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## Emerging Legal Issues of E-Commerce

Farooq A. Mir
University of Kashmir, far\_lwtr@rediffmail.com

M. Tariq Banday *University of Kashmir*, sgrmtb@yahoo.com

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## **Emerging Legal Issues of E-Commerce IT ACT 2008**

Farooq A. Mir University of Kashmir, India M. Tariq Banday University of Kashmir, India

#### **Abstract**

Internet has unfolded a new market for businesses to explore and exploit. The enormous flexibility and speed of Internet makes it the most modern platform for businesses as well as consumers to execute business transactions. The goods and services of diverse nature are being offered to the businesses or to the consumers globally. The whole world has been converted in to the market to be available on the click of a mouse on the laptop or palmtop. To provide security and legal recognition to the transactions executed electronically, the Indian Parliament enacted the Information Technology Act, 2000 modeled on UNCITRAL's Model Law, though it departs in many respects from the spirit of the Model Law. Immediately after the enactment of the IT Act, it was found that certain significant provisions are missing in this enactment; its provisions lack harmony and above all many legal issues have not been properly spelled out. The IT Act was amended in the year 2008 with four fold objectives. Interestingly, the draftsmen have admitted that the digital signatures prescribed for authentication of electronic records in the original IT Act are linked with specific technology, it has become necessary to provide for alternative technology of electronic signatures, nevertheless the original provision for digital signatures has been retained which has compounded the confusion. Furthermore, the Indian courts have not yet found any opportunity to appraise the impact of the provisions of the IT Act on substantive principles of contract formation codified in the Indian Contract Act, 1872. An analytical evaluation is therefore, needed to identify the issues raised by the information technology relating to contract formation, impact of the IT Act on the principles relating to contract formation provided in the Contract Act, and impact of non-inclusion of the principles governing e-commerce, provided in the Model Law but not reflected in the IT Act.

**Keywords:** E-Commerce; Legal issues of E-Commerce; E-Commerce Security Digital Signature

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## **Emerging Legal Issues of E-Commerce**

Farooq Ahmad Mir\* M. Tariq Banday\*\*

#### **Abstract**

Internet<sup>1</sup> has unfolded a new market for businesses to explore and exploit. The enormous flexibility and speed of Internet makes it the most modern platform for businesses as well as consumers to execute business transactions. The goods and services of diverse nature are being offered to the businesses inter se or to the consumers globally. The whole world has been converted in to the market to be available on the click of a mouse on the laptop or palmtop.

To provide security and legal recognition to the transactions executed electronically, the Indian Parliament enacted the Information Technology Act,  $2000^2$  modeled on UNCITRAL's Model Law, though it departs in many respects from the spirit of the Model Law. Immediately after the enactment of the IT Act, it was found that certain significant provisions are missing in this enactment; its provisions lack harmony and above all many legal issues have not been properly spelt out.

The IT Act was amended in the year 2008<sup>3</sup> with four fold objectives. (1) to harmonize protection of personal data and information and implementation of information technology enabled services such a egovernance, e-commerce and e-transactions with the provisions of the IT Act. (2) to add new penal provision in the IT Act, IPC, Indian Evidence Act and the Code of Criminal Procedure to provide provisions for new forms of crimes like publishing sexually explicit materials in electronic form, video voyeurism and breach of confidentiality and leakage of data by intermediary, e-commerce frauds like

<sup>\*</sup> LL.M, Ph. D, Associate Professor, Department of Law, University of Kashmir, Srinagar-190006. e-mail: far\_lwtr@rediffmail.com.

<sup>\*\*</sup> Senior Assistant Professor, Department of Electronics and Instrumentation Technology, University of Kashmir, Srinagar.-190006. e-mail: sgrmtb@yahoo.com.

<sup>&</sup>lt;sup>1</sup> For history of Internet; See ACLU v. Reno 929 F. Supp. 824 (E.D.Pii. 1996). See also Leiner et al, A Brief History of the. Internet, The Internet Society (available at www.isoc.org/Internet-history/brief/html. The term Internet is defined as a set of computer networks - possibly dissimilar - joined together by means of gateways that handle data transfer and the conversion of messages from the sending network to the protocols used by receiving network. See Microsoft Press Computer Dictionary 220 (2d ed. 1994)

<sup>&</sup>lt;sup>2</sup> Herein-after referred to as the IT Act. This Act has come into force on October 17, 2000

<sup>&</sup>lt;sup>3</sup> This came into effect w.e.f.29-10-2009

personation commonly known as phishing, identity theft and offensive messages through communication services.(3) to provide alternative technology of electronic signatures for bringing harmonization with the Model Law on Electronic Signatures adopted by the UNCITRAL and to fall in line with the resolution No. 56/80, dated 12<sup>th</sup> December,2001 recommending that all states accord favourable consideration to the said Model law on Electronic Signatures. (4) to authorize service providers to set up, maintain and upgrade the computerized facilities and also collect, retain and appropriate service charges for providing such services at such scale as may be provided by the central Government or the State Government.

Interestingly, the draftsmen have admitted that the digital signatures prescribed for authentication of electronic records in the original IT Act are linked with specific technology, it has become necessary to provide for alternative technology of electronic signatures, nevertheless the original provision for digital signatures has been retained which has compounded the confusion. Furthermore, the Indian courts have not yet found any opportunity to appraise the impact of the provisions of the IT Act on substantive principles of contract formation codified in the Indian Contract Act, 1872. An analytical evaluation is therefore, needed to identify the issues raised by the information technology relating to contract formation, impact of the IT Act on the principles relating to contract formation provided in the Contract Act, and impact of non inclusion of the principles governing e-commerce, provided in the Model Law but not reflected in the IT Act.

#### **Legal Validity of Electronic Contracts**

One of the objectives of the original IT Act spelt in the statement of objects and reasons is to legalize e-commerce. This objective is reiterated in the objectives of the IT (Amendment) Act, 2008 also. Surprisingly, there was no express provision in the original IT Act validating contracts executed electronically. This lapse was inspite of the fact that there was an express provision to this effect in the Model Law<sup>4</sup> which forms the basis of the IT Act as claimed in its statement of objects and reasons.

The IT (Amendment) Act now provides that where in a contract formation, the communication of

<sup>&</sup>lt;sup>4</sup> The UNCITRAL Model Law provides that offer and acceptance may be expressed by means of data messages and the contract thus formed shall not be denied validity or en force ability on the sole ground that a data message was used for that purpose. See Article 11 of the Model Law. In Singapore where Common law principles for the formation of contract are generally followed, the Electronic Transactions Act, 1998, on the lines of Article 11 of the UNCITRAL Model Law provides expressly in Section 11 that the contracts formed by electronic means are valid. Similarly, proposed draft on Article 2B of the Uniform Commercial Code contains an express provision for legal validity of the electronic contracts.

proposals, the acceptance of proposals, the revocation of proposals and acceptances, as the case may be, are expressed in electronic form or by means of an electronic record, such contract shall not be deemed to be unenforceable solely on the ground that such electronic form or means was used for that purpose.<sup>5</sup>

The above provision makes a plain statement to the effect that electronic contracts are legally valid without further spelling out attendant principles of contract formation which raise many question than the answers provided by this amendment. Are electronic contracts now exclusively dealt under the IT Act? Are Common Law principles, followed by the Indian courts to interpret provisions of the Indian Contract Act, applicable to the electronic contracts also? Has the IT Act in any way changed or modified substantive provisions relating to the contract formation? Has the IT Act provided additional requirements for the formation of the electronic contracts? These issues are discussed as under.

#### Are electronic contracts now exclusively dealt under the IT Act?

As already stated, an express provision has been provided in new section 10-A by the Amendment Act, 2008, validating electronic contracts but that does not mean that such contracts are now exclusively dealt under the IT Act. This can be inferred by reading sections 10-A and 81 together. Section 81 provides that the provisions of the IT Act shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force. Thus all those principles that are provided in the Contract Act are still applicable provided they are not inconsistent with the rules governing electronic contracts under the IT Act. It is to be understood that the Contract Act is a fundamental law governing contracts and the IT covers only those aspects of electronic contracts that are not covered under the Contract Act.

#### **Communication of Offer and Acceptance**

The pre-requisites for contract formation *inter alia*, are offer and acceptance. As a general rule acceptance must be actually received by the offeror. This rule, commonly called the receipt rule, was modified in 19th century. The new rule called the postal or mail box rule was formulated in response to the delay that occurred when parties attempted to conclude contracts at a distance in the early industrial period<sup>6</sup> as representing the fairest method of allocating the risk. By virtue of the postal rule, a complete contract

<sup>&</sup>lt;sup>5</sup> Section 10-A

<sup>&</sup>lt;sup>6</sup> Susannah Downing and Justin Harrington, The Postal Rule in Electronic Commerce: A Reconsideration'. Communication Law, Vol.5 No.2, 2000 at p. 43

<sup>&</sup>lt;sup>7</sup> It is admitted by the courts that in a given situation justice, by applying postal rule, to both the contracting parties

comes into existence when the properly stamped and addressed letter is put in the course of transmission so as to be out of the power of the acceptor and it is immaterial whether that letter reaches to the offerer or not. This rule has an obvious advantage for the offeree as he will not be responsible for delay, instead the burden of uncertainty of waiting lies on the offeror. This mail box rule used in the Common law countries provides a solution where a party is interested in revoking his offer. As against this, in Civil law countries, the general rule that offeror must actually receive acceptance is normally used as offers are not generally revocable.

When the instantaneous means of communications appeared on the scene, it was initially thought that the mail box rule applies to such communications also<sup>11</sup> till *Entores v. Miles Far East Corporation Ltd.*<sup>12</sup> was decided. In this case the offeree had sent his acceptance from Amsterdam by telex to the offeror in London. Lord Denning held that telex is a 'virtually instantaneous' form of communication which when used makes mail box rule inapplicable<sup>13</sup> It was further held that in instantaneous means of communication the 'receipt rule' applies and the contract, in such cases comes into existence where acceptance is received. The rationale behind this rule is that the offeree will always either his acceptance has been received and can react immediately to any faults or misunderstanding. This rule was confirmed by the House of Lords in *Brinkibon Ltd. v. Stahag Stahl and Stahl warenhandelgesellschaftmbh*, <sup>14</sup> with an important observation that although it is a sound rule, it is not necessarily a universal rule. It was further observed that in many

may not be possible. In the words of Thesiger LJ: 'It is impossible in transactions which pass between parties at a distance and have to be carried on through the medium of correspondence to adjust conflicting right between innocent parties so as to make the consequences of mistake ... fall equally upon the shoulder of both.' Household Fire Insurance Co. v. Grant (1879) 4 EXD 21fi at p. 228

<sup>&</sup>lt;sup>8</sup> Brogden v. Directors of the Metropolitan Railway Company (1877)2 App. Las 666; Household Insurance Company v. Grant (1879) 4 E & D 216.

<sup>&</sup>lt;sup>9</sup> RIR Abeyratne, 'Auctions on the Internet of Airline Tickets', Communication Law, Vol.4 No.1, 1999 see also Adams v. l,indsel (1818) 1 B & Ald 681, in which the court held that otherwise no contract would be ever concluded by post.

<sup>&</sup>lt;sup>10</sup> Siegfried Eiselen, 'Electronic Commerce and the UN Convention on Contracts for the International Sale of Goods (CISC) 1980', The EDI Law Review. 6:21-24, 1999 at 26.

<sup>&</sup>lt;sup>11</sup> See Carow Towing Co. v. The. Ed. McWilliams (1919) 46DLR506 (Ex. ct). The Canadian court held that telephone can be well equated with a letter and therefore, postal rule applies. The acceptance is complete where the words are spoken. This position was changed after Entores decision except in Quebec. Now Article 1387 of Civil Code of Quebec 1994 has nullified this Judicial position by holding that in communication invoking telephone, contract is concluded where acceptance is received. Even after the Entores decision, Justice Hidiyattullah of Indian Supreme Court held that Section 4 of the Contract Act is flexible enough to cover instantaneous means of communication. See his dissenting opinion in Baghwandas Kedia, v.Girdharilal, AIR 1966 SC 543

<sup>&</sup>lt;sup>12</sup> [1955] 2 OB 327

<sup>&</sup>lt;sup>13</sup> Id at 332.

<sup>&</sup>lt;sup>14</sup> ( 1982) I All.ER 293

situations this rule may not apply and while, making any decision regard shall be had to the intention of the parties, sound business practice and in some cases by a judgment where the risks should lie.<sup>15</sup>

The postal rule has been incorporated in Section 4 of the Contract Act with an important modification to the principle of communication of acceptance. The law relating to the communication of offer is in line with the Common Law principle The communication of offer is complete when it comes into the knowledge of the offeree. This was the principal reason that the reward was denied to Lai man Shukla in *Lalman Shukla v. GaurieDatt Sharma*, inspite of the fact that he had succeeded in finding the boy whose uncle (master of Lalman) had announced a reward of Rs.501 to any one finding the boy about which Lalman came to know only after finding the boy.

The Contract Act makes a significant departure from the Common Law principle relating to communication of acceptance and adopts some what curious rule by providing different timings for completion of communication of acceptance as against the offerer and offeree. The communication of acceptance is complete, against the proposer when it is put in the course of transmission to him so as to be out of the power of the acceptor and as against the acceptor when it comes into the knowledge of the proposer. However, contract is concluded at a place where the letter of acceptance is posted, and there is no disagreement on this point between the Indian law and Common Law.

The rule of instantaneous means of communication laid in *Entores* was also followed by the Supreme Court of India in *Baghwandas Governdhandas Kedia v. Girdharilal Parshottamdas and* Co.<sup>20</sup> The court confined the operation of Section 4 to postal communications, and laid down that in cases of instantaneous means of communication the contract is concluded where acceptance is received.

<sup>16</sup> Section 4 of the Contract Act provides that the communication of a proposal is complete when it comes to the knowledge of the person to whom it is made. The communication of an acceptance is complete as against the proposer, when it is put in a course of transmission lo him, so as to be out of power of the acceptor; as against the acceptor, when it comes to the knowledge of the proposer.

The communication of a. revocation is complete, as against the person who makes it, when it is put into a course of transmission to the person to whom it is made, so as to be out of the. power of the person who makes it; as against the person to whom it is made when it comes to his knowledge.

<sup>&</sup>lt;sup>15</sup> Id at 296.

<sup>&</sup>lt;sup>17</sup> (1913) IIAL1..LJ. 489.

<sup>&</sup>lt;sup>18</sup> Supra note 16

<sup>&</sup>lt;sup>19</sup> Ramdas Chakwbarti v. Cotton Ginning Co. Ltd. (1887) 9 All Series 366.

<sup>&</sup>lt;sup>20</sup> Supra note 11.

It is interesting to note that electronic communications do not fit perfectly in any of the above two broad categories of communications. All electronic communications may not be as instantaneous as popularly believed. Thus they occupy a functional position somewhere between the traditional letter and telephone communications.<sup>21</sup> The possible situations are discussed here:

EDI transmission may be simultaneous when principal trading partners are linked directly. However, a direct link is rare and expensive.  $^{22}$  EDI communication is generally established through value added network  $(VAN)^{23}$  or service providers.

Thus an EDI message will be first received by the senders VAN and then the recipients VAN and finally by the recipient. Where parties are linked directly, it is argued, that the receipt rule should apply and when they are connected by intermediaries then the postal rule should apply.<sup>24</sup>

Electronic communications by e-mail are not directly sent from the offerer to the offeree and contracting parties are not connected directly as it involves several mail servers and there is a strong element of 'store and forward.<sup>25</sup> The recipient will be unaware of the message until he checks his inbox at the provider's server which is possible only sometime after delivery.<sup>26</sup> It is not possible for the sender to know whether and when an e-mail was received and whether it was received in an original form or was modified or entirely changed. The software in certain systems make it possible to have read or receive receipts, but these receipts as well as 'bounce back error message' do not ensure that the contents of the message have been received in an original form by the recipient.<sup>27</sup>The messages sent by an e-mail may take different routes and do not pass as a single unit but broken into digital chunks (packets) with the result these messages are delayed and

<sup>&</sup>lt;sup>21</sup> Supra note 10 at p23

<sup>&</sup>lt;sup>22</sup> Rosa Julia-Barcelo, 'EDI - Electronic Contracting: Contract Formation and Evidentiary issues under Spanish Law' The EDI Law Review. 6:155-172, 1999.

<sup>&</sup>lt;sup>23</sup> VAN is the usual acronym to indicate third party service providers, who usually add some value to the transmission process. The service providers will usually serve as an interface to translate structured messages from one software application to another and to store and forward messages. See Eisiens, The Electronic Data Interchange Agreement' 1995 SA Merc. L J 1-18.

<sup>&</sup>lt;sup>24</sup> Chris Reed, Computer Law (3rd ed. 1996) pp. 304-305.

<sup>&</sup>lt;sup>25</sup> Jan-Malte Niemann; Cyber contracts 'A Comparative View on The Actual Time of Contract Formation", Communication Lam, Vol.5, No.2, 2000 at p. 51.

<sup>&</sup>lt;sup>26</sup> S.Jones, 'Trading on the Internet' (1997) 8(3) PCC 41 at p. 43

<sup>&</sup>lt;sup>27</sup> Gringras. The Laws of the Internet ( $\backslash QQ7$ ) at p. 17.

sometimes may not be delivered at all.<sup>28</sup>

These attributes of e-mail communication bring it closer to non-instantaneous means of communication. It is, therefore, argued that e-mails are more suitable for the application of the postal rule.

The communication of acceptance via a web site represents a reverse scenario of e-mail. The parties are connected directly as no mail server or intermediary is involved. The communication is almost simultaneous and parties know whether their message has been received or not. If there is a transmission error, a message reading 'server not responding' will automatically appear on the sender's system which will enable him to know that the message has not been received<sup>29</sup>. Due to the instantaneous nature of the web communications, application of the receipt rule is recommended.<sup>30</sup>

The above discussion makes it clear that there is no uniform rule applicable in all situations to determine the time for the formation of contract electronically and this uncertainty cannot be resolved by applying the Contract Act's provisions alone.

The IT Act has adopted *verbatim* the rules of the UNCITRAL Model Law to determine the time for receipt of electronic records.<sup>31</sup>

The rules incorporated are:

- 1. dispatch of an electronic record occurs when it enters a computer resource outside the control of the originator and
- 2. receipt of an electronic record occurs at the time when:

<sup>&</sup>lt;sup>28</sup> There are many reasons responsible for delay or loss of message. Sometimes the router carrying packets making up a message delivers them to a router's input port faster than the processing capacity of the port, with the result, the packets which cannot be simultaneously processed are lined up in the routers RAVI. If the number of packets received exceeds the RAM capacity of the router, packets may be lost. Sometimes there is a miscalculation of the routers that may be used for forwarding a message. The message packet carries a segment which prescribes the maximum number of routers to be used for carrying a message. But sometimes it is possible that a message may require routers more than the prescribed routers and message is returned. See Susannah Downing and Justin Harrington, supra note 6 at p. 46.

<sup>&</sup>lt;sup>29</sup> Web transactions earn,' dale with a check sum. The system used for transmitting information will easily be able to know whether information has been received and any error in delivering the message will be easily detected.

<sup>&</sup>lt;sup>30</sup> Supra note 25

<sup>&</sup>lt;sup>31</sup>See Art. 15 of Model Law.

- a) it enters the computer resource designated by the addressee;
- b) it is retrieved by the addressee where an electronic record designated sent to computer resource which is not the one by the addressee.
- c) it enters the computer resource of the addressee where no computer resource has been designated.<sup>32</sup>

Save as otherwise agreed to between the parties, an electronic record is deemed to be dispatched at the place where the originator has his place of business, and is deemed to be received at the place where the addressee has his place of business.

The time of the receipt of an electronic record shall remain the same notwithstanding that the place of business may be different from the place where the computer resource is located.<sup>33</sup>

The above rules have modified the substantive law relating *to* the communication of offer and acceptance where electronic means of communications have been used. These rules are a half-way house between the postal rule and actual receipt rule. However, these rules will not govern electronic communications in all situations as the relevant section does not use the common expression 'notwithstanding anything contained contrary in any Act', instead, the parties are free to agree on different timings of receipt of electronic record.<sup>34</sup>

The words 'dispatch of electronic record' indicates commencement of the transmission of the electronic record and takes effect when it enters the information system outside the control of the originator which may not necessarily be that of the addressee, it may be that of the intermediary.

The word 'enters' into a computer resource, used for both dispatch and receipt of the electronic record, is crucial for determining the actual timing of the dispatch and receipt. An electronic record should not be considered to be dispatched if it merely reached the information system of the addressee but failed to enter it due to the malfunctioning of the information system.<sup>35</sup> It can be also argued here that the dispatch of an

<sup>&</sup>lt;sup>32</sup> Section 13 of the IT Act.

<sup>33&#</sup>x27; Section 13(3) of the IT Act

 $<sup>^{34}</sup>$  Section 13 starts with the words, 'Save as otherwise agreed to between the originator and the addressee ...

<sup>&</sup>lt;sup>35</sup>This construction has been favoured in Guide to Enactment of UNCITRAL Model Law on Electronic Commerce

electronic record has taken place but not its receipt within the provisions of the IT Act.

An electronic record enters a computer resource when it becomes available for processing within that computer resource. Whether that electronic record should be intelligible or usable by the addressee is not clear.

Section 13 of the IT Act, providing rules for determining the time of dispatch and receipt of electronic record, cannot be read in isolation but has to conjoin with section 12 which provides for the acknowledgement of receipt. In other words, section 13 will take effect only when section 12 has been satisfied.

Section 12 provides that where the originator has stipulated that the electronic record is binding only on receipt of an acknowledgement of such electronic record by him, then unless acknowledgement has been so received, the electronic record shall be deemed not to have been sent by the originator.<sup>36</sup> Where an electronic record has not been made binding on the condition of receipt of acknowledgement and the acknowledgement has not been received by the originator within the specified or agreed time or, if no time has been specified or agreed to, within a reasonable time, then the originator may give notice to the addressee stating that no acknowledgement has been received by him and specifying a reasonable time by which the acknowledgement must be received by him and if no acknowledgement is received within the mentioned time limit, he may after giving notice to the addressee treat the electronic record as though it has never been sent.<sup>37</sup>

Where the originator has not agreed with the addressee on a particular mode or method by which the acknowledgement should be sent then the addressee may acknowledge the receipt by (a) any communication, automated or otherwise; or (b) any conduct of the addressee, sufficient to indicate the originator that the electronic record has been received.<sup>38</sup>

The receipt of acknowledgement should not be confused with acceptance. It simply evidences that an electronic record has been received and can be equated with a sender's instruction like 'return receipt

with an avowed object that an addressee should not be placed under the burdensome obligation to maintain its information system functioning at all times. Available at http://www.uncitral.org/english/test/electron/ml.ec.h tm.

<sup>&</sup>lt;sup>36</sup> Section 12(2) of the IT Act

<sup>&</sup>lt;sup>37</sup> Section 12(3) of the IT Act

<sup>&</sup>lt;sup>38</sup> Section 12(1) of the IT Act

requested in postal communications.<sup>39</sup> Whether an acknowledgement of receipt amounts to an acceptance in a given case depends upon a number of factors including the language used in the receipt, the intention of the party sending receipt and any usage of trade.

#### **Revocation of Offer and Acceptance**

The IT Act is not a complete code for electronic transactions. The Contract Act is still the basic law governing contract formation including contracts formed electronically. However, these two Act are supplementary to each other and the IT Act not only acts as a 'gap filler' to provide solutions to the issues generated by the introduction of electronic means of communication which are not covered by the Contract Act but in certain cases fundamental principles laid down in the Contract Act have been modified. One such modification has taken place in the case of communication and revocation of offer and acceptance. Although, the IT Act does not expressly provide rules for such modification, by reading sections 4 and 5 of the Contract Act and sections 12 and 13 of the IT Act together, one could conclude that the below discussed modifications have taken place by implication.

Section 4 of the Contract Act provides that the communication of offer is complete when it comes into the knowledge of the offeree. The question is: when the communication of an offer made by electronic means is complete? Is it when the offer enters into the computer resource as provided under section 13 of the IT Act or when the offeror receives acknowledgement as mentioned in section 12 of the IT Act? On close examination of sections 12 and 13 of the IT Act, it becomes clear that the test of knowledge on the part of offeree as provided under section 4 of the Contract Act for finding whether communication of an offer is complete is inapplicable to electronic communications. It is quite possible that the electronic record may enter the computer resource of the addressee without his knowledge because section 13 provides that the receipt of the electronic record occurs at the time when it enters the computer resource designated by the addressee or, where no computer resource has been designated then to the computer resource of the addressee. It is only where a computer resource has been designated by the addressee but the electronic record is sent to a computer resource other than the designated one, it can be said that the addressee has knowledge of the electronic record because section 13 provides that in that case the receipt of the electronic record occurs at the time, in such situation, when it is retrieved by the addressee. The second alternative is to treat the communication of an electronically made offer as complete when the offeror receives acknowledgement of the receipt of the offer. One may argue that acknowledgement of receipt

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University of Delhi. Delhi – 110007. India.

<sup>&</sup>lt;sup>39</sup> Supra note 35

sent by the offeree implies knowledge on his part, however it may not be always so for two reasons: (a) section 12 provides that where the originator has not agreed with the addressee that the acknowledgement be sent in a particular form or method, then the addressee, *inter alia*, may use an automated process for sending acknowledgement which means, in a given situation, the addressee may not be aware of the electronic record of which acknowledgement of receipt has been sent (b) receipt of the electronic record may occur at the time when the message enters the computer resource, irrespective of whether the message is intelligible to or usable by the addressee.

The above discussion leads to the conclusion that the knowledge element necessary for determining the time for communication of offer in postal communications is irrelevant in case of electronic communications. The communication of offer is, however, complete when the acknowledgement is received by the offeree, notwithstanding the fact that the acknowledgement has been sent by the automated process as it can be attributed to the offeree by virtue of section 11 that recognizes theory of attribution. The rules relating to revocation of offer provided in section 5 of the Contract Act apply *mutatis mutandis* to offers made electronically. The offeror will be free to revoke his offer at any time before its communication of acceptance is complete and this legal position provided in section 5 of the Contract Act has not been changed by the IT Act.

The rules provided in section 4 of the Contract Act for communication of acceptance have been rendered inapplicable by implication in case where acceptance is communicated electronically and it can now be said that the communication of acceptance is complete at the time when its acknowledgement is received by the acceptor in the sense as provided in section 12 of the IT Act and, quite naturally, the time when communication of acceptance is complete will vary depending upon the given situation, but not in the sense as provided in section 4 of the Contract Act. The communication of acceptance is complete against the acceptor as well as the offeror at the time when the acknowledgement enters into the designated computer resource or where no computer resource has been designated, the computer resource of the addressee. There will be no time lag, in these cases, between dispatch and receipt of the acceptance. Both dispatch and receipt will be 'simultaneous and a complete contract arises when acknowledge enters in the computer resource as stated above. This means that there will be no scope for revocation of acceptance in these situations. Section 5 of the Contract Act which provides provision for revocation of acceptance will be in-applicable in these situations.

Different rules will, however, apply where acknowledgement has been sent to a computer resource which

is not the same as that designated by the addressee. In this case, communication of acceptance is complete as against the offeror when the acceptor has dispatched the acknowledgement as provided in section 12 of the IT Act and as against the acceptor when, it is retrieved by the offeror. This interpretation is possible because dispatch and receipt is not simultaneous as is the case in the above two situations. Thus here is a scope for revocation of acceptance which is possible at any time before acknowledgement is retrieved by the offeror and section 5 of the Contract Act will be applicable. In this situation, it is quite possible that an acceptance message could be retrieved at the same time as a message revoking that acceptance where acceptor chooses the same method for communicating revocation which was used for communicating acceptance. But unlike section 4 of the Contract Act, complete contract will come into existence only when acceptance is retrieved and not when the acceptance is dispatch.<sup>40</sup> This interpretation is based on the rationale on which section 13 of the IT Act rests.

Section 5 of the Contract Act will also be applicable in those situations where acknowledgement for one reason or the other has not yet entered into the computer resource. This includes the possibility where dispatch of the acknowledgement has taken place within the meaning of section 12 of the IT Act, i.e. acknowledgement of acceptance has entered into the computer resource outside the control of the acceptor but is still on the system of the intermediary and is yet to enter the designated computer resource or the addressee's computer resource where no computer resource has been designated. Another possibility will be where acceptance does not enter into the computer resource in the sense as understood in section 14 of the IT Act due to the malfunctioning of the computer resource.

#### **Incorporation of Terms by Reference**

Standard form contracts have been recognised by the courts as a valid means of executing contractual relationship. Various rules<sup>41</sup> have been evolved with the passage of time to mitigate the rigour of terms which were considered either harsh to the opposite party or of which the opposite party' could not be supposed to have had reasonable notice. Exemption clauses which either limit or exclude liability of the party using the form or impose onerous conditions on the opposite party' have been regarded as a part of the main contract even if they are not actually mentioned in the main contract provided they satisfy certain

 $<sup>^{40}</sup>$ In case of postal Communications. a complete contract arises when the letter of acceptance is posted and not when it is received. See supra note 19

<sup>&</sup>lt;sup>41</sup> Some of them are: reasonable notice, notice contemporaneous with contract, theory of fundamental breach, unreasonable terms, strict construction. See F Kesstler, Contracts of Adhesion- Some thoughts about Freedom of Contract",43 Columbia IR 639 (1943)

tests evolved by the courts. Web site contracts present a scenario which can be equated to some extent with the challenges posed by the standard form contracts at their early stages.

The expression 'incorporation by reference is used as a concise means of describing the situation where a document refers generically to provisions which are detailed elsewhere, rather than reproducing them in full.<sup>42</sup>Electronic communications are structured in such a way that large numbers of messages are exchanged, with each message containing brief information and relying much more frequently than paper documents on reference to information accessible elsewhere<sup>43</sup>. The question is: are the terms incorporated by reference a part of the main contract and if so under what circumstances?

The IT Act does not contain any express provision affording legal status to terms which are not in the main message but are only referred to in that message. There was no provision in the original UNCITRAL Model Law also dealing with this situation. However, the United Nation's Commission on Trade Law, while realizing that by virtue of hyperlinks parties quite frequently provide detailed information not in the main contents but some where else, made an express provision in the Model Law by incorporating Art. 5 bis.<sup>44</sup>

A provision like Art. 5 bis of the Model Law is missing in the IT Act which is to be provided by way of amendment.

The courts in India can take help of the rules established for determining the validity of the exemption clauses in standard terms. However, it is to be borne in mind that due to the significant difference in the modes of operation between traditional and electronic commerce, the traditional tests evolved by the courts in paper based standard form contracts might be ineffective when applied to corresponding electronic commerce terms.

That the terms and conditions which will govern a contract must be brought to the notice of the opposite party is a long established rule. However, when it comes to contracts made electronically, views differ on

<sup>&</sup>lt;sup>42</sup> Supra note 35

<sup>43</sup> Ibid

<sup>&</sup>lt;sup>44</sup> Article 5 bis was adopted by UNCITRAL at its thirty first session, in June 1998 which reads as: information shall not be denied legal effect, validity or enforceability solely on the grounds that it is not contained in the data message purporting to give rise to such legal effect, but is merely referred to in that data message.

the best way of achieving this.<sup>45</sup> Thanks to the technology, the options available to bring terms incorporated by reference into the notice of the opposite party are many and varied.<sup>46</sup> It is now possible to design a web page requiring the user to scroll through the terms and conditions incorporated by reference and to confirm that he has not only read those terms but has also accepted them. The courts may consider this as a reasonable mode to bring incorporated terms of the notice of the other party.

#### **Authentication of Electronic Contracts**

Every user of the Internet, whether he is an originator<sup>47</sup> or addressee<sup>48</sup>, is always concerned about the security, confidentiality and integrity of the electronic record and its authenticity is the concern of the addressee. Any person interested in executing commercial over Internet will always be particular about :(a) who has sent this message? (b) when was it sent? (c) to whom was it sent? (d) was it received (e) when was it received? (f) did it arrive in the same form in which it was sent? (g) has it remained confidential.

The information transferred over Internet passes through various intermediate stations and one interested in knowing the information can intercept it. A message sent in a plain ASCII text format is like a postcard which can be read by any one having access to the mail directories of a particular system. The card is still secure because it has a limited space and any alteration can be detected. The message sent through Internet provides a scope for scanning and can be filtered by automatic programmes looking for certain key words.

The message sent through an e-mail is more to forgery as it can be moderated, changed or made to appear as if it were coming from a known party, with that party's knowledge or consent. What is worst, most businesses are unaware of the difficulty in erasing an e-mail. Pressing the delete button is no guarantee that a message has actually been deleted from the system. The e-mail message can in principle be

<sup>&</sup>lt;sup>45</sup> Heather Rowe, Internet-Enabled Commerce; International Issues for Business Lawyers, Journal for Intellectual Property July,1999 Vol. 2 No. at p 542

<sup>&</sup>lt;sup>46</sup> Graham J.H. Smith, Internet Law and Regulation (2<sup>nd</sup> ed.) (Sweet and Maxwell

<sup>&</sup>lt;sup>47</sup> "Originator" means any person who sends, generates, stores or transmits any electronic message or causes any electronic message to be sent, generated, stored, or transmitted to any other person but does not include an intermediary. Section 2(za).

<sup>&</sup>lt;sup>48</sup> "Addressee" means a person who is intended by the originator to receive the electronic record but does include any intermediary. Section 2 (b).

retrieved as far back as 10 years from the archival system of the Internet provider company. 49

When Internet is used as a medium of communication no physical document is created, nor is any original document exchanged between the parties. Even parties do not see sometimes to each other. There is a genuine desire of the each party that the other party may not repudiate that party's action. The message authenticity, integrity and non-repudiation, which are three essentials of a record to form legal basis of a claim, can be achieved by different methods of encryption.

#### **Scheme of Authentication under the IT Act**

The original IT Act was technologically specific. Section 3 made the use of Asymmetric cryptosystem and hash function mandatory for authentication of electronic records.<sup>50</sup> This provision was not in harmony with sections 14, 15 and 16. Sections 14<sup>51</sup> and 15<sup>52</sup> define secure electronic record and secure digital signature (now electronic record) respectively and section 16<sup>53</sup> gives power to the Central Government to prescribe security procedures. A plain reading of theses sections make it clear that the parties to any electronic transactions are free to apply any security procedure that may or may not be the one that is prescribed under section 3 of the IT Act and Central Government is empowered to prescribe any security procedure for the purposes of authentication.

<sup>&</sup>lt;sup>49</sup> Thomas J. Smedinghoff (Ed) Online Law, the SPA's Legal Guide to Doing Business on the Internet( 1997) at p 103

<sup>&</sup>lt;sup>50</sup> Section 3 provided that (1)subject to the provisions of this section, any subscriber may authenticate an electronic record by affixing his digital signature. (2) the authentication of the electronic record shall be effected by the use of asymmetric cryptosystem and hash function which envelope and transform the initial electronic record into another electronic record.

<sup>&</sup>lt;sup>51</sup> Section 14 provides that where any security procedure has been applied to an electronic record at a specified time, then such record shall be deemed to be a secure electronic record from such point to the time of verification

<sup>&</sup>lt;sup>52</sup> Section 15 defined secured digital signature (now electronic Signature) if, by application of a security procedure agreed to by the parties concerned, it can be verified that a digital signature, at the time it was affixed, was(a) unique to the subscriber affixing it; (b) capable of identifying such subscriber; (c) created in a manner or using a means under the exclusive control of the subscriber and is linked to the electronic record to which it relates in such a manner that if the electronic record was altered the digital signature would be invalidated, then such digital signature shall be deemed to be a secure digital signature.

The Central Government shall, for the purposes of this Act, prescribe the security procedure having regard to commercial transactions prevailing at the time when the procedure was used, including (a) the nature of transactions;(b) the level of sophistication of the parties with reference to their technological capacity;(c) the volume of similar transactions engaged in by other parties;(d) the availability of alternatives offered to but rejected by any party;(e) the cost of alternative procedure; and (f) the procedures in general use for similar types of transactions or communications.

Sections 14 and 15 were taken verbatim from Sections 16 and 17 of the Singapore Electronic Transactions Act, 1998 but this legislation operates with a different Scheme. This legislation is technologically neutral. Unlike IT Act, it does not prescribe any particular technology for authentication of electronic record and quite logically provides that if any security procedure with requisite features has been applied to any electronic record that will be presumed to be a secured electronic record. As against this, the IT Act prior to the Amendments in 2008 was technologically specific and prescribed a particular technology for authentication of electronic record which when applied would make the electronic record per se a secured one. There was no need of providing separate provisions for secured electronic record and secured digital signature.

The Amendment Act, 2008 has retained Section 3. It has also incorporated a new section i.e., Section 3-A. This section makes a provision for Electronic Signature and provides that notwithstanding anything contained in section 3, but subject to the provisions of sub-section (2), a subscriber may authenticate any electronic record by such electronic signature or electronic authentication technique which-

- (a) is considered reliable; and
- (b) may be specified in the second scheduled.
- (2) For the purposes of this section any electronic signature or electronic authentication technique shall be considered reliable if-
  - (a)-----
  - (b)-----
  - (c)----
  - (d)-----
  - (e)-----

It appears that proper fine tuning has not gone in the drafting of above section3-A so as to make it compatible with other provisions of the IT Act. This Section starts with a common expression, "notwithstanding any thing contained in section 3" which means that it is not now mandatory to authenticate electronic record by affixing digital signature as provided in Section 3. This would have been

a logical interpretation to section 3-A but surprisingly this section is subject to sub section (2) of Section 3. Sub section (2) provides that the authentication of the electronic record shall be effected by the use of asymmetric cryptosystem and hash function which envelop and transform the initial electronic record into another electronic record. Does this mean that Section 3-A is governed by Section 3? If it is so, then why was section 3-A incorporated because this interpretation would not change the legal position that stands before the amendment. This interpretation, though legally correct, goes against the avowed purpose of making the IT Act technologically neutral as outlined in the statement of objects and reasons of the Amendment Act. Furthermore Section 3-A makes affixing of electronic signature optional as it uses the word "may" as against Section 3 which uses the word "shall" and thus makes use of asymmetric cryptosystem and hash function mandatory. The best option before the legislature was (a)to delete Section 3; (b) make authentication mandatory(c) make IT Act technology neutral by omitting the expression "subject to the provisions of sub-section(2)".

#### **Need for Time Stamping Service**

Taking cue from the Model Law, the IT Act gives legal recognition to electronic records and electronic signatures that are functional equivalents of paper based documents<sup>54</sup> and hand written signatures respectively.<sup>55</sup> The electronic signature ensures authenticity, confidentiality, and non-repudiation of the electronic record. These attributes of electronic record are sin quo non for electronic commerce but in addition to these attributes it would be at times crucial to know exactly at what time offer or acceptance or revocation of offer or revocation of acceptance has been dispatched or received because the Indian contract Act provides a provision for revocation of offer and acceptance<sup>56</sup> unlike English law that makes acceptance irrevocable. These provisions of the Indian Contract Act are still applicable to the electronic contracts as they are not inconsistent with the express provisions of the IT Act.

The electronic signatures cannot help in knowing the time of dispatch or receipt of the electronic record. Furthermore, there is technique called date spoofing that helps in changing date of receipt or dispatch of electronic records in all those servers through which an electronic record would travel. A party to any electronic contract can change the time of receipt or dispatch of an electronic record to his convenience

<sup>&</sup>lt;sup>54</sup> See Section 4 of the IT Act.

<sup>&</sup>lt;sup>55</sup> See Section 5 of the IT Act.

<sup>&</sup>lt;sup>56</sup> See Section 5 of the Indian Contract Act.

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with the help of date spoofing technique and it may be difficult to find out exact date. The solution lies in making the use of time stamping service along with electronic signatures mandatory.

#### Conclusion

Electronic commerce is gaining acceptability throughout the globe because of its ease, flexibility and speed. It is to be borne in mind that Internet is essentially global in character and the legal issues raised by its use have global ramifications. Furthermore, e-commerce will not flourish in an uncertain legal environment. Legal principles have to be well formulated. The sermon of Model Law is that the courts or other national authorities while enacting provisions of Model Law or the provisions of the Instruments implementing the Model Law as a part of domestic legislation which, of course will be domestic in character, be interpreted with reference to its international origin in order to ensure uniformity. Thus the IT Act has to be given such an interpretation as is in harmony with the international standards.

The original IT Act had many questionable provisions, many areas were left uncovered and many grey areas were created.

The Amendment Act 2008 has brought major changes in the IT Act. However, there are still many grey areas which have to be addressed. There are a number of common law principles relating to contracts evolved by the court over a period of time. Their applicability to electronic contracts has to be determined. It is to be remembered that the IT Act does not form a complete code for the electronic contracts. The Contract Act is still the fundamental law for contract formation. However where the provisions of the Contract Act are inconsistent with the provisions of the IT Act or where express provision has been provided in the IT Act, then only the IT Act will apply.

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