Effective Formation of Contracts by Electronic Means

Do We Need a Uniform Regulatory Regime?

Karen Mills
KarimSyah Law Firm
Jakarta, Indonesia

Introduction

A conference was held on electronic commerce in Sydney, Australia in November of 2000, and this writer was asked to present a paper on, inter alia, the selfsame topic covered in this chapter. Much of that paper is incorporated herein. At the time, with the rise of electronic commerce at a relatively early stage, it was clear that there were still far more questions than answers in arriving at effective mechanism to ensure validity of contracts entered into through electronic means and that, as electronic commerce evolves, we will see it give rise to as many more legal questions as it will solve business problems. More than four years later some of these questions have been addressed but others still remain. And, regardless of the extent to which the “new e-conomy” really does change the way we do business, it will certainly require the world to seek new paradigms in many facets of the law

As electronic technology has continued to evolve in the intervening years, most jurisdictions have addressed some of the questions in new legislation or, for common law based legal systems, in court decisions in cases heard. International organisations which support international business, such as the United Nations Commission on International Trade Law (“UNCITRAL”) and the International Chamber of Commerce (“ICC”) have also expended considerable effort to offer solutions to the business world through standard model legal provisions and contractual terms and conditions which can be utilised by any and all nations in drafting their legislation or by parties in formulating contracts, respectively.

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1 Paper to be presented at World Summit on Information Technology in Tunis, 15 - 18 November, 2005, and to be published in compendium book prepared by Centre for International Legal Studies.

2 The writer was assisted in preparation for this paper by several associates of the firm, including: Ilman F. Rakhmat, Fifiek N. Woolandara and N. Pininta Ambuwaru (the two latter having since left the firm.)

Nonetheless, the validity of a contract will depend in each instance not only upon the facts and intention of the parties but also upon the law under which such contract is to be interpreted, governed and, eventually enforced. As long as the laws of each jurisdiction differ in material ways from that of others, questions will continue to arise in interpretation and enforcement where there is any cross-border element of an electronic transaction. And is not the “borderless”, as well as the “paperless” nature of electronic commerce through the internet, the very essence of electronic commerce?

Of course transactions themselves, and the substantive commercial provisions embodied in transactional contracts, do not change in any material way simply because the contract is formed electronically. What has changed, and will continue to evolve, are primarily the means by which the parties, or their counsel, will communicate in establishing those contracts. There still are, and will continue to be, buyers and sellers and lenders and borrowers just as there will continue to be contracts negotiated and concluded for the purchase of goods and services, financing of assets and projects, issuance and transfer of stocks and bonds, provision and perfection of security, and payment and repayment of principal, interest and other compensation, as well as the failure to make such payments, thereby requiring rights and obligations to be pursued through legal means. The only totally new form of transaction is the licensing of the use of software which is delivered directly by downloading from the internet.

In e-commerce, not only are contracting parties not necessarily situate within, or subject to the jurisdiction of, the courts of a single geographical area, but in some situations there may be no way to determine exactly WHERE one or more of the parties are situate. Communication through the internet can take any form the transmitting party desires. Letterheads can be created and any name can be affixed to an electronic message so how can one ascertain with certainly WHO is the originator of a communication? Documents transmitted electronically can be edited and revised seamlessly by a recipient, or anyone else having access to such document. How does one determine or, more importantly, prove WHEN an agreement has been reached and WHAT are the terms of that agreement? What law will apply to that agreement, and what governing body has jurisdiction over that agreement and/or the parties thereto? These are some of the questions which arise when we consider how a contract effectively can be formed by electronic means. Although many of these questions are being addressed by the various lawmakers in their own way all over the world today, it seems patently clear that because of the borderless nature of electronic commerce, the same can be regulated smoothly, safely and consistently on an international scale only if there is a single universal framework within which all legal systems will eventually operate.
Electronic Commerce

The easy question to address is: what do we mean by electronic commerce? At least for purposes of this chapter we refer to transactions effected via the internet, and we might consider that these fall into two basic categories:

(i) transactions where the internet is the operative element in concluding the contract, or where one party offers goods or services openly on the internet, to anyone interested, and any party wishing to obtain such goods and services places its order by clicking a box or filling out a form, or similar, on the website or by responding to a bulk email offer, and the contract is thereby established. Delivery can be made by shipping the goods or downloading the product, such as computer software, directly via the internet, and payment is invariably made via credit card with the details and authorisation made upon order, also on the net. This kind of contract is often referred to as a “click-wrap” or “browse-wrap” contract, particularly where relating to downloading of software, but let us use a more universal term and refer to these basically retail contracts as: “Simple Sales Contracts” or “SSCs”; and

(ii) other types of contracts where the parties negotiate for the terms via email, passing draft language back and forth until the terms are all agreed, and the sum of the messages themselves may become the contract, or a full electronic document may be prepared containing all of the agreed upon terms and this document is confirmed and, perhaps “signed” also on line. We shall refer to this type of contract as “Negotiated Contracts”.

The Contract

Before we can consider how any contract may effectively be formed online, we must first examine the larger question of what legally constitutes a “contract”. From a legal point of view, by “contract” we must assume we mean a legal, binding and enforceable agreement which binds each of the parties thereto to the obligations which are assigned to it in such contract. The legal force of a contract will depend upon the law that governs the contract itself and its enforceability depends upon the law of the place in which one is attempting to enforce it. Although some jurisdictions may require contracts to be in writing to be binding, others theoretically, and subject to certain exceptions, may not. There are numerous other differences found among various legal systems and some of these may have a considerable impact on the validity and enforceability of a contract in or under the laws of the country or countries applying such system.
Most legal systems in the world adhere, to a greater or lesser degree, to one of two basic concepts: (i) the Common-Law system, based upon English law and practiced in the UK, the US, Australia, New Zealand and other countries once under the influence of the UK or other common law jurisdictions, such as Hong Kong, Singapore, Malaysia, India and parts of Africa and the Pacific Islands, in which the applicable law consists not only of written legislation but also of the body of case decisions rendered by learned judges over the centuries to interpret such written legislation; and (ii) the Civil Law system, practiced in most European countries and those jurisdictions once under their influence and a few others as well. Civil Law does not view its body of caselaw as an integral part of its binding law. While some cases may take on importance as guidance, or jurisprudence, civil law is based primarily on written laws and regulations only, combined with an underlying duty of good faith.

Civil Law and Common Law based jurisdictions tend to apply different criteria to determine whether, or when, a binding contract exists.

**Common Law v. Civil Law Contracts**

Under the **Common Law**, as a general rule, a contract is said to be formed where the parties have made clear their intention to be bound, or to create legal obligations between or among them. This is normally characterised in terms of one party making an offer with the contract formed when the other party accepts such offer. The second party may not accept the offer in its entirety, but may propose deletions of or revisions to some provisions or additions of others. Such a counter proposal is considered a counter offer, which becomes the offer on the table, and it is up to the other party to accept this, as acceptance, or put forward yet another counter proposal, which proposal then becomes the offer on the table at that time. This kind of back and forth negotiation will continue until the terms proposed by one party, being the offer at that stage, is accepted in its entirety by the other, thereby constituting the acceptance and, generally, at that point the contract is deemed to have been formed.

Thus, in a nutshell, common law sees a contract as a mutual declaration of an intention to be bound to stated, agreed, terms, as evidenced by an offer by one party which is, eventually or immediately, accepted by the other(s). Some jurisdictions have specific requirements for the form such offer or acceptance must take or that the contract must be embodied in a writing signed by both parties and, for certain contracts, there may be additional evidentiary requirements such as legalisation of the execution or registration of notice or of the contract itself in some regulatory archive or similar. Likewise questions
often arise as to how long an offer is effective, i.e. how long the offeror is bound to honor its offer and perform if the other party accepts later on and, as a corollary, whether an offer may be rescinded at any time prior to acceptance and, if so, the time frame allotted for that.

**Civil Law** jurisdictions generally consider that a contract becomes binding as soon as the formal requirements for establishment of a contract have been complied with. These requirements generally will look more to such issues as whether the parties voluntarily intended to bind themselves to specific terms, whether those terms are sufficiently clear to create binding obligations, as well as such matters as the legality of the obligations assumed and the capacity and authority of the parties to bind themselves, or their principals. Each country will have its own legislation setting out the formal requirements for a contract, and for the most part they will address the above issues.

But as a general principle, all jurisdictions look towards the intention of the parties, as expressed in the manner as prescribed by the provisions of its respective laws, to determine: (i) whether and when the parties bound themselves to certain obligations to the other party or parties, and (ii) what those obligations are. Other differences include the common-law requirement of consideration (*quid-pro-quo*), not usually present in the civil law regime, and the civil law duty of good faith, not specifically required under common law. Some of these will be discussed later in this paper.

**Simple Sales Contracts (“SSCs”)**

As mentioned above, the most common form of electronic SSCs are generally referred to as “click-wrap” contracts, where one party purchases goods or services from another over the internet. The purchasing party will click boxes indicating the item(s) it wishes to purchase, or the program it wishes to download, and usually another set of boxes to indicate method of payment and possibly delivery. Payment is made, normally by the purchaser providing its credit card information, in another set of dialogue boxes. Normally, it is only after the order and payment information have been provided on line, and confirmed by the selling party, that the purchasing party is provided with the standard terms and conditions, or possibly only a link thereto, with further dialogue boxes which the purchaser will click upon in order to indicate his/her agreement therewith, usually by clicking “accept” or “agree”, which then is supposed to consummate the transaction. Even with software which is offered free, the offerors of the software will require a click to indicate agreement to their “fine print” terms of software license. One can see that questions can easily arise as to exactly at which point a click wrap agreement is formed: exactly what constitutes an offer and what the acceptance. Courts in some jurisdictions have
already looked into such questions and the US court has in at least one instance recognised that click-wrap contracts do create legal obligations\(^4\), but it is still early days and time will tell whether the courts of different jurisdictions will view these questions similarly.

Such questions may become even more difficult to determine with respect to what are sometimes referred to as “browse-wrap” contracts. This refers to some websites which require acceptance of its standard terms and conditions, normally the license and attendant restrictions on use and reproduction, from every user that signs on to its website, whether goods or services are available for purchase, or for free, thereon or for access to the information available on the site. Whether, and when, such terms and conditions are communicated to the prospective user and in what manner, if any, such user accepts such terms, is even more likely to give rise to differing views by courts of different jurisdictions. One US court has already found that where a website did not give sufficient notice of the terms of its license agreement the user was not bound to such agreement simply because it had downloaded the software offered\(^5\).

For analysis of electronic formation of simple sales contracts the first, and for the most part the primary, question is what constitutes an offer and what an acceptance. Terms and conditions are generally standard and not negotiable, so that the only question is whether or not the parties are bound and many of the questions which arise with regard to negotiated contracts, in particular identifying what are binding terms, governing law, enforcement, capacity to contract and the like, do not often arise in this kind of transaction. Not only can the seller ascertain through the credit card company whether the party’s credit is current and the billing address corresponds with the requested shipping address but normally a mechanism of order confirmation will be applied, whereby a “click” to order an item is followed by a request for a second confirming click, and in some cases even a third. Goods will normally not be shipped until the credit is authorised.

\textit{Offer or Offer to Treat?}

Thus the primary issue which seems to arise with regard to formation of these SSCs is based more on the common law view of offer and acceptance. The question which seems to arise most frequently in cases and published discussions is whether, when, or to what extent, an advertisement for sale of goods or services posted on an internet website or sent by bulk email constitutes


a firm offer. Some jurisdictions consider that it does and when a prospective purchaser places its order in reliance on that advertisement such order constitutes acceptance, thereby creating the binding contract upon that acceptance. But other jurisdictions take the opposite view: that an open advertisement is not an offer, but is considered as an “offer to treat”, or an invitation to make an offer. In that scenario, the order by the prospective purchaser becomes the offer and only when that order is confirmed as accepted by the seller do contractual obligations arise.

Where the advertisement is considered an offer, the question then arises for how long is that offer valid - how long is the offeror bound to perform in the event that another party accepts? If the advertiser, being deemed an offeror, declines to perform or deliver the goods or services advertised once a prospective purchaser accepts the offer by placing an order (in this case over the internet) will the accepting party have a cause of action for breach?

In the event of such a dispute, for example if a purchasing party placed an order in response to a posting on the internet, believing that the sale were thereby consummated, but the selling party was not able to fulfill it and the purchasing party were thereby prejudiced or suffered damages due to the failure to receive the goods, the courts would have to look to whether a contract was ever effected between them: whether the advertisement was an offer or an offer to treat, and therefore whether the order was an acceptance or an offer. There is unlikely to be any choice of governing law nor forum for resolution of disputes in such a situation, and where the parties reside in different jurisdictions usually at least the purchaser will not be aware of the domicile or location of the seller. Thus unless all jurisdictions view this question similarly, one can see that courts in different locations might find exactly opposite on the matter in question. Unfortunately, however, there is no uniform view of this question. Different jurisdictions seem to take different views.

There is some attempt at uniformity offered in the language of the United Nations Convention on the International Sale of Goods\(^6\) which states, in Article 14:

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\text{“(1) A proposal for concluding a contract addressed to one or more specific persons constitutes an offer if it is sufficiently definite and indicates the intention of the offeror to be bound in case of acceptance. A proposal is sufficiently definite if it indicates the goods and expressly or implicitly fixes or makes provision for determining the quantity and the price.}
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\text{“(2) A proposal other than one addressed to one or more specific persons is to be considered merely as an invitation to make offers, unless the contrary is clearly indicated by the person making the proposal.”}
\]

\(^6\) Vienna, April 11, 1980.
More than 60 countries have ratified this convention, but many have included various reservations, which in the aggregate would tend to vitiate much of the uniformity provided. Although the convention seeks to look to the intention of the parties, by the language it would seem that an advertisement sent by email would likely be construed as an offer, whereas one simply posted on the internet would be considered as an offer to treat. Of course, as there were no electronic commerce media, except perhaps telefax, in existence when this Convention was drafted, what would have been intended by its drafters, or even its signatories, as to offers or advertisements on the internet cannot be ascertained.

Brazil and Malaysia generally view an advertisement as a binding offer, at least for a reasonable period of time. Brazil views contracts differently in accordance with whether or not the parties are face to face when making them. Parties face to face can discuss the terms, an offer can be changed or withdrawn at that time, and the contract is either made immediately or not made and is not binding until agreed by the other party. In such a case the contract is considered as entered into “inter praesentes”. Where the parties do not have face to face, direct, access to each other, and therefore cannot discuss terms, the contract is considered to be concluded “inter absentes”. Where the parties are inter absentes, Brazil considers that an advertisement is binding on the advertiser at least long enough for other parties to consider whether to accept and will not be free to renege or change the terms once the advertisement is posted. Canada makes a similar distinction, but also recognises that where a contract is entered into by parties via a “chat line” or some system of electronic conferencing the parties may be considered to be inter praesentes, whereas where the advertisement is made through an email or posted on a website, the parties are inter absentes and the advertiser is considered as an offeror and is bound to the terms of the offer for a reasonable time in which to expect acceptance/response from the offeree or from the public in general.

Switzerland recognises an offer on the internet as an offer inter absentes and views it as a binding offer for the amount of time it is reasonable to expect an acceptance to be made.

Hungary and the United Kingdom, on the other hand, generally view advertisements as offers to treat, but the UK also requires that an open offer may be revoked at any time before acceptance, but such revocation must be communicated to the offeree. Singapore and, for the most part, the United States, will look beyond the face of the question and apply other tests, such as intention of the parties, where ascertainable, what other terms or time limits are

See Chapter on Brazil by Momsen, Leonardos & Cia in ONLINE CONTRACT FORMATION, op cit.
imposed, what is a reasonable time limit for an offer to be considered as open, and form of revocation, although, absent other clarifying elements they tend to lean towards seeing an advertisement as an offer to treat and not a clear offer.\(^8\)

Clearly, then, with exactly the same facts before them, courts in different jurisdictions might well render exactly opposite decisions.

**Standard Terms and Conditions**

A question which may arise even more often than what has constituted an offer and whether it has been accepted in general, is to what extent standard terms and conditions set out by the "offeror" (or offeror to treat) will be binding upon the offeree, or purchaser of the goods or services.

Most courts which have examined this issue in cases of normal, paper, contracts have taken the logical view, seeking to determine whether the terms and conditions in question were effectively communicated to the purchaser, whether this was before or after acceptance was indicated (or order placed), whether there was some acknowledgement of agreement thereto and whether any of such conditions are unreasonable or onerous. It is reasonable to assume that the courts will apply the same reasoning for click-wrap and browse-wrap contracts executed electronically.

Beyond the above questions, however, by far the majority of problems faced with Simple Sales Contracts over the internet relate not to whether and when contracts are formed but to fraud of one sort or another, which is an issue beyond the scope of this chapter. We are more concerned here with formation of a valid and binding contract and that question arises far more frequently in the case of Negotiated Contracts. Let us therefore move on to analysis of these more complex issues.

**Negotiated Contracts**

While Common Law jurisdictions generally apply the offer and acceptance test to determine the underlying validity of a contract, the prevailing legislation in civil law jurisdictions normally set out formal requirements which must be met. Let us first see what these typically may be and then analyse these elements of a valid contract when the medium of the internet is substituted for face-to-face negotiation and paper execution.

\(^8\) See discussions in relevant chapters of ONLINE CONTRACT FORMATION, op cit.
As Indonesia is the jurisdiction in which the writer practices, we shall consider the requirements under Indonesian law as an example of the civil law regime, although in one form or another many of these issues will also arise under common law regimes as well. Indonesia’s basic law of obligations is virtually identical to mid-twentieth-century Dutch law, which, like most civil law legislation, was based upon the Napoleonic Code, and thus is typical of civil law.

Article 1338 of the Indonesian Civil Code (the “Civil Code”) is the basic provision of Indonesian law affording freedom of contract. The Article provides, inter alia, that a contract has the force of law as between or among the parties who have validly and legally entered into it.

A contract is legally concluded when it fulfills the required conditions set out in Article 1320 of the Civil Code. Those conditions are:

a. The parties must each have the legal capacity to conclude a contract. All persons are deemed to have such legal capacity except: (i) minors (under 21 years old, unless married) and (ii) persons under official custody. (Legal entities must be represented by someone with the authority to bind that entity, either actual corporate authority or authority granted by such an authorised person through power-of-attorney.)

b. The subject matter must be clearly defined. If possible the quality and quantity thereof should be specified. The obligations of each of the parties must be clear.

c. The contract must be for a permissible legal purpose; i.e. no obligation or performance may be contrary to the law, public order or public morality.

d. There must be a meeting of minds, by free consent, without any coercion, error or deceit.

Where there is lack of legal capacity, or of free consent on the part of a party, the contract is voidable and annulment may be requested from the court. In cases of ambiguity about the subject matter or illegal cause the contract is null and void ab initio, and the court must, ex officio, so declare.

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9 Dutch Laws in force at the time of Indonesia’s independence, in 1945, were adopted and, except to the extent subsequently repealed or superseded by new laws, remain in effect.
10 Note: these are enumerated here in a different order from that provided in the Civil Code.
11 Article 330 Civil Code.
12 Article 433 Civil Code.
13 Article 1333 Civil Code
A contract which fulfills the requirements mentioned above comes into existence as a legally binding obligation the moment there is an agreement between or among the parties\(^\text{14}\) (whether or not the same is in writing) and cannot be terminated unilaterally\(^\text{15}\) without judicial intervention\(^\text{16}\). Every contract must be performed in good faith\(^\text{17}\).

Let us, then, examine the questions that may arise over each of these elements when a contract is concluded through electronic means, primarily through the internet.

**a. Legal Capacity**

With traditional contract negotiation the parties are generally known to each other, at least sufficiently for each to determine the approximate age and mental capacity of the other(s). But how does one determine that the person who is making a commitment through the internet does have legal capacity? How does one even determine what constitutes such legal capacity in the jurisdiction to which such party is subject or, in many cases, even what jurisdiction that may be? A contractual commitment might easily be made over the internet by an underage child or even, for that matter, an insane person or incarcerated criminal. At least in Indonesia, a court should rule that an underage child will not be held liable for breach of contract. More importantly, how can a party intending to contract with a corporation or similar legal entity ascertain that the person with whom he or she is dealing is in fact authorised to represent that legal entity?

A mechanism to determine exactly with whom one is contracting, and what is that person’s authority so to act is clearly in order. Asking for such information as a preliminary measure may suffice, provided the responding party provides accurate information. But how can one even determine that? Digital Signatures, discussed below, may solve this difficulty to some extent.

**b. Certainly of Obligations**

While the subject matter of an internet-based SSC is immediately identifiable, as it is the product being advertised or offered, in Negotiated Contracts there are likely to be many, more complicated, contractual obligations to be assumed. Where the contract is to be formed through electronic commerce, the terms finally agreed upon will usually be embodied in a series of negotiating correspondences.

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\(^{14}\) Article 1338 Civil Code

\(^{15}\) Or in some case even bilaterally, such as ante-nuptial settlements

\(^{16}\) Article 1266 Civil Code.

\(^{17}\) Article 1338 Civil Code.
sent through e-mail, or through a combination of telephone conversations, e-mail, telefax and perhaps other means as well. Where drafts are exchanged through the internet and, when all of the terms are finally agreed upon, a hard copy is produced for execution, we can be reasonably secure that the terms set out in that hard copy will correctly represent the agreement of the parties, particularly where, as in Indonesia and some other civil law jurisdictions such as France, the parties initial each page. But what of contracts that are constituted by the exchange of e-mails only? How does one determine at what stage the contract has been concluded and which of the set of e-mails constitute the final terms?

And what about integrity of content? How does one ensure that the electronically created document which one party has sent to another is not edited and revised. How do we prove that the terms of the contract which are negotiated through the internet and finally agreed upon will not be adjusted just that little bit when presented as evidence, or for enforcement?

c. **Legal Purpose.**

There are certain activities which would be legal in some jurisdictions but are contrary to law and/or public policy in others. Gambling is one example, which concept may be deemed to extend to the holding of raffles, sweepstakes or lotteries. In some jurisdictions, such as Monaco, Macau and even some states of the USA, such as Nevada, all forms of gambling are legal, while in others, such as Indonesia, any gambling is prohibited. The laws of other jurisdictions may fall somewhere in between. How the prohibition against an Indonesian resident entering, and winning, for example, a foreign state lottery, could be put into effect is difficult to contemplate. But it is clear that any action submitted to an Indonesian court to enforce a gambling obligation would almost certainly be rejected on the basis of illegality. This would apply regardless of how the obligation were incurred - in person or electronically.

The legality question of course brings up other issues, such as those relating to computer fraud and crime, but these, again, are well beyond the scope of this chapter and we shall leave them to others to discuss.

d. **Free Consent - “Signing” a Contract.**

As mentioned above, under Indonesian law, and that of at least some other civil law jurisdictions, the contract is deemed to come into existence the moment both parties have come to agreement on their respective rights and obligations. So we need to ensure not only that such rights and obligations are clear, but that they have in fact been agreed to. Traditionally this would be indicated by the parties affixing their signature to the end of the agreement (and, as mentioned above,
their initials to each page in jurisdictions where the same is either the law or the practice.)

Probably the major difficulty faced by the legal profession in ensuring effective formation of contracts through electronic means stems from the requirements of many jurisdictions that contracts need be in writing and signed by the parties if they are to be enforceable. This requirement differs in some common law and civil law jurisdictions. Common law jurisdictions often have strict requirements of writing through legislation such as statutes of frauds\textsuperscript{18}. Civil law jurisdictions vary. Normally the requirement of a signed writing is not as stringent as in many common law jurisdictions and is a matter of evidentiary value rather than one of validity.

Under Indonesian law, although theoretically a contract need not be committed to writing so long as the formal requirements as met, as a practical matter where there is no writing the compliance with these requirements will be difficult to prove if contested. Furthermore, the requirements under Indonesian law and practice, as well as that of some other jurisdictions, for proving the authenticity of a signature are quite stringent, normally requiring two witnesses or a notarial legalisation.

THE QUESTIONS

As mentioned at the outset, the questions that arise in evaluating the validity and enforceability of any contract, but in particular those entered into electronically without the parties having direct personal contact, can, in lay parlance, be broken down into the age-old categories of Who, When, Where, What and Why?

Who?

First of all we need to identify who are the parties to any contract. Where parties sit together and execute a paper document, they can show each other their identifying documentation and, where relevant, corporate authority, and will actually see each other execute the final contract, and may even have witnesses or a notarial legalisation. How can the parties to an electronic contract assure these matters?

With the advent of scanners and .pdf files, documents indicating corporate authority and, to some extent, legal capacity, can be provided electronically.\footnote{See, inter alia, Section 2 of the UK Law of Property Act of 1989, and Article 2-201 of the U.S. Uniform Commercial Code.}
Fraud and forgery are, of course, possible, but that risk is not much greater for a scanned certified document than for an “original”. More importantly, we need to establish that a party sought to be bound by an electronically generated contract has really agreed to it.

**Electronic Signature**

To this problem we are beginning to see solutions emerge through the advances of technology. An example is the “electronic signature”, which was quite early on approved by then U.S. President, Clinton, who in 2000 signed a bill - electronically of course - giving full legal effect to electronic signatures in the U.S. Hong Kong and New Zealand also have legislation recognising electronic signatures and presumably most other jurisdictions have, or soon will have, enacted similar legislation to comply with market conditions, although so far many, in particular civil law jurisdictions, impose additional requirements to ensure authenticity of such electronic signatures.

In December of 2001, the United Nations Commission on International Trade Law (“UNCITRAL”), issued, by Resolution of the General Assembly, a **Model Law on Electronic Signatures** (the “MLESig”), offered to any and all states that may wish to adopt it, and intended to be adopted together with UNCITRAL’s **Model Law on Electronic Commerce** (the “Model Law”) discussed below in this Chapter. The MLESig defines an Electronic Signature as: “. .  data in electronic form in, affixed to or logically associated with, a data message, which may be used to identify the signatory in relation to the data message and to indicate the signatory's approval of the information contained in the data message,”\(^{19}\) and provides that: “Where the law requires a signature of a person, that requirement is met in relation to a data message if an electronic signature is used that is as reliable as was appropriate for the purpose of which the data message was generated or communicated, in the light of all the circumstances, including any relevant agreement.”\(^ {20}\)

Jurisdictions which adopt the MLESig, preferably together with the Model Law, will have accepted electronic signatures as, more or less, the equivalent of a physical signature on paper. However, it does not provide any guidance as to how the electronic signature may be created to meet the requirements. One such mechanism is offered to the world at large in **General Usage for International Digitally Ensured Commerce** (known as “GUIDEC”), issued by the International Chamber of Commerce (“ICC”). GUIDEC applies the term “ensure” to indicate the method by which a sender of a message may authenticate, or ensure, the message. An ensured message is one that is: “(I)

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\(^{19}\) Article 2 (a). The full text can be found on the UNCITRAL website: www.uncitral.org.

\(^{20}\) Article 6 (1).
intact and unaltered since ensured, and (2) identified with its ensurer.”

The method suggested by which parties may ensure involves a combination of a private and a public key, with third-party certification, and is described in some detail in the GUIDEC. GUIDEC is not intended for use in simple internet sales, but only for Negotiated Contracts and similar instruments by which a party may be bound.

Many technology companies offer encryption software, often bundled with internet browsers, which can legally certify a signatory. But how is fraud to be avoided? Does the electronic signature stay with the computer in which the software is installed, or can a person apply it from any computer? In either case, how can one protect it against hacker, or even co-worker, break-in? GUIDEC refers to this problem and provides that a sender of an ensured message is not to be held responsible for such message if the same is forged. It does not advise how to avoid hacking and forgery, however, nor could it be expected to do so.

Another solution is offered by a Japanese company through a device which enables electronic documents to be signed with a fingerprint. This is a field that will certainly continue to evolve in the near future. But each time a “foolproof” system is developed, will it only be a very short matter of time before the code is broken?

The issue becomes more complicated where contracts are entered into, or obligations assumed, by means of “electronic agents”. This term has been used to refer to certain computer programs or other electronic means which may be used to communicate electronically and initiate action or respond to electronic “offers”. Theoretically two electronic agents could contract together with no actual person even participating in such transaction at the time it is contracted for. At least recent Canadian legislation recognises such contracts in cases in which it can be established that such an electronic agent was in fact authorised by the party to enter into such contracts, for example, if a computer is programmed to make or accept offers in predetermined circumstances the intention of the programmer or user to create legal relations may be reasonably inferred.

Electronic agents may be utilised in systems such as Electronic Data Interchanges, often referred to as “EDI”. These are closed, or private information systems through which contracting parties both, or all, utilise a specific

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21 See Article 2, Section VII, GUIDEC, available at: www.iccwbo.org/home/guidec/guidec.asp.
22 A very clear description of the working of an electronic signature can be found in Nick Lockett’s chapter on the United Kingdom in ONLINE CONTRACT FORMATION, op cit at pg 303.
dedicated software application installed in their computer which links their information systems together and allows them to execute a contract via an encrypted EDI message which is decipherable only by the information systems of these private participants. EDI is defined in the UNCITRAL Model Law on Electronic Commerce as: “... the electronic transfer from computer to computer of information using an agreed standard to structure the information.” In a sense it might be considered a private internet membership club used for the purpose of establishing contractual relations. As the scope of EDI is limited to individual participants in such systems, we have deemed further discussion of EDI to be outside the scope of this Chapter.

**Cannot always satisfy formal requirements electronically**

Some contracts require a higher standard of execution. Under many laws, for example, and those of civil law jurisdictions in particular, certain contracts must be taken as notarial deeds thereby being entitled to official status or force of law. Examples might include contracts for the sale of land or registered seagoing vessels or establishment of companies and the creation of certain security interests over property. The contracting parties to such deeds must appear before a notary public, who in some jurisdictions must read out to them the text of the deed, and certify their acknowledgement that those are the terms to which they have agreed. Such a deed is then executed in the presence of the notary. Can this type of contract be consummated through electronic means? It seems clear that it cannot, at least not unless and until a jurisdiction with authority over such deeds adopts an entirely new paradigm for such authentic government-regulated documentation.

And at least for the foreseeable future, regardless of what facilities are being offered for electronic contracts, if the legal profession wishes to ensure the integrity and enforceability of negotiated contracts, and be sure that such contracts will meet the test for validity and enforceability in any jurisdiction in which it may be disputed, it would still be wise to commit the final copy to paper and have each party sign it in the traditional way and exchange original executed copies by post or courier, not only via the internet.

**When?**

**When is a contract formed?** In Negotiated Contracts, as in SSC’s mentioned above, the point at which a contract is concluded, or deemed concluded, may be relevant for a number of purposes, the most important of which is to know when and whether the parties have agreed to be bound with each other, and also to

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24 Article 2 (b). The Model Law is discussed in more detail later in this Chapter.
identify what are the terms to which they have agreed. We have discussed offer and acceptance in the section on SSCs, above, but with Negotiated Contracts the question may take on further complexities. Common law generally deems the contract to have been concluded when an offer is accepted, and such acceptance is communicated to the offeror. Civil law generally deems the contract to be concluded the moment the formal requirements, as set out in the relevant legislation, are met. One can imagine, without looking much further, that it is possible that these two concepts may not always result in the same legal conclusion, particularly where the parties are themselves subject to different legal regimes and no specific governing law has been designated.

Where contracts are executed on paper by the parties, in particular where they sit together for such execution, it is clear that the contract is formed upon such execution, even if in some cases the contract may recite that it becomes effective at or as of an earlier, or even later, time. As a written signature is not always required for a contract to be valid (see discussion under heading “Free Consent - “signing” a Contract”, above) other principles must be looked to to determine when the contract came into effect. Common law looks to when an acceptance is made and communicated to the offeror. But even this seemingly simple test has given rise to disputes the world over, as different jurisdictions may have different views as to when an acceptance is deemed to be made or received. Some laws state that the acceptance is effective upon its leaving the control of the sender, whereas others that it becomes effective only when it is received by the offeror or when it is in a situation in which the offeror has control of it and ability to know of it (such as arrival into the email box of the offeror), whether or not the offeror actually sees it at that time. Of course the offeror may designate the form or means which an acceptance may take, and as long as the prospective acceptor has due notice of such requirement most jurisdictions will recognise it. But possibly not all where additional legal requirements are imposed.

**When is a Revocation of an Offer Effective? When does a Breach Occur?**

Questions also arise as to the validity of a contract where the offeror seeks to revoke an offer prior to receipt of acceptance but where notice of acceptance has been dispatched. Since views on when contracts are formed differ from jurisdiction to jurisdiction, clearly this issue too can create legal uncertainty where such notices are sent over the internet. And where there are requirements for notice to cure or attempt at amicable settlement, before a breach can be declared or action therefore may be commenced, the appropriate legal regime must be consulted to determine whether such time limits have been complied with and thus whether or not a party may have a cause of action. All of these questions may be treated differently by the legislative regime and /or the
courts of differing jurisdictions.

**Where?**

Many questions arise in this category and, because of the borderless nature of electronic commerce and the territorial nature of legislation, clearly some of the major difficulties in finding uniform solutions will arise in these areas.

*Where are the Parties Situate? Where is the Contract Entered into and Where is it deemed to be Performed?*

Parties that contract via the internet may do so from virtually anywhere in the world, provided there is some telephonic or other communications service available at such locality. But the internet provides no facility to determine where is the website you are visiting, or where a party to or from whom an email is addressed is either domiciled or situate at the time. Most website and email addresses are not location specific. Unless both parties are domiciled in the same jurisdiction or the parties designate a law to govern their relationship, what law would one look to to determine the ramifications of this? Clearly conflicts of laws legislation in any jurisdiction in which a party might seek to enforce its contractual rights would come into play if these matters were not made clear in the contract or ancillary matters thereto. But the conflict of laws rules differ from one jurisdiction to another, and thus, again, different answers will result from application to different courts or recourse to laws in different jurisdictions.

**Tax Ramifications**

These questions become particularly relevant in determining which jurisdiction’s taxing authority may tax the transaction, or the income derived therefrom. Most countries tax on a combination of the bases of: (i) source of income (where the activity giving rise to the income takes place), and (ii) destination of income (where the recipient of the income is domiciled or resident.) How then do we determine which taxing authority may tax any given electronic transaction? A product may be produced, or service rendered, in one or more countries through a facility owned by a resident of another but under license from the IPR owner located in a third country, marketed by a marketing company located in one or more 4th countries through the internet and purchased by buyers in any number of 5th countries. Goods may be stored in warehouses in one or more 6th countries and shipped to all buyers from there, and the purchase price may be paid by credit card to a bank in a 7th country and credited to the account of a subsidiary of the seller located in an 8th country. What taxing authority
determines the taxes that are due and payable; who is responsible to pay them; and to which taxing authority must they be paid? These questions were posed by Indonesia’s then Director of Income Tax, Dr. Gunadi, in his paper for the International Fiscal Association’s compilation of national reports on Taxation of Electronic Commerce. Dr. Gunadi concluded, as we must also conclude, that electronic commerce forces us all to seek new paradigms in the legal regulation of business transactions. But no country can do this alone. It will require cooperation among all countries for the questions posed in this chapter and those questions yet to emerge meaningfully and consistently to be answered.

**What is the Governing Law?**

How are international electronic contracts to be interpreted where the laws of each relevant jurisdiction (to the extent such jurisdictions can be determined) differ? And which country or countries will have jurisdiction to enforce a contract entered into in cyberspace?

Certainly it is to be recommended that parties clearly designate the place of performance and, more importantly, their choice of governing law in any electronic contract. Of course in SSCs and other contracts the parties are unlikely to use counsel and thus are even less likely to consider the issue. How does one establish what law is to govern their electronic transaction? In traditional paper contracts, where the governing law is not clear, general principles of private international law would normally apply the law of the place where the contract is concluded and/or the law of the place in which the contract is performed. In a transaction contracted electronically neither of these factors may be able to be ascertained and thus neither of such general rules can be applied. The contract may be concluded in cyberspace and/or may be performed in more than one, or in indeterminable, jurisdictions, just as in our taxation example, above.

Legal control - the right to make and enforce laws - has always been based upon the territorial control of the geographical area so governed. If the internet is either domiciled everywhere, or nowhere, what laws can effectively govern activities conducted within or through it: transactions which occur in cyberspace. Is this not the great metaphysical question of our age: Just where is cyberspace located?

There is no government with the jurisdiction to govern or regulate cyberspace. Only if all governments adopt the same laws to govern “e-conomic” transactions will there be the possibility of an even playing field and effective, transparent, flow of business through the internet. Otherwise a transaction may be subject to too many, conflicting, laws, or perhaps to none at all.
Where can the Contract be Enforced?

Again, unless a choice of jurisdiction or designation of an alternative means of dispute resolution, such as arbitration in a certain venue or under specific institutional rules or administration, are incorporated into the contract, the domicile of the party against which the aggrieved party wishes to proceed may be the only forum in which the contract can effectively be enforced, assuming such domicile can be determined.

If the place of domicile or residence of a party is known, the other party may bring an action in the court which has \textit{in personam} jurisdiction over the party to be claimed against. If such domicile is not known, whether the court of the domicile of the complaining party has jurisdiction over the subject matter will depend upon the laws of the complainant’s jurisdiction, and such laws do vary from state to state. But even if the laws of the state in which a case may be brought recognise the courts’ jurisdiction, those of the state in which the defendant may reside or maintain assets may not recognise judgements of the courts of other countries, or at least those of the country in which the judgement was issued.

Where the parties have in their contract designated arbitration as the means to resolve any disputes which may arise thereunder, some of these problems may be less difficult to resolve. Most arbitration rules and some laws enabling arbitration make it clear that an arbitral tribunal has the jurisdiction to decide upon its own jurisdiction over the subject matter of and parties to a dispute, and absent designation by the parties, also to decide upon the seat, or venue of the arbitration. Although the arbitration laws and rules may differ on these and other points, as long as both the state in which the arbitration is held and that in which the award eventually rendered is sought to be enforced are signatories to the 1958 United Nations Convention on the Recognition and Enforcement of Arbitral Awards (the “New York Convention”), enforcement should not present difficulty, as an award rendered in any contracting state may be enforced in any other.

The issue may not be quite a clear, however, if an arbitration is held electronically. Many arbitration laws require that in order to be valid an arbitral award must state where the award was rendered and must be signed by all arbitrators. Both of these requirements can cause difficulties where the arbitration is held in cyberspace and rendered electronically. Some arbitration rules and laws have different requirements for procedures, registration and/or enforcement, depending upon whether the arbitration is domestic or international. Where the arbitrators do not hold hearings in a single location but sit in different places, as do the parties, where can the arbitration be deemed
to be held and where is the award rendered? Only if the parties can agree that the arbitral reference will be deemed to be held, and/or the award rendered, in a specific geographic location will cyber-arbitrations be feasible where either of the parties resides or maintains assets in a jurisdiction with such requirements. Cyberspace is not a signatory to the New York Convention.

Where the award is required to be signed by the arbitrators, and/or registered in the courts, unless the Model Law has been adopted in the jurisdiction in which the award is sought to be enforced and unless such jurisdiction recognises electronic signatures or ensured signatures as provided in the GUIDEc or the MLESig, the original award will have to be printed out in hard copy and sent around to the full tribunal for signature. For the present, this is a precaution which it is probably wise to take in any arbitration unless the parties have specifically agreed, in a signed writing, to the contrary.

What?

What are the Terms of the Contract?

The terms and conditions which will bind each of the parties to a Negotiated Contract are generally negotiated through meetings, conversations, drafts passing back and forth and similar communications, until a point is reached at which both, or all, parties are sufficiently satisfied with the language included in a particular draft to agree thereto. The final version, with all terms and conditions agreed upon by the parties is normally embodied in a set of hard copy originals executed by the parties with each one retaining an identical original signed at least by the other. Such negotiations can almost as easily be conducted through electronic messages such as email and perhaps even video conferencing. However when all of the terms have been agreed upon (or, in the parlance of common law, when the final offer is accepted) how do the parties indicate their agreement and intention to be bound to these electronically? And, perhaps more importantly, is there a mechanism to ensure that an instrument embodying the full and final terms can be obtained, reviewed and perhaps used as evidence in case of an eventual dispute?

Some contracts are not committed to a single writing but are embodied in a series of letters or, in the case of a contract negotiated and formed electronically, a series of emails. The questions that arise here include how can each party ensure that the other has the same understanding of the totality of the rights and obligations as he has, that the same messages are considered to constitute their agreement, and that the other party will not revise any of the text of the emails thereby adjusting the terms previously agreed to?
Why?

*Why do the Parties wish to Contract? or: What is the Consideration - is Consideration Required?*

One issue that indeed will vary from jurisdiction to jurisdiction is the necessity for consideration for a contract to be recognised as valid. Most common law jurisdictions require that each party receive some benefit from a contract and do not recognise one-sided obligations as binding. Some may require that the benefits are more or less in balance, where others will be satisfied even with nominal consideration, or simply the recital that there has been consideration without specifying what it is. Many civil law jurisdictions have no such requirement and recognise even a patently unfair and unbalanced contract as valid as long as it complies with the formal requirements set by its laws.

*Recognition of Electronic Obligations*

The above are some of the factual questions which the parties should keep in mind and these should be able to be clarified with diligent practice. However, we must also look to the laws of the jurisdictions in which the contract may at any point need to be enforced, and the law governing the contract itself, to ensure those laws recognise contractual obligations formed in this way as valid, and will enforce them. Some jurisdictions will still require a hard copy signed writing in order to recognise the obligations as binding on a party. Others now recognise electronic communications, but require confirmation, either by email as well or in hard copy writing. Thus even when the terms have all been agreed upon, parties would be wise to look to the laws that might at any point be deemed relevant to ensure that the contract, and its means of execution, are recognised.

As mentioned above, although the formal requirements for a contract do not necessarily require it be committed to writing, a verbal contract can create innumerable evidentiary difficulties whenever the obligations of the parties are disputed. Thus, for all practical purposes, we must assume that a “writing” is required to establish contractual obligations. Can that writing be in electronic form?

*SOME SOLUTIONS*

Over the past years, since electronic commerce began to show itself as a force for the future conduct of all manner of business, and as the questions raised herein and many others have emerged, not only have individual states been seeking
solutions to such questions, but so have international organisations which support trade. We have mentioned, above, the ICC and UNCITRAL, which two organisations seem to be the first to address so many international commercial issues. Primarily UNCITRAL creates draft legislation which it offers to all governments to adopt, or adapt, and encourages as many as possible to do so in the interests of standardising the legal regime for international trade, thereby eliminating the many divergences in laws which lead to uncertainty and sometimes injustice today. Although sometimes UNCITRAL offers tools for the private sector, such as its rules of arbitration for use by any private parties in ad hoc arbitral references as well as by arbitral institutions which wish to bring their rules into synchronisation with that of other bodies, primarily UNCITRAL’s efforts are directed at the public sector. The ICC, on the other hand, addresses more the private sector, creating draft terms for private contracts. although their ICC court of arbitration is more in the line of a public sector facility, as it replaces a court of law where the parties have so designated.

Thus, as seen above, UNCITRAL has created a model law on electronic signatures, and the ICC has offered its GUIDE to help private parties implement such a law where passed, or even where it is not in effect. UNCITRAL has also offered its Model Law on Electronic Commerce to countries wishing to utilise it as their law on such matters, which Model Law recognises electronic messages as the equivalent of written ones, while one of the most recent products offered by the ICC are “eTerms 2004”, offering draft language which any party may include in their contracts to facilitate the acceptance of such electronic messages.

**ICC eTerms 2004**

The “eTerms“ themselves address many, although by no means all, of the questions we have posed in this paper above. The eTerms are expressed as follows:

“**Article 1 – E-commerce agreement**

The parties agree:

1.1 that the use of electronic messages shall create valid and enforceable rights and obligations between them; and

1.2 that to the extent permitted under the applicable law, electronic messages shall be admissible as evidence, provided that such electronic messages are sent to addresses and in formats, if any, designated either expressly or implicitly by the addressee; and

1.3 not to challenge the validity of any communication or agreement between
them solely on the ground of the use of electronic means, whether or not such use was reviewed by any natural person.

Article 2 – Dispatch and Receipt

2.1 An electronic message is deemed to be:

(a) dispatched or sent when it enters an information system outside the control of the sender; and

(b) received at the time when it enters an information system designated by the addressee.

2.2 When an electronic message is sent to an information system other than that designated by the addressee, the electronic message is deemed to be received at the time when the addressee becomes aware of the message.

2.3 For the purpose of this contract, an electronic message is deemed to be dispatched or sent at the place where the sender has its place of business and is deemed to be received at the place where the addressee has its place of business.”

UNCITRAL Model Law

The United Nations Commission on International Trade Law (“UNCITRAL”) has been prescient enough to provide a suggested solution to many of the above enumerated problems in their Model Law on Electronic Commerce of 1996 (as supplemented in 1998, the “Model Law”). As with their model arbitration law UNCITRAL offers the Model Law to all jurisdictions to adopt, or adapt, in this case in support of the commercial use of international contracts in electronic commerce. It has already been adopted in over 20 jurisdictions and has influenced legislation in others, including most of the states of the USA. Article 11 (1) of the Model Law states:

“In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data messages. Where a data message is used in the formation of a contract that contract shall not be denied validity or enforceability on the sole ground that

25 ICC Department of Policy and Business Practices, Commission on Commercial Law and Practice; Commission on E-Business, IT and Telecoms, Task Force on Electronic Contracting, ICC eTerms 2004, ICC Guide to electronic contracting, ICC Document 460-22/3rev3, 28 May, 2004. ICC eTerms 2004 should be available on the ICC website by the time of publication of this Chapter, although it was not as yet posted at time of writing.
a data message was used for that purpose.”

Article 11 (2) allows certain types of contracts to be excluded from the scope of this Article 11 (1), at the option of the issuing body.

“Data message” is defined as:

“. . information generated, sent, received or stored by electronic, optical or similar means including, but not limited to, electronic data interchanges. (EDI), electronic mail, telegram, telex or telecopy.”

Generally the solutions offered by the Model Law provide that documents, instruments, or other units of information will not be denied legal effect, validity or enforceability solely on the grounds that the same is in the form of a data message. The Model Law has been well drafted to set new paradigms for the transaction of business in a manner compatible with the unique borderless, paperless nature of electronic commerce. This is made clear in its Introduction. Paragraph 2 of section A, Objectives, states:

“"The use of modern means of communication such as electronic mail and electronic data interchange (EDI) for the conduct of international trade transactions has been increasing rapidly and is expected to develop further as technical supports such as information highways and the INTERNET become more widely accessible. However, the communication of legally significant information in the form of paperless messages may be hindered by legal obstacles to the use of such messages, or by uncertainty as to their legal effect or validity. The purpose of the Model Law is to offer national legislators a set of internationally 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.”

Indeed, coordination of legislation is even more essential in the regulation of electronic commerce than of arbitration laws and rules, as addressed by the UNCITRAL’s Model Law on Arbitration and its Rules of Arbitration. Most arbitrations, except where conducted electronically, are usually conducted in a single jurisdiction and thus the hardship of such jurisdiction having different laws from others is not as severe. Electronic commerce is by its very nature borderless, encompassing any number of different jurisdictions for any single transaction. If each jurisdiction views the transaction differently from a legal

26 Article 2 (a).
point of view, how can any such business effectively be concluded?

Jurisdictions which have adopted, or which will adopt, the Model Law will now have a basis for recognition and admissibility of electronically created and/or transmitted contractual and other documentation. This will mean, among other things, that within such jurisdictions, where a regulatory authority does not wish to recognise electronic “data messages”, it will have to take affirmative action, i.e. promulgate legislation which specifically and categorically excludes it. Requirement of execution as a deed before a notary would certainly constitute such legislation. Otherwise, the mere fact that the messages are contained in electronic media will not cause such message to be viewed as being inferior to a written document. The full text of the Model Law is attached as Schedule I to this Chapter 27.

Thus we can see that UNCITRAL and the ICC, through UNCITRAL’s Model Laws and the ICC’s GUIDEC and eTerms, respectively, are already laying the basis for a uniform international standard of recognition and application of electronic contractual data. The Model Laws address validity of electronic messages and signatures, while GUIDEC addresses protection of their integrity and eTerms provides uniform language for implementation. Jurisdictions that do not adopt the Model Laws or apply the system offered by the ICC, will have to find their own way in navigating across these troublesome shoals. But it is clear that because electronic commerce can cut across any number of jurisdictional borders, consistent regulation can only be effected if all countries apply the same, or at least a similar, regulatory framework. The Model Laws have been created for just such a purpose and it is hoped that, with time, they will be adopted by most, if not all, jurisdictions.

Conclusion

Concurrent with, although not arising out of, the economic chaos which reigned in the last few years of the twentieth century came the rise of electronic commerce. As financial markets struggle to restructure debt obligations and rebuild ailing economies, a new universal internet e-conomy is emerging which pays no heed to geographical borders or long-established commercial traditions. The job of the legal practitioner has changed, and is changing, all around us and we find we must establish new paradigms in order to address the myriad of questions and pitfalls we are encountering every step of the way. Because there is no single governing body with the power and authority to regulate borderless commerce, we can no longer expect business practices to comply with the laws and regulations established in any one jurisdiction or by any one government.

27 The full text with explanatory material and a guide to its use can be found on the UNCITRAL website: www.UNCITRAL.org.
organisations such as UNCITRAL and ICC are seeking to offer global solutions. It is up to each government individually, as well as all governments collectively, to remove the stumbling-blocks which its old regulatory framework may have, over the years, set in the way of new business trends. And it is up to the legal profession to help our governments in this effort for are we not, after all, the bridge which connects those lawmakers with the constituency which must follow their laws in the proper conduct of business and the growth of the world’s economies?

Karen Mills
Chartered Arbitrator
kmills@cbn.net.id
Schedule I

UNITED NATIONS COMMISSION ON INTERNATIONAL TRADE LAW (UNCITRAL)

UNCITRAL Model Law on Electronic Commerce with Guide to Enactment 1996, with additional article 5 bis as adopted in 1998

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UNCITRAL MODEL LAW ON ELECTRONIC COMMERCE

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Resolution adopted by the General Assembly
[on the report of the Sixth Committee (A/51/628)]


The General Assembly,

Recalling its resolution 2205 (XXI) of 17 December 1966, by which it created the United Nations Commission on International Trade Law, with a mandate to further the progressive harmonization and unification of the law of international trade and in that respect to bear in mind the interests of all peoples, in particular those of developing countries, in the extensive development of international trade,

Noting that an increasing number of transactions in international trade are carried out by means of electronic data interchange and other means of communication, commonly referred to as "electronic commerce", which involve the use of alternatives to paper-based methods of communication and storage of information,

Recalling the recommendation on the legal value of computer records adopted by the Commission at its eighteenth session, in 1985, (1) and paragraph 5(b) of General Assembly resolution 40/71 of 11 December 1985, in which the Assembly called upon Governments and international organizations to take action, where appropriate, in conformity with the recommendation of the Commission, (1) so as to ensure legal security in the context of the widest possible use of automated data processing in international trade,

Convinced that the establishment of a model law facilitating the use of electronic commerce that is acceptable to States with different legal, social and economic systems, could contribute significantly to the development of harmonious international economic relations,

Noting that the Model Law on Electronic Commerce was adopted by the Commission at its twenty-ninth session after consideration of the observations of Governments and interested organizations,

Believing that the adoption of the Model Law on Electronic Commerce by the Commission will assist all States significantly in enhancing their legislation governing the use of alternatives to paper-based methods of communication and storage of information and in formulating such legislation where none currently exists,

1. Expresses its appreciation to the United Nations Commission on International Trade Law for completing and adopting the Model Law on Electronic Commerce contained in the annex to the present resolution and for preparing the Guide to Enactment of the Model Law;
2. Recommends that all States give favourable consideration to the Model Law when they enact or revise their laws, in view of the need for uniformity of the law applicable to alternatives to paper-based methods of communication and storage of information;

3. Recommends also that all efforts be made to ensure that the Model Law, together with the Guide, become generally known and available.

85th plenary meeting
16 December 1996

UNCITRAL Model Law on Electronic Commerce
[Original: Arabic, Chinese, English, French, Russian, Spanish]

Part one. Electronic commerce in general

Chapter I. General provisions

Article 1. Sphere of application*

This Law** applies to any kind of information in the form of a data message used in the context*** of commercial**** activities.

* The Commission suggests the following text for States that might wish to limit the applicability of this Law to international data messages:

"This Law applies to a data message as defined in paragraph (1) of article 2 where the data message relates to international commerce."

** This Law does not override any rule of law intended for the protection of consumers.

*** The Commission suggests the following text for States that might wish to extend the applicability of this Law: "This Law applies to any kind of information in the form of a data message, except in the following situations: [...]".

**** The term "commercial" should be given a wide interpretation so as to cover matters arising from all relationships of a commercial nature, whether contractual or not. Relationships of a commercial nature include, but are not limited to, the following transactions: any trade transaction for the supply or exchange of goods or services; distribution agreement; commercial representation or agency; factoring; leasing; construction of works; consulting;
Article 2. Definitions

For the purposes of this Law:

(a) "Data message" means information generated, sent, received or stored by electronic, optical or similar means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy;

(b) "Electronic data interchange (EDI)" means the electronic transfer from computer to computer of information using an agreed standard to structure the information;

(c) "Originator" of a data message means a person by whom, or on whose behalf, the data message purports to have been sent or generated prior to storage, if any, but it does not include a person acting as an intermediary with respect to that data message;

(d) "Addressee" of a data message means a person who is intended by the originator to receive the data message, but does not include a person acting as an intermediary with respect to that data message;

(e) "Intermediary", with respect to a particular data message, means a person who, on behalf of another person, sends, receives or stores that data message or provides other services with respect to that data message;

(f) "Information system" means a system for generating, sending, receiving, storing or otherwise processing data messages.

Article 3. Interpretation

(1) In the interpretation of this Law, regard is to be had to its international origin and to the need to promote uniformity in its application and the observance of good faith.

(2) Questions concerning matters governed by this Law which are not expressly settled in it are to be settled in conformity with the general principles on which this Law is based.

Article 4. Variation by agreement

(1) As between parties involved in generating, sending, receiving, storing or otherwise
processing data messages, and except as otherwise provided, the provisions of chapter III may be varied by agreement.

(2) Paragraph (1) does not affect any right that may exist to modify by agreement any rule of law referred to in chapter II.

Chapter II. Application of legal requirements to data messages

Article 5. Legal recognition of data messages

Information shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of a data message.

Article 5 bis. Incorporation by reference

(as adopted by the Commission at its thirty-first session, in June 1998)

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.

Article 6. Writing

(1) Where the law requires information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference.

(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being in writing.

(3) The provisions of this article do not apply to the following: [...].

Article 7. Signature

(1) Where the law requires a signature of a person, that requirement is met in relation to a data message if:

(a) a method is used to identify that person and to indicate that person's approval of the information contained in the data message; and
(b) that method is as reliable as was appropriate for the purpose for which the data message was generated or communicated, in the light of all the circumstances, including any relevant agreement.

(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the absence of a signature.

(3) The provisions of this article do not apply to the following: [...].

Article 8. Original

(1) Where the law requires information to be presented or retained in its original form, that requirement is met by a data message if:

(a) there exists a reliable assurance as to the integrity of the information from the time when it was first generated in its final form, as a data message or otherwise; and

(b) where it is required that information be presented, that information is capable of being displayed to the person to whom it is to be presented.

(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being presented or retained in its original form.

(3) For the purposes of subparagraph (a) of paragraph (1):

(a) the criteria for assessing integrity shall be whether the information has remained complete and unaltered, apart from the addition of any endorsement and any change which arises in the normal course of communication, storage and display; and

(b) the standard of reliability required shall be assessed in the light of the purpose for which the information was generated and in the light of all the relevant circumstances.

(4) The provisions of this article do not apply to the following: [...].

Article 9. Admissibility and evidential weight of data messages

(1) 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.

(2) 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.

Article 10. Retention of data messages

(1) Where the law requires that certain documents, records or information be retained, that requirement is met by retaining data messages, provided that the following conditions are satisfied:

(a) the information contained therein is accessible so as to be usable for subsequent reference; and

(b) the data message is retained in the format in which it was generated, sent or received, or in a format which can be demonstrated to represent accurately the information generated, sent or received; and

(c) such information, if any, is retained as enables the identification of the origin and destination of a data message and the date and time when it was sent or received.

(2) An obligation to retain documents, records or information in accordance with paragraph (1) does not extend to any information the sole purpose of which is to enable the message to be sent or received.

(3) A person may satisfy the requirement referred to in paragraph (1) by using the services of any other person, provided that the conditions set forth in subparagraphs (a), (b) and (c) of paragraph (1) are met.

Chapter III. Communication of data messages

Article 11. Formation and validity of contracts

(1) In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data messages. Where a data message is used in the formation of a contract, that contract shall not be denied validity
or enforceability on the sole ground that a data message was used for that purpose.

(2) The provisions of this article do not apply to the following: [...].

Article 12. Recognition by parties of data messages

(1) As between the originator and the addressee of a data message, a declaration of will or other statement shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of a data message.

(2) The provisions of this article do not apply to the following: [...].

Article 13. Attribution of data messages

(1) A data message is that of the originator if it was sent by the originator itself.

(2) As between the originator and the addressee, a data message is deemed to be that of the originator if it was sent:

(a) by a person who had the authority to act on behalf of the originator in respect of that data message; or

(b) by an information system programmed by, or on behalf of, the originator to operate automatically.

(3) As between the originator and the addressee, an addressee is entitled to regard a data message as being that of the originator, and to act on that assumption, if:

(a) in order to ascertain whether the data message was that of the originator, the addressee properly applied a procedure previously agreed to by the originator for that purpose; or

(b) the data message as received by the addressee resulted from the actions of a person whose relationship with the originator or with any agent of the originator enabled that person to gain access to a method used by the originator to identify data messages as its own.

(4) Paragraph (3) does not apply:

(a) as of the time when the addressee has both received notice from the originator that the data message is not that of the originator, and had reasonable time to act accordingly; or

(b) in a case within paragraph (3)(b), at any time when the addressee knew or should
have known, had it exercised reasonable care or used any agreed procedure, that the data message was not that of the originator.

(5) Where a data message is that of the originator or is deemed to be that of the originator, or the addressee is entitled to act on that assumption, then, as between the originator and the addressee, the addressee is entitled to regard the data message as received as being what the originator intended to send, and to act on that assumption. The addressee is not so entitled when it knew or should have known, had it exercised reasonable care or used any agreed procedure, that the transmission resulted in any error in the data message as received.

(6) The addressee is entitled to regard each data message received as a separate data message and to act on that assumption, except to the extent that it duplicates another data message and the addressee knew or should have known, had it exercised reasonable care or used any agreed procedure, that the data message was a duplicate.

**Article 14. Acknowledgement of receipt**

(1) Paragraphs (2) to (4) of this article apply where, on or before sending a data message, or by means of that data message, the originator has requested or has agreed with the addressee that receipt of the data message be acknowledged.

(2) Where the originator has not agreed with the addressee that the acknowledgement be given in a particular form or by a particular method, an acknowledgement may be given by

(a) any communication by the addressee, automated or otherwise, or

(b) any conduct of the addressee, sufficient to indicate to the originator that the data message has been received.

(3) Where the originator has stated that the data message is conditional on receipt of the acknowledgement, the data message is treated as though it has never been sent, until the acknowledgement is received.

(4) Where the originator has not stated that the data message is conditional on receipt of the acknowledgement, and the acknowledgement has not been received by the originator within the time specified or agreed or, if no time has been specified or agreed, within a reasonable time, the originator:

(a) may give notice to the addressee stating that no acknowledgement has been received and specifying a reasonable time by which the acknowledgement must be received; and
(b) if the acknowledgement is not received within the time specified in subparagraph (a), may, upon notice to the addressee, treat the data message as though it had never been sent, or exercise any other rights it may have.

(5) Where the originator receives the addressee's acknowledgement of receipt, it is presumed that the related data message was received by the addressee. That presumption does not imply that the data message corresponds to the message received.

(6) Where the received acknowledgement states that the related data message met technical requirements, either agreed upon or set forth in applicable standards, it is presumed that those requirements have been met.

(7) Except in so far as it relates to the sending or receipt of the data message, this article is not intended to deal with the legal consequences that may flow either from that data message or from the acknowledgement of its receipt.

**Article 15. Time and place of dispatch and receipt of data messages**

(1) Unless otherwise agreed between the originator and the addressee, the dispatch of a data message occurs when it enters an information system outside the control of the originator or of the person who sent the data message on behalf of the originator.

(2) Unless otherwise agreed between the originator and the addressee, the time of receipt of a data message is determined as follows:

(a) if the addressee has designated an information system for the purpose of receiving data messages, receipt occurs:

(i) at the time when the data message enters the designated information system; or

(ii) if the data message is sent to an information system of the addressee that is not the designated information system, at the time when the data message is retrieved by the addressee;

(b) if the addressee has not designated an information system, receipt occurs when the data message enters an information system of the addressee.

(3) Paragraph (2) applies notwithstanding that the place where the information system is located may be different from the place where the data message is deemed to be received under paragraph (4).
(4) Unless otherwise agreed between the originator and the addressee, a data message is deemed to be dispatched at the place where the originator has its place of business, and is deemed to be received at the place where the addressee has its place of business. For the purposes of this paragraph:

(a) if the originator or the addressee has more than one place of business, the place of business is that which has the closest relationship to the underlying transaction or, where there is no underlying transaction, the principal place of business;

(b) if the originator or the addressee does not have a place of business, reference is to be made to its habitual residence.

(5) The provisions of this article do not apply to the following: [...].

Part two. Electronic commerce in specific areas

Chapter I. Carriage of goods

Article 16. Actions related to contracts of carriage of goods

Without derogating from the provisions of part one of this Law, this chapter applies to any action in connection with, or in pursuance of, a contract of carriage of goods, including but not limited to:

(a) (i) furnishing the marks, number, quantity or weight of goods;

(ii) stating or declaring the nature or value of goods;

(iii) issuing a receipt for goods;

(iv) confirming that goods have been loaded;

(b) (i) notifying a person of terms and conditions of the contract;

(ii) giving instructions to a carrier;

(c) (i) claiming delivery of goods;

(ii) authorizing release of goods;

(iii) giving notice of loss of, or damage to, goods;

(d) giving any other notice or statement in connection with the performance of the contract;
(e) undertaking to deliver goods to a named person or a person authorized to claim delivery;

(f) granting, acquiring, renouncing, surrendering, transferring or negotiating rights in goods;

(g) acquiring or transferring rights and obligations under the contract.

**Article 17. Transport documents**

(1) Subject to paragraph (3), where the law requires that any action referred to in article 16 be carried out in writing or by using a paper document, that requirement is met if the action is carried out by using one or more data messages.

(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for failing either to carry out the action in writing or to use a paper document.

(3) If a right is to be granted to, or an obligation is to be acquired by, one person and no other person, and if the law requires that, in order to effect this, the right or obligation must be conveyed to that person by the transfer, or use of, a paper document, that requirement is met if the right or obligation is conveyed by using one or more data messages, provided that a reliable method is used to render such data message or messages unique.

(4) For the purposes of paragraph (3), the standard of reliability required shall be assessed in the light of the purpose for which the right or obligation was conveyed and in the light of all the circumstances, including any relevant agreement.

(5) Where one or more data messages are used to effect any action in subparagraphs (f) and (g) of article 16, no paper document used to effect any such action is valid unless the use of data messages has been terminated and replaced by the use of paper documents. A paper document issued in these circumstances shall contain a statement of such termination. The replacement of data messages by paper documents shall not affect the rights or obligations of the parties involved.

(6) If a rule of law is compulsorily applicable to a contract of carriage of goods which is in, or is evidenced by, a paper document, that rule shall not be inapplicable to such a contract of carriage of goods which is evidenced by one or more data messages by reason of the fact that the contract is evidenced by such data message or messages instead of by a paper document.

(7) The provisions of this article do not apply to the following: [...].