the involvement of third parties in the signature authentication process. This is the case, for instance, of electronic signature and authentication methods supported by certificates issued by a trusted third party certificate service provide, in particular digital signatures under a Public Key Infrastructure (PKI).

Most legal systems have special procedures or requirements that are intended to enhance the reliability of handwritten signatures. Typical examples include the following:

- (a) Notarization:- The certification by a notary public to establish the authenticity of signature on a legal document, which often requires physical appearance of the person before notary.
- (b) Attestation:- Attestation is the act of watching someone sign a legal document and then signing one's name as a witness. By attesting the witness states and confirms that the person whom he or she watched signing the document in fact did so.
- (c) Seal:- Signing or sealing may, for example, provide evidence of the identity of the signature; that the signatory agreed to be bound by the agreement and did so voluntarily; the document is final and complete; or that the information has not been altered after signing.

V. E-Commerce in United Arab Emirates

The 2008 United Nations Department of Economic and Social Affairs (UNDESA) has ranked the UAE in 5th position in terms of transactional services. It is just behind the developed countries like Sweden, Denmark, Norway and the United States¹⁸.



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The survey also placed the UAE in Thirty Second (32) among 192 Member States in the 2008 e-Government Readiness Index, which rated the online presence of national websites and selected ministries, including health, education, welfare, labour and finance. The UAE has also the highest web measure index in the region which reaffirms the country's commitment to setting the highest standards of e-Governance excellence.

The UAE's strong performance in global e-readiness reflects how the country is effectively using the internet as an instrument for economic growth and human development, mainly through improvements in telecommunications infrastructure, human resources, and legal and policy framework.

E-Services to Citizens & Others in UAE

1. The Dubai e-Government has revealed that over 1,700 online services have been launched in different government departments.
2. Key highlights of 2007 also include an ISO 9001: 2000 quality certification and an award for being the 'Best e-Government Programme in the Middle East's during the Leaders in Dubai Summit.

The UAE Federal permits to use the electronic records and signatures in following functions¹⁹:

1. To accept the deposit or submission of the document their making or keeping in the form of electronic records;
2. To issue any permit or license or decision or acceptance in the form of electronic records;
3. To accept the fees or any other payment in any electronic form. Inviting tenders or receiving bids pertaining to the governmental purchases in an electronic manner.

The United Arab Emirates Federal Law No. (1) of the Electronic Transactions and Commerce, 2006

In order to meet the changes and developments that have been taking place at international level in the field of electronic commerce and to implement UNCITRAL Model Law on Electronic Commerce and other related documents, the United Arab Emirates Federal Government has enacted Law No. (1) of the Electronic Transactions and Commerce, 2006.²⁰ This law shall apply to electronic records, documents and signatures pertaining to the electronic transactions and commerce²¹.





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The objectives of the this Code are to protect the rights of electronic dealers, facilitate electronic transactions, remove the obstacles in conducting of e-commerce, facilitate the correspondence between the Government and non-government bodies, minimise the falsification of the electronic correspondence and to establish unified principles to the rules, regulations and standards in respect of the authentication and safety of the electronic correspondence. The Code also aims to support the development of the electronic commerce in the local and international arenas, by way of using electronic signature²².

The UAE Code on Electronic Transactions and Commerce contains Ten Chapters; definitions part²³, validity of law and its objects²⁴, requirements of electronic transactions²⁵, Electronic Transactions²⁶, Protected Electronic Records and Signatures²⁷, Provisions in connection with the certificates of electronic approval and the approval services²⁸, recognition of the certificates of the electronic approval and the foreign electronic signatures²⁹, Governmental use of the electronic records and signatures³⁰, Sentences³¹, and final provisions³².

(1). Validity of Electronic Correspondence

The electronic message shall not lose its legal effect or its capability of being executed due to the fact that it is in an electronic form³³.

(2). Keeping documents, record or information

The condition of keeping of a documents, record or information may be fulfilled if document or record or information is kept in the form of an electronic record by following the conditions laid down in the code³⁴.

(3). Equal to a document in writing and signed on document

If the law provides that any statement or document or record or dealing or evidence shall be in writing or provides that certain results shall ensure for not writing any matter, the electronic document or record shall fulfil such condition if the stipulations laid down in the code have been complied³⁵. The reliance can be placed on electronic signature and the certificates of the electronic approval issued according to the provisions of law³⁶.

(4). Admission and Evidentiary value of the Electronic Evidence³⁷

1. None of the following shall be inconsistent with the admission of the electronic signature as an evidence:

- (a) That the message or signature is in an electronic form.



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(b) That the message or signature is not original or in its original form whenever such electronic message or signature is the best evidence which is reasonably contemplated to be obtained by the person relying upon it as evidence.

2. Regarding the evaluation of the evidential value of the electronic information, the following ingredients shall be taken into consideration:

- (a) The extent of the possibility of the reliance in the manner by which one or more of the operations of the insertion of the information or its making or preparation or storing or submission or sending.
- (b) The extent of the possibility of reliance upon the manner used in the preservation of the safety of the information.
- (c) The extent of the possibility of relying upon the origin of the information if such source is known.
- (d) The extent of the possibility of relying upon the manner by which the identity of the creator is confirmed.
- (e) Any other ingredient pertaining to the subject.

3. Unless the contrary is proved, it is presumed that the protected electronic signature:

- (a) Can be relied upon
- (b) It is the signature of the concerned person
- (c) It is affixed by that person with the intention of signing and approving the electronic message whose issuance is attributed to such person.

4. Unless the contrary is proved, it is presumed that the protected electronic record:

- (a) Did not change since it was made.
- (b) Shall be relied on.

(5). Validity of Electronic Transactions³⁸

1. The contract shall not lose its validity or the possibility of its execution due the fact that it is made by one or more electronic correspondence.

2. A contract may be made between automated electronic media, comprising two electronic information systems. It means conclusion of a contract without personal or direct intervention of natural person.

3. The electronic message shall be deemed to be issued by the creator if the latter issues such message himself/herself/itself.





4. The electronic message shall be deemed to be issued by the creator if it is sent by a person having the power of disposition on behalf of the creator or from automated information system and programmed to work automatically.

(6). Reliance upon the Signatures and the Certificates of the Electronic Approval³⁹

The person shall be entitled to rely upon the electronic signature or the certificate of the electronic approval to the extent to which such reliance is reasonable. For the purpose of deciding whether it is reasonable for a person to rely upon an electronic signature or a certificate of electronic approval, the following factors shall be taken into consideration:

- (a) The nature of the concerned transaction to be supported with the electronic signature;
- (b) The value or significance of the concerned transaction if the same is known to the party relying upon the electronic signature;
- (c) Whether the person relying upon the electronic signature or the certificate of the electronic approval took appropriate steps to decide the electronic signature or the certificate of the electronic approval.
- (d) Whether the party relying upon the electronic signature took appropriate step to ascertain that the electronic signature is supported by a certificate of electronic approval or it is expected to be so.
- (e) Whether the person relying upon the electronic signature or the certificate of the electronic approval came to know or had to know that the electronic signature not complied with or cancelled.
- (f) The former agreement or dealing between the creator and the party relying upon the electronic signature or any trade custom prevailing in this respect
- (g) Any other relevant factor.

(7). Recognition of foreign Electronic Certificates and Signatures⁴⁰

The certificate of electronic approval issued by the foreign providers of the approval services shall be deemed to be a certificate of electronic approval issued by the providers of the approval services if the practices of the foreign providers of the approval services of the same standard of reliability provided they have also followed the required standards as provided in the Code.



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VI. CONCLUSION

UNCITRAL has been doing a commendable job in the field of Electronic Commerce by enacting Conventions and producing required documents from time to time. Some of the main documents pertain to electronic commerce are: Recommendation on the Legal Value of Computer Records, 1985; UNCITRAL Model Law on Electronic Commerce, 1996; UNCITRAL Model Law on Electronic Signatures, 2001; United Nations Convention on the Use of Electronic Communications in International Contracts, 2005 and UNCITRAL document Promoting Confidence in Electronic Commerce: Legal issues on international use of electronic authentication and signature methods, 2007. It has removed the difficulty in introducing the electronic form of evidence before adjudicating authorities.

From the evidence point of view the UNCITRAL Conventions guarantees equality to electronic documents, records and communications and the States or adjudicating bodies should not make any discrimination between data message and paper document. The study of related documents suggests that there is enough protection is provided to electronic form of evidence by incorporating several 'presumption' provisions in law. Therefore, whenever there is a presumption in law to accept it as a original, genuine or true, the court has no option but to raise presumption in favour of such electronic evidence under certain circumstances as provided by law. The UAE Federal Law No (1) of the Electronic Transactions and Commerce, 2006 Code has followed the Model Law of UNCITRAL in order to give validity to electronic correspondence, equate a electronic record or document with document written and signed, accept electronic message, validate electronic transactions and rely on electronic signatures, certificates and also to recognise foreign electronic certificates and signatures.

The developments stated in above paragraphs suggest that in order to overcome the difficulties in introducing the electronic form of evidence and to facilitate electronic commerce at national and international level it has become necessary to create a legal frame work suitable for electronic



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commerce. Therefore, the conclusion is that the new technology has resulted in revolutionary change in the field of law of evidence.

However, the success of Electronic commerce is dependent on proper legal framework and also several other important preconditions such as; Availability of internet, A well functioning Modern communication system, Distribution of electricity, Privacy; security and encryption; Access to computer hardware, software and servers; A legal and regulatory framework; Possibility of secure transactions; Protection of Intellectual Property Rights and Human resource system.

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