CHAPTER 10

EFFECTIVE FORMATION OF CONTRACTS BY ELECTRONIC MEANS: DOES THE WORLD NEED A UNIFORM REGULATORY REGIME?

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10.01 Introduction

A conference was held on electronic commerce in Sydney, Australia, in November 2000,[1] at which the author presented a paper on the self topic covered in this chapter.

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 any effective mechanism to ensure validity of contracts entered into through electronic means and that, as electronic commerce evolves, it will give rise to as many more legal questions as it will solve business problems. Five years later, some of these questions have been addressed, but others still remain.

In addition, regardless of the extent to which the new e-conomy really does change the way business is done, it will certainly require the world to seek new paradigms in many facets of the law.[2]

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1 Third Asian Financial Law Conference of the International Bar Association Asia Pacific Forum, at Sydney, Australia, 18–21 November 2000, paper published in *Online Contract Formation*, Kinsella and Simpson, eds. (1st ed., 2004.

2 The author was assisted in the preparation of this paper by several associates of the firm, including Ilman F. Rakhmat, Luna Amanda, Fifiek N. Woelandara, and N. Pininta Ambuwaru (the last two having since left the firm).

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 organizations which support international business, such as the United Nations Commission on International Trade Law (UNCITRAL) and the International Chamber of Commerce (ICC), also have expended considerable effort to offer solutions to the business world through standard model legal provisions and contractual terms and conditions which can be utilized by any and all nations in drafting their legislation or by parties in formulating contracts, respectively.

Nonetheless, the validity of a contract will depend in each instance not only on the facts and intention of the parties but also on 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 crossborder element of an electronic transaction. In addition, 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, or should not, 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 in any sense 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; thus, how can one be sure what the communication originally said?

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 one considers 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 appears 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, in short, a universal law of cyberspace.

10.02 Electronic Commerce

The easy question to address is: what does one mean by electronic commerce? At least for the purposes of this chapter, the author refers to transactions effected via the Internet, and one might consider that these fall into two basic categories, namely:

1. 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 authorization made on order, also on the Internet. This kind of contract is often referred to as a "click-wrap" contract or, where relating to downloading of software, "browse-wrap" contract, but a more universal term for these basically retail contracts is "simple sales contracts".
2. Other types of contracts are those 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-on terms, and this document is confirmed and, perhaps also "signed" online. These types of contracts may be referred to as "negotiated contracts".

10.03 The Contract

(a) In General

Before one can consider how any contract may effectively be formed online, one must first examine the larger question of what legally constitutes a "contract".

From a legal point of view, by "contract" one must assume 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 on the law that governs the contract itself, while its enforceability will depend on 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 an electronic 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, namely:

1. The Common Law system, based on English law and practiced in the United Kingdom, the United States, Canada, Australia, New Zealand, and other countries once under the influence of the United Kingdom, 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
2. The Civil Law system, practiced in most European countries and those jurisdictions once under their influence, including many South American countries, and a few others as well, such as Indonesian and Japan.[3]

Civil Law does not view its body of court decisions 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.

(b) Common Law v. Civil Law Contracts

(i) In General

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 characterized in terms of one

3 Civil Law does not view its body of case law 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.

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, are accepted in their 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 legalization 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. 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 (see text, below).

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:

1. Whether and when the parties bound themselves to certain obligations to the other party or parties, and
2. What those obligations are.

(ii) Simple Sales Contracts

As mentioned above, the most common form of electronic simple sales contracts 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 on to indicate his 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 United States court has in at least one instance recognized that click-wrap contracts do create legal obligations.[4] However, it is still early, 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 their 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 United States 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]

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4 *Hotmail Corp. v. Van Money Pie Inc.*, 47 U.S.P.Q. 2d 1020 (1998) (N.D. Cal).

5 *Specht v. Netscape Communications Corp.*, 150 F. Supp. 2d 585, United States Dis. LEXIS 9073, 45 U.C.C. Rep. Serv. 2d (CBC) 1 (S.D.N.Y., 2001), in Bouchard, "Canada", *Online Contract Formation*, Kinsella and Simpson, eds. (2004).

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 whereby many of the questions which arise with regard to negotiated contracts, in particular identifying 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 authorized.

(iii) Offer or Offer to Treat?

Thus, the primary issue which appears to arise with regard to formation of these simple sales contracts is based more on the Common Law view of offer and acceptance. The question which appears 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 such an advertisement is an offer and, when a prospective purchaser places its order in reliance on that advertisement, such order constitutes acceptance, upon which the contract arises. However, other jurisdictions take the opposite view, i.e., 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 as to 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, such as, if a purchasing party placed an order in response to a posting on the Internet, believing that the sale was thereby consummated, but the selling party was not able to fulfill it and the purchasing party was 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 the opposite on the matter in question. Unfortunately, however, there is no uniform view of this question. Different jurisdictions appear 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 (the "Vienna Convention"), which states, in article 14:

> (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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> (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.

More than 60 countries have ratified the Vienna 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 appear 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.[6]

Canada makes a similar distinction, but also recognizes 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 recognizes an offer on the Internet as an offer *inter absentes*, and it 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 United Kingdom 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 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.

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

(c) Standard Terms and Conditions

(i) In General

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 on 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),

6 Momsen, Leonardos & Cia, "Brazil", *Online Contract Formation*, Kinsella and Simpson, eds. (2004).

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. The author is more concerned here with formation of a valid and binding contract, and that question arises far more frequently in the case of negotiated contracts.

(ii) Negotiated Contracts

In General 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 sets out formal requirements which must be met.

As Indonesia is the jurisdiction in which the writer practices, the requirements under Indonesian law as an example of the Civil Law regime will be considered, although in one form or another many of these issues also will arise under Common Law regimes as well. Indonesia's basic law of obligations is virtually identical to mid-twentieth-century Dutch law[7] which, like most Civil Law legislation, was based on the Napoleonic Code, and thus is typical of Civil Law.

Article 1338 of the Indonesian 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[8] are:

1. 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)[9] and (ii) persons under official custody;[10]

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7 Most 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.

8 Note: these are enumerated here in an order different from that provided in the Civil Code.

9 Indonesian Civil Code, article 330.

10 Indonesian Civil Code, article 433. Legal entities must be represented by someone with the authority to bind that entity, either an actual corporate authority or authority granted by such an authorized person through power-of-attorney.

2. The subject matter must be clearly defined and, if possible, the quality and quantity thereof should be specified;[11]
3. 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; and
4. 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.

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[12] (whether or not the same is in writing) and cannot be terminated unilaterally (or, in some cases, even bilaterally, such as ante-nuptial settlements) without judicial intervention.[13] Every contract must be performed in good faith.[14]

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). However, how does one determine that the person who is making a commitment through the Internet has 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 in another jurisdiction ascertain that the person with whom he is dealing is in fact authorized 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. However, how can one determine that? Electronic signatures, discussed below, may solve this difficulty to some extent.

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11 Indonesian Civil Code, article 1333. The obligations of each of the parties must be clear.

12 Indonesian Civil Code, article 1338.

13 Indonesian Civil Code, article 1266.

14 Indonesian Civil Code, article 1338.

Certainly of Obligations While the subject matter of an Internet-based simple sales contract 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 on will usually be embodied in a series of negotiating correspondences 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 on, a hard copy is produced for execution, one 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. However, 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 constitutes the final terms?

In addition, 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 does one prove that the terms of the contract which are negotiated through the Internet and finally agreed on will not be adjusted just that little bit when presented as evidence, or for enforcement?

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 United States, 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. However, 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.

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. Thus, one must 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.[15] Civil law jurisdictions vary. Normally, the requirement of a signed writing is not as stringent as in many Common Law jurisdictions, and it 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 are met, as a practical matter where there is no writing, 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 legalization.

10.04 The Questions

(a) In General

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?

(b) Who?

(i) In General

First, one must identify the parties to the 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 legalization. How can the parties to an electronic contract assure these matters?

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15 United Kingdom Property Act of 1989, section 2; United States Uniform Commercial Code, article 2-201.

With the advent of scanners and pdf files, documents indicating corporate authority and, to some extent, legal capacity, can be provided electronically. 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, one must establish that a party sought to be bound by an electronically generated contract has really agreed to it.

(ii) Electronic Signature

To this problem one is beginning to see solutions emerge through the advances of technology. An example is the "electronic signature", which was quite early on approved by then-United States President Clinton who, in 2000, signed a bill — electronically, of course — giving full legal effect to electronic signatures in the United States. Hong Kong and New Zealand have legislation recognizing electronic signatures, and presumably most other jurisdictions have, or soon will have, enacted similar legislation to comply with market conditions, although thus far many, in particular Civil Law jurisdictions, impose additional requirements to ensure authenticity of such electronic signatures.

In December 2001, UNCITRAL issued, by Resolution of the General Assembly, a Model Law on Electronic Signatures (the "2001 Model Law"), 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 "1996 Model Law"), discussed below. The 2001 Model Law 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 . . . .[16]

Jurisdictions which adopt the 2001 Model Law, preferably together with the 1996 Model Law, will have accepted electronic signatures as, more or less, the equivalent of a physical signature on paper. However, the Model Laws do not provide any guidance as to how the electronic signature may be created to meet the requirements. One such mechanism is offered in the General Usage for International Digitally Ensured Commerce (GUIDEC), issued by the 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: "(1) intact and unaltered since ensured, and (2) identified with its ensurer".[17]

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16 UNCITRAL Model Law on Electronic Signatures, 2001, article 2(a). The full text can be found on the UNCITRAL website at http://www.uncitral.org and provides, in article 6(1), 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".

17 GUIDEC, article 2, section VII, at http://www.iccwbo.org/home/guidec/guidec.asp.

The method suggested by which parties may ensure involves a combination of a private and a public key, with third-party certification, and it is described in some detail in the GUIDEC.[18] 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. However, 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. However, 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 recognizes such contracts in cases in which it can be established that such an electronic agent was in fact authorized 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.[19]

Electronic agents may be utilized in systems such as electronic data interchanges (EDI). These are closed, or private, information systems through which contracting parties both, or all, utilize a specific dedicated software

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18 A very clear description of the working of an electronic signature can be found in Lockett, "United Kingdom" in *Online Contract Formation*, Kinsella and Simpson, eds. (2004), at p. 303.

19 Sookman, *Computer, Internet and Electronic Commerce Law* (Release 3) (2002), a p. 10-18.6, quoted by Bouchard, "Canada", *Online Contract Formation*, Kinsella and Simpson, eds. (2004), at p. 50.

application installed in their computer which links their information systems together and allows them to execute a contract via an encrypted electronic data interchanges message which is decipherable only by the information systems of these private participants.

Electronic data interchanges 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".[20] In a sense, it might be considered a private Internet membership club used for the purpose of establishing contractual relations. As the scope of electronic data interchanges is limited to individual participants in such systems, further discussion of electronic data interchanges is outside the scope of this Chapter.

(iii) Satisfying 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, establishment of companies, or 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 appears 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.

In addition, 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.

(c) When?

(i) When Is a Contract Formed?

In negotiated contracts, as in simple sales contracts mentioned above, the point at which a contract is concluded, or deemed concluded, may be

20 United Nations International Trade Law Commission Model Law on Electronic Commerce, 1996, article 2(b).

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 to identify what are the terms to which they have agreed. We have discussed offer and acceptance in the section on simple sales contracts, 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 on 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 text, above), other principles must be looked to for determining when the contract came into effect.

Common Law looks to when an acceptance is made and communicated to the offeror. However, 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 on its leaving the control of the sender, whereas others state 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 recognize it, but possibly not all where additional legal requirements are imposed.

(ii) 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.

In addition, where there are requirements for notice to cure or attempt at amicable settlement, before a breach can be declared or action therefor 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.

(d) Where?

(i) In General

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.

(ii) 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. However, the Internet provides no facility to determine where is the website visited, 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 for determining the ramifications of this? Clearly, conflict 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. However, 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.

(iii) 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:

1. Source of income (where the activity giving rise to the income takes place); and
2. Destination of income (where the recipient of the income is domiciled or resident.)

How then does one 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 fourth countries through the Internet, and purchased by buyers in any number of fifth countries. Goods may be stored in warehouses in one or more sixth countries and shipped to all buyers from there, and the purchase price may be paid by credit card to a bank in a seventh country and credited to the account of a subsidiary of the seller located in an eighth 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? [21]

(iv) 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? In addition, 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 simple sales 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 on 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, i.e., 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"

21 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 that electronic commerce forces one to seek new paradigms in the legal regulation of business transactions. However, 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.

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.

(v) 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 courts in 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 *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 on the laws of the complainant's jurisdiction, and such laws do vary from state to state.

However, even if the laws of the state in which a case may be brought recognize the court's jurisdiction, those of the state in which the defendant may reside or maintain assets may not recognize judgments of the courts of other countries, or at least those of the country in which the judgment 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 on its own jurisdiction over the subject matter of and parties to a dispute and, absent designation by the parties, also to decide on the seat, or venue of the arbitration.

Although 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 as clear, however, if an arbitration is held electronically. Many arbitration laws require that 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 on 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 1996 Model Law has been adopted in the jurisdiction in which the award is sought to be enforced and unless such jurisdiction recognizes electronic signatures or ensured signatures as provided in the 2001 Model Law or the GUIDEC, 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.

(e) What?

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 on 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(s).

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 on (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? In addition, 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 and 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?

(f) Why?

(i) Why Do the Parties Wish to Contract? 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 recognized as valid. Most Common Law jurisdictions require that each party receive some benefit from a contract and do not recognize 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 recognize even a patently unfair and unbalanced contract as valid as long as it complies with the formal requirements set by its laws.

(ii) 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 recognize contractual obligations formed in this way as valid, and will enforce them.

Some jurisdictions will still require a hard copy signed writing to recognize the obligations as binding on a party. Others now recognize electronic communications, but require confirmation, either by email as well or in hard-copy writing. Thus, even when the terms have all been agreed on, 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 recognized.

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?

(g) Solutions

(i) In General

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 organizations which support trade. The ICC and UNCITRAL organizations, which appear to be the first to address so many international commercial issues, have been mentioned above.

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 standardizing 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 synchronization 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 the 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 the Model Law on Electronic Signatures, 2001, and the ICC has offered its GUIDEC to help private parties implement such a law where passed, or even where it is not in effect. UNCITRAL also has offered its Model Law on Electronic Commerce, 1996, to countries wishing to utilize it as their law on such matters; the 1996 Model Law recognizes 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.

(ii) ICC eTerms 2004

The eTerms themselves address many, although by no means all, of the questions posed in this chapter 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.[22]

(iii) UNCITRAL 1996 Model Law

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

22 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. The ICC eTerms 2004 should be available on the ICC website by the time of publication of this chapter, although they was not posted at the time of writing.

> data interchanges. (electronic data interchanges), electronic mail, telegram, telex or telecopy.[23]

Generally the solutions offered by the 1996 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 1996 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 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 point of view, how can any such business effectively be concluded?

Jurisdictions which have adopted, or which will adopt, the 1996 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 recognize electronic "data messages", it will have to take affirmative action, i.e., promulgate legislation which specifically and categorically excludes it.

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23 UNCITRAL Model Law on Electronic Commerce, 1996, article 2(a).

The requirement of execution as a deed before a notary would certainly constitute such legislation. Otherwise, the mere fact that a message is contained in electronic media will not cause such message to be viewed as being inferior to a written document.[24]

Thus, one can see that UNCITRAL and the ICC, through UNCITRAL's 1996 and 2001 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 1996 and 2001 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. However, 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 1996 and 2001 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.

10.05 Conclusion

Concurrent with, although not arising out of, the economic chaos which reigned in the last few years of the 20th 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, and one must establish new paradigms to address the myriad of questions and pitfalls one is 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. International organizations 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.

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24 The full text of the 1996 Model Law, with explanatory material and a guide to its use, can be found on the UNCITRAL website, at http://www.UNCITRAL.org.