APPENDIX G

[See page 55]

Uniform Electronic Commerce Act

Legal relationships have long been based on paper documentation. Many rules of law are expressed in language that suits documents on paper. Over the past generation, however, paper has been giving way to computer-generated communications. In the past decade, networked computers and particularly the Internet have accelerated the replacement of paper and spread it into new domains, notably to consumer and domestic transactions

The effect of these developments on the law is uncertain. To some extent the courts have come to terms with technology, to some extent people made contracts to provide standards for computer communications, and to some extent special legislation has clarified the rules. The Uniform Law Conference of Canada adopted its Uniform Electronic Evidence Act in 1998.

The benefits of efficiency and interactivity that flow from the expansion of electronic communications are reduced by persistent legal uncertainty, however. In particular, it is difficult to be sure that such communications will satisfy statutory rules that require writing, or signatures, or the use of original documents. Many legal relationships, especially contracts, depend on the intention of the parties. It has not been clear to what extent such intention can be communicated automatically, or by symbolic actions like clicking on an icon on a computer screen.

Numerous efforts have been devoted to resolving these uncertainties. The international standard in that direction has been the United Nations Model Law on Electronic Commerce, adopted by the General Assembly of the United Nations in November, 1996. (http://www.un.or.at/uncitral/english/texts/electcom/ml-ec.htm) The Model Law seeks to make the law "media neutral", i.e. equally applicable to paper-based

and electronic communications. It does so by proposing "functional equivalents" to paper, i.e. methods to serve electronically the policy purposes behind the requirements to use paper. It does so in a "technology neutral" way, i.e. without specifying what technology one has to use to achieve this functional equivalence.

The result may be described as "minimalist" legislation. The rules may appear very simple, even self-evident. They are also flexible, allowing many possible ways of satisfying them. They are, however, a vital step forward toward certainty. They transform questions of capacity ("Am I allowed to do this electronically?") into questions of proof ("Have I met the standard?"). This is a radical difference. Many computer communications occur between people who have agreed to deal that way. (Indeed the Model Law does not force people to use computer communications against their will.) Without provisions like those of the Model Law, however, the legal effectiveness of electronic transactions on consent may not be clear.

It is important to note that the Model Law does not purport to improve the quality of documents on paper when they are replaced by electronic documents. Defects of form or reliability or permanence that people accept on paper will not affect the validity of electronic equivalents. Parties in practice may ask for more assurance than bare validity gives them, just as they may do for paper records. Oral contracts can be binding, but many people want them in writing anyway. In any medium, the minimal requirements for legal validity may not meet the standards for prudent business or personal transactions. Removing barriers to electronic commerce does not require a change in this philosophy.

The Uniform Electronic Commerce Act is designed to implement the principles of the UN Model Law in Canada. It applies, however, beyond the scope of "commerce", to almost any legal relationship that may require documentation. A list of exceptions appears in section 2. The commentary to each section explains the principles and, where necessary, the operation of the section. Further assistance may be sought in the UN Guide to Enactment of the Model Law, which is at the same World Wide Web address as

the Model Law, noted above.

The Uniform Act has three parts. The first part sets out the basic functional equivalence rules, and spells out that they apply when the people involved in a transaction have agreed, expressly or by implication, to use electronic documents. This avoids the need to amend all the many statutes that may state or imply a medium of communication.

This part applies some special rules to governments. It has been widely considered, not just in Canada but in several other countries, that the general permission to use electronic communications may expose governments to an overwhelming variety of formats and media that they may not have the capacity to handle and that may not work for their particular purposes. Private sector entities can limit their exposure by contract; governments often deal with people with whom it has no contract. Part 1 therefore allows governments to set its own rules for incoming electronic documents. Outgoing documents would have to conform to the general standards of the Act, unless authorized to do otherwise by some other legislation.

Part 2 of the Uniform Act sets out rules for particular kinds of communications, including the formation and operation of contracts, the effect of using automated transactions, the correction of errors when dealing with a computer at the other end of the line, and deemed or presumed time and place of sending and receiving computer messages. Part 3 makes special provision for the carriage of goods, to permit electronic documents in a field that depends, on paper, on the use of unique documents, the creation of which is challenging electronically.

Definitions

1. In this Act,

"electronic" includes created, recorded, transmitted or stored in digital form or in other intangible form by electronic, magnetic or optical means or by any other

means that has capabilities for creation, recording, transmission or storage similar to those means and "electronically" has a corresponding meaning.

"electronic signature" means information in electronic form that a person has created or adopted in order to sign a document and that is in, attached to or associated with the document.

"Government" means

- (a) the Government of [enacting jurisdiction];
- (b) any department, agency or body of the Government of [enacting jurisdiction], [other than Crown Corporations incorporated by or under a law of [enacting jurisdiction]]; and
- [(c) any city, metropolitan authority, town, village, township, district or [rural municipality or other municipal body, however designated, incorporated or established by or under a law of [enacting jurisdiction].]

Comment: The definition of "electronic" intends to ensure that the application of the Act is not unduly restricted by technical descriptions. For example, digital imaging relies on optical storage, which is technically not electronic, but which is generally seen as properly subject to this Act. Likewise, new technologies may arise that fit within the principles of the Act that might be excluded by a literal reading of "electronic". The only limit is that the product must be in digital or other intangible form. This prevents the definition from extending to paper documents, which have similar capabilities as the electronic media.

The definition of "electronic signature" does not create a different legal meaning of signature in the electronic world. That is why it refers to an intention to sign, thus importing the general law on the mental state required for validity. The definition serves two purposes. First, it makes clear that an electronic signature is simply electronic

information; it does not need to "look like" a handwritten signature, though it is possible to digitize handwriting so that it is displayed in that way. Second, it acknowledges that the electronic signature will not be "attached" to an electronic document the same way as an ink signature is to paper. The electronic signature may be "associated with" the document, by mathematical logic or otherwise. The legal effect and validity of the signature are dealt with in section 10, not in the definition.

"Government" is broadly defined to include all parts of the government of enacting jurisdictions. However, at the margins each jurisdiction will have to decide when particular entities are more like private sector bodies that should be subject to the general rules of the Act. Crown Corporations are the most likely candidate for such treatment, but not all of them may be given identical status in each jurisdiction.

Municipal governments may be problematic as well. The reasons for separate rules for governments apply to municipalities. The general permission to communicate electronically in section 17 may be very useful. However, the number of municipalities in most enacting jurisdictions creates the potential for diverse and incompatible technical standards, rendering communications expensive if not impossible. Some kind of central coordination may be advisable. This is beyond the scope of the Uniform Act, however. For this reason the reference to municipalities has been square bracketed.

Application

- 2. (1) Subject to this section, this Act applies in respect of [enacting jurisdiction] law.
- (2) The [appropriate authority] may, by [statutory instrument], specify provisions of or requirements under [enacting jurisdiction] law in respect of which this Act does not apply.
 - (3) This Act does not apply in respect of

- (a) wills and their codicils;
- (b) trusts created by wills or by codicils to wills;
- (c) powers of attorney, to the extent that they are in respect of the financial affairs or personal care of an individual;
- (d) documents that create or transfer interests in land and that require registration to be effective against third parties.
- (4) Except for Part 3, this Act does not apply in respect of negotiable instruments, including negotiable documents of title.
- (5) Nothing in this Act limits the operation of any provision of [enacting jurisdiction] law that expressly authorizes, prohibits or regulates the use of electronic documents.
- (6) The [appropriate authority] may, by [statutory instrument], amend subsection (3) to add any document or class of documents, or to remove any document or class of documents previously added under this subsection.
- (7) For the purpose of subsection (5), the use of words and expressions like "in writing" and "signature" and other similar words and expressions does not by itself prohibit the use of electronic documents.

Comment: The Act will apply to all legal rules within the authority of the enacting jurisdiction, whether in statute, regulation, order-in-council or common law. This section sets out a short list of exceptions, such as wills and land transfers. The principle of exclusion is not that such documents should not be created electronically. Rather, they seem to require more detailed rules, or more safeguards for their users, than can be established by a general purpose statute like this one.

Subsection (5) says that the Act also does not limit the operation of any rule of the law of the enacting jurisdiction that already provides expressly for the use of electronic documents or expressly bars their use. Subsection (7) ensures that words like "in writing" are not taken to prohibit their use; more specific reference to electronic documents is needed for that purpose.. The Uniform Act intends to remove barriers to electronic communications, but not to reform existing law or to bring existing law into harmony with its standards. That is a separate task for the legislature. Enacting the Uniform Act will avoid the need to amend all the statutes of a jurisdiction that impose or imply paper documents. Where such statutes have already been amended, the Uniform Act does not limit their operation. For example, if the enacting jurisdiction has passed the Uniform Electronic Evidence Act, then the provisions of this Act on originals will not apply to the best evidence rule in that jurisdiction.

Subsections (2) and (6) are safety valves, allowing the government to add to the list of exceptions, (2) by provisions of law, (6) by types of document, in case examples of paper-based documents arise after enactment of the Uniform Act where it is thought that electronic communications should not substitute. If such examples are known at the time of enactment, they can be added to the statutory list here. Advance health care directives (if thought not to be included as a power of attorney for personal care) and agreements on domestic or matrimonial matters might be examples. In the interests of maximizing the benefit of electronic communications, the Uniform Law Conference has kept the exceptions to a minimum.

The Act also allows the government to take the regulatory exceptions off the list again, but not to delete by executive action the exceptions made by statute. While each enacting jurisdiction may choose the legal tool by which the list may be made and amended, the action should be public, as is suggested by the bracketed term "statutory instrument".

There is no general exception for consumer transactions. Consumers want to be sure of the legal effect of their electronic dealings as much as anyone else. Many rules of

consumer protection can be satisfied by the functional equivalents to writing in the Uniform Act. However, the general issue of consumer protection in electronic commerce is being separately reviewed by a federal-provincial-territorial working group, and that group may propose complementary harmonized legislation where appropriate.

Crown

3. This Act binds the Crown.

Comment: The Crown is covered by this Act, and its electronic communications will be affected by it. Part 1 contains special provisions for government communications that limits this section somewhat. For greater certainty about the rest of the Act, this section has been inserted.

Interpretation

4. The provisions of this Act relating to the satisfaction of a requirement of law apply whether the law creates an obligation or provides consequences for doing something or for not doing something.

Comment: This section ensures that the enabling rules of the Uniform Act apply broadly to "requirements" to use paper, even if the law does not appear to create an obligation. For example, a statute may say "An acceptance in writing is valid", or "An acceptance not in writing is invalid", instead of "An acceptance must be in writing". The principle of the rule in either case may have been to ensure that oral communications would not be relied on. It was unlikely to have been intended to prohibit an acceptance by electronic document.

PART 1

PROVISION AND RETENTION OF INFORMATION

Legal recognition

5. Information shall not be denied legal effect or enforceability solely by reason that it is in electronic form.

Comment: This is the governing principle for the Uniform Act. Legal effect may not be denied to electronic communications only because of the electronic form. The reason for the double negative is that the Uniform Act cannot guarantee the effect of electronic communications. There may be many reasons to challenge validity of a particular electronic document. The purpose of this section is to ensure that the electronic form alone is not such a reason.

Much of Part 1 of the Uniform Act deals with particular form requirements, e.g. that information be in writing, or signed. If the law does not require particular forms or media, people should be able to provide information electronically under current law. Section 5 will help remove all doubt, by barring discrimination based on the medium of communication. For example, if someone has to give notice to someone else, electronic notice will satisfy that requirement. Section 5 simply underlines that fact. It is not intended to displace the more specific rules in the following sections.

Use not mandatory

- 6.(1) Nothing in this Act requires a person to use or accept information in electronic form, but a person's consent to do so may be inferred from the person's conduct.
- (2) Despite subsection (1), the consent of the Government to accept information in electronic form may not be inferred by its conduct but must be expressed by communication accessible to the public or to those likely to communicate with it for particular purposes.

Comment: This section ensures that the Act is not used to compel people to use electronic documents against their will. Many people are still uncomfortable with such documents, and of course many others do not yet have the capacity to use them. Nothing "in this Act" requires the use of such documents. However, people can bind themselves to use them, by contract or by practice. Handing out a business card with an e-mail address in some circumstances may be taken as consent to receive e-mail for the purposes of that business, though possibly not for all purposes. Likewise, placing an order through a web site may be consent to deal with that vendor electronically, though that consent could be withdrawn. The effectiveness of a consent found in a standard form (not negotiated) contract may be open to dispute without some action to show it was intended. Failing to respond to an electronic message is not likely to constitute consent to receive the message in that form, if there is no other evidence of consent to the kind of electronic message received.

This consent rule does not undermine the usefulness of the Uniform Act, which aims at certainty, not compulsion. The Act seeks to give legal effect to electronic documents used by parties who want to use them. It does not give people a calculated or bad faith way out of transactions based on electronic communications, by "strategic" withdrawal of consent. The reality of consent and the effect of a purported withdrawal of consent will have to be judged on the circumstances of particular cases.

The rule does form a kind of access control, and not just a yes-or-no consent. One can consent to a particular format, for reasons of readability or reliability, and not to others. One can set requirements for consent, in other words.

Information coming into government has a special status. The general permission to use electronic communications may expose governments to an overwhelming variety of formats and media that they may not have the capacity to handle and that may not work for their particular purposes. Private sector entities can limit their exposure by contract. Governments often deal with people with whom they have no contract, and who communicate with governments only because they have to. Part 1 therefore

expressly allows governments to set its own rules for incoming electronic documents. The "consent" to accept electronic records must be express, not implied, and it must be communicated to those likely to need to know it. This could be done by posting requirements on a web site, or by issuing a directive, or by more or less formal means depending on the circumstances. It could also be expressed in a particular contract, if the policy applied to all such contracts.

Requirement for information to be in writing

7. A requirement under [enacting jurisdiction] law that information be in writing is satisfied by information in electronic form if the information is accessible so as to be usable for subsequent reference.

Comment: The Model Law takes as the basic function of writing the establishment of memory, that is the durable record of information. As a result, the equivalent of this function can be achieved if an electronic document is accessible so as to be usable for subsequent reference. "Accessible" means understandable as well as available. "Subsequent reference" does not specify a time for which the electronic document must be usable, any more than a piece of paper is guaranteed to last.

Providing information in writing

- 8.(1) A requirement under [enacting jurisdiction] law for a person to provide information in writing to another person is satisfied by the provision of the information in an electronic document,
 - (a) if the electronic document that is provided to the other person is accessible by the other person and capable of being retained by the other person so as to be usable for subsequent reference, and
 - (b) where the information is to be provided to the Government, if

- (i) the Government or the part of Government to which the information is to be provided has consented to accept electronic documents in satisfaction of the requirement; and
- (ii) the electronic document meets the information technology standards and acknowledgement rules, if any, established by the Government or part of Government, as the case may be.

Comment: When the law requires someone to provide information to someone else in writing, then more is needed than mere accessibility. The recipient has to receive the document in a way that gives him or her control over what becomes of it. One cannot give notice in writing by holding up a text on paper for the other person to read. One must deliver a paper. This section therefore requires the information to be accessible for subsequent use, but also that the information be capable of retention by the person who is to be provided with the information. How it is made capable of retention is not specified, as different types of enterprise may use different means for different purposes. In some cases the information may be sent by e-mail; in others, it may be made available for printing or downloading, if the intended recipient is given notice that it is so accessible.

Government may apply information technology standards, which would extend at least to hardware and software specifications and rules on the medium of communication (diskette, the Internet, dedicated phone line, and so on.) Government may also choose to make rules about acknowledgements, where information is to be provided to it, so the person submitting information has evidence that the information is received.

Providing information in specific form

9. A requirement under [enacting jurisdiction] law for a person to provide information to another person in a specified non-electronic form is satisfied by the provision of the information in an electronic document,

- (a) if the information is provided in the same or substantially the same form and the electronic document is accessible by the other person and capable of being retained by the other person so as to be usable for subsequent reference, and
- (b) where the information is to be provided to the Government, if
 - (i) the Government or the part of Government to which the information is to be provided has consented to accept electronic documents in satisfaction of the requirement; and
 - (ii) the electronic document meets the information technology standards and acknowledgement rules, if any, established by the Government or part of Government, as the case may be.

Comment: Sometimes writing requirements are more precise. Statutes or regulations may prescribe a form for presenting the information. This section describes the functional equivalent of those requirements. Electronic documents must have the same or substantially the same form as the requirement - format is a vital part of meaning.

The same rules for government documents apply as did in section 8.

Signatures

- 10. (1) A requirement under [enacting jurisdiction] law for the signature of a person is satisfied by an electronic signature.
 - (2) For the purposes of subsection (1), the [authority responsible for the requirement] may make a regulation that,
 - (a) the electronic signature shall be reliable for the purpose of identifying the person, in the light of all the circumstances, including any relevant

agreement and the time the electronic signature was made; and

- (b) the association of the electronic signature with the relevant electronic document shall be reliable for the purpose for which the electronic document was made, in the light of all the circumstances, including any relevant agreement and the time the electronic signature was made.
- (3) For the purposes of subsection (1), where the signature or signed document is to be provided to the Government, the requirement is satisfied only if
 - (a) the Government or the part of Government to which the information is to be provided has consented to accept electronic signatures; and
 - (b) the electronic document meets the information technology standards and requirements as to method and as to reliability of the signature, if any, established by the Government or part of Government, as the case may be.

Comment: A signature may mean many things in law, but the essential function is to link a person with a document. A signature without a document is only an autograph. This section therefore makes an electronic signature, as defined, function as a signature in law. The definition requires that the information purporting to constitute the signature be created or adopted by a person with the intent to sign the document, and that it be associated in some way with the document. Someone who alleges that an electronic signature meets a signature requirement will have to prove these characteristics to the satisfaction of the court or other decision maker.

The general law does not set any technical standard for the production of a valid signature. The essential question is the intent of the person who created the mark or symbol alleged to be a signature. This would normally proved by evidence extrinsic to the document, though the position of a name written in ink may lead readily to the

conclusion that it was intended to be a signature. Evidence of intent of electronic signatures will develop with practice.

Although the UN Model Law makes an electronic signature meet a test of appropriate reliability in order to meet a signature requirement, the Uniform Law Conference felt that such a test would detract from the "media neutrality" of the Uniform Act. However, where the authorities responsible for a signature requirement take the view that the requirement does imply some degree of reliability of identification or of association with the document to be signed, they may under subsection (2) make a regulation to impose a reliability standard. The language of subsection (2) is based on that in the Model Law.

Signatures submitted to government must conform to information technology requirements and also to any rules about the method of making them or their reliability. Different departments may have different standards for such matters, depending on what they need to do with the signed information.

The Uniform Act does not say how to show who signed an electronic document. Attribution is left to ordinary methods of proof, just as it is for documents on paper. The person who wishes to rely on any signature takes the risk that the signature is invalid, and this rule does not change for an electronic signature.

Provision of originals

- 11. (1) A requirement under [enacting jurisdiction] law that requires a person to present or retain a document in original form is satisfied by the provision or retention of an electronic document if
 - (a) there exists a reliable assurance as to the integrity of the information contained in the electronic document from the time the document to be presented or retained was first made in its final form, whether as a paper document or as an electronic document;

- (b) where the document in original form is to be provided to a person, the electronic document that is provided to the person is accessible by the person and capable of being retained by the person so as to be usable for subsequent reference; and
- (c) where the document in original form is to be provided to the Government.
 - (i) the Government or the part of Government to which the information is to be provided has consented to accept electronic documents in satisfaction of the requirement; and
 - (ii) the electronic document meets the information technology standards and acknowledgement rules, if any, established by the Government or part of Government, as the case may be.
- (2) For the purpose of paragraph (1)(a),
 - (a) the criterion for assessing integrity is whether the information has remained complete and unaltered, apart from the introduction of any changes that arise in the normal course of communication, storage and display;
 - (b) the standard of reliability required shall be assessed in the light of the purpose for which the document was made and in the light of all the circumstances.
- (3) For the purposes of paragraph (1)(b), an electronic document is deemed not to be capable of being retained if the person providing the electronic document inhibits the printing or storage of the electronic document by the recipient.

Comment: The Model Law considers the basic function of requiring an original document to be to support the integrity of the information in it. It is presumably harder to alter an original than a copy. This section makes an electronic document function as an original if there are sufficient assurances of integrity of the information in it. This is similar to the standards for meeting the best evidence rule in section 4 of the Uniform Electronic Evidence Act and in article 2838 of the Civil Code of Quebec. In addition, the rule requires the equivalent to writing, as set out in section 7. The standard for the assurances of integrity of the information varies with the purpose of the document, just as the degree of scrutiny of the integrity of a paper document will vary with its use. The usual rules about government apply in this section too.

Whether document is capable of being retained

12. An electronic document is deemed not to be capable of being retained if the person providing the electronic document inhibits the printing or storage of the electronic document by the recipient.

Comment: Several sections require that a document must be capable of being retained in order to meet the legal requirement that information be provided. This section is intended to discourage the sender from doing anything that would inhibit the recipient from printing or storing the electronic document once it is received.

Retention of documents

- 13. A requirement under [enacting jurisdiction] law to retain a document is satisfied by the retention of an electronic document if
 - (a) the electronic document is retained in the format in which it was made, sent or received, or in a format that does not materially change the information contained in the document that was originally made, sent or received;
 - (b) the information in the electronic document will be accessible so as to be usable for subsequent reference by any person who is entitled to have access

to the document or who is authorized to require its production; and
(c) where the electronic document was sent or received, information, if any,
that identifies the origin and destination of the electronic document and the
date and time when it was sent or received is also retained.

Comment: People may wish to retain records in electronic form, whether the records were created electronically or on paper. Paper documents may be made electronic by scanning, which makes the information treatable as data afterwards, or by imaging, which generally preserves a digital picture of the information that is not intended to be changed. In any event, the function of making people retain records is to retain the information contained in the record.

Record managers and archivists make clear that information about the records are important to understanding them, or even knowing what they are. However, the Uniform Act does not require more of such contextual information (sometimes known as "metadata") than does the current law about documents on paper. It does say that if an electronic document is transmitted, then any information available about the time of its transmission should be kept as well as the document itself.

This is more than is required for documents on paper, since someone who receives a paper document in the mail is not required to keep the envelope or other mailing information. However, the Act does not require the information to be created if it is not there. Again we distinguish between good practices and legal requirements.

The standard for electronic record retention is similar to that for original documents, that the integrity of the information be maintained and be accessible to those who have a right to see it. Satisfying the requirements for originals under section 11 is somewhat more stringent as to form. Not all retention requirements will demand the original document. Where they do, section 11 will apply as well as section 13.

The Act does not mention the time for which such records may be retained, since the time will not change with the medium of storage. Nor does it expressly require that

the hardware and software used to store and read the information be kept current, but that is implied by the need for continued accessibility. The law does not prescribe the technology, any more than it requires a certain kind of paper or ink or other support for traditional records.

Copies

14. Where a document may be submitted in electronic form, a requirement under a provision of [enacting jurisdiction] law for one or more copies of a document to be submitted to a single addressee at the same time is satisfied by the submission of a single version of an electronic document.

Comment: With electronic documents, copies are hard to distinguish from originals. In addition, electronic documents are usually very easy to reproduce. Requirements of statutes and regulations for people to submit certain numbers of copies of documents are hard to read in the electronic context, therefore. Must one send in several diskettes, or send the same e-mail message several times, or attach the same document several times to the same e-mail? This section resolves those issues by requiring the person receiving the information to make the copies.

Other requirements continue to apply

15. Nothing in this Part limits the operation of any requirement under [enacting jurisdiction] law for information to be posted or displayed in specified manner or for any information or document to be transmitted by a specified method.

Comment: Sometimes particular forms of display are required, or particular forms of communication. The electronic document must also follow the other form rules. Sometimes such rules may mean that a paper document must be used. However, the words "in writing" or "signed" themselves do not constitute a "specified manner" or "specified method" for these purposes, or the point of much the Act would be undermined. If the rules say that regular mail must be used to deliver information, the parties to the communication may agree on other means, if the source of those rules

allows such variation, expressly or by implication.

Authority to prescribe forms and manner of filing forms

- 16. (1) If a provision of [enacting jurisdiction] law requires a person to communicate information, the minister of the Crown responsible for the provision may prescribe electronic means to be used for the communication of the information and the use of those means satisfies that requirement.
- (2) If a statute of [enacting jurisdiction] sets out a form, the [authority responsible] for the form may make an electronic form that is substantially the same as the form set out in the statute and the electronic form is to be considered as the form set out in the statute.
- (3) A provision of [enacting jurisdiction] law that authorizes the prescription of a form or the manner of filing a form includes the authority to prescribe an electronic form or electronic means of filing the form, as the case may be.
 - (4) In this section,

"filing" includes all manner of submitting, regardless of how it is designated.

"prescribe" includes all manner of issuing, making and establishing, regardless of how it is designated.

Comment: Much information must be submitted to government or to private persons on specific forms, set out in statute or more commonly prescribed in regulations. Rather than require governments to amend all the authorizing texts, this section allows them to provide electronic equivalents to the forms designed for and often presumed to be paper. The first subsection applies where information is to be provided but without a specified form, to allow the government to create a form. Subsection (2) deals with forms in statutes and subsection (3) with forms in regulations. Subsection (2) does not specify

how the electronic equivalent of a statutory form should be created. Subsection (3) says that a form authorized to be made by regulation must be given its electronic equivalent by regulation. Enacting jurisdictions may choose whether they wish to allow for administrative forms, especially where a paper-based form is already prescribed.

Collection, storage, etc.

- 17. (1) In the absence of an express provision in any [enacting jurisdiction] law that electronic means may not be used or that they must be used in specified ways, a minister of the Crown in right of [enacting jurisdiction] or an entity referred to in subparagraphs (b) [or (c)] of the definition of "Government" may use electronic means to create, collect, receive, store, transfer, distribute, publish or otherwise deal with documents or information.
- (2) For the purpose of subsection (1), the use of words and expressions like "in writing" and "signature" and other similar words and expressions does not by itself constitute an express provision that electronic means may not be used.

Comment: This section gives governments the right to use electronic communications internally and externally, and to convert incoming messages to electronic form. Unlike the earlier provisions on communications from the public to the government, it does not require any express consent, but applies directly when the Act comes into force. This general permission yields to any direction by the legislature that electronic documents not be used. However, the mere use of terms such as "writing" or "signed" is not considered such a direction, since most of them date from a time when paper was presumed, not chosen expressly over electronic media.

Electronic payments

18. (1) A payment that is authorized or required to be made to the Government under [enacting jurisdiction] law may be made in electronic form in any manner specified by [the Receiver General] for the [enacting jurisdiction].

(2) A payment that is authorized or required to be made by the Government may be made in electronic form in any manner specified by the [Receiver General] for the [enacting jurisdiction].

Comment: To ensure the integrity of public accounts and accountability for public finances, payments to and by government are often subject to detailed statutory rules. This section allows the Receiver General or equivalent authority in the enacting jurisdiction to provide for electronic media of payment, for incoming or for outgoing payments, or both. The usual rules about authority and record-keeping would continue to apply to such payments.

PART 2

COMMUNICATION OF ELECTRONIC DOCUMENTS

Comment: This Part gives general guidance to points of law that may be in doubt in a world of electronic communications. Unlike the provisions of Part 1, this Part does not deal with specific requirements of the law. It applies to common law rules of contracts, and supplements them with a few rules that appear useful to resolve common difficulties in using such communications. Government communications are included in this Part.

Definition of "electronic agent"

19. In this Part, "electronic agent" means a computer program or any electronic means used to initiate an action or to respond to an electronic documents or actions in whole or in part without review by a natural person at the time of the response or action.

Comment: Computer transactions are largely automated transactions. The novelty of electronic commerce is less the automation than the electronic communications used to establish relationships that require legal effect. The forms of automation are changing, too. Businesses and individuals use "electronic agents", which are software programs,

sometimes embedded in hardware, that can seek out information and respond to it or to incoming messages. This part deals with some of the legal effects of using such tools.

The use of the term "electronic agent" is widespread. The law of agency however plays no part in this discussion. An electronic agent is a tool, not an agent in law.

Formation and operation of contracts

- 20. (1) Unless the parties agree otherwise, an offer or the acceptance of an offer, or any other matter that is material to the formation or operation of a contract, may be expressed
 - (a) by means of an electronic document; or
 - (b) by an action in electronic form, including touching or clicking on an appropriately designated icon or place on a computer screen or otherwise communicating electronically in a manner that is intended to express the offer, acceptance or other matter.
- (2) A contract shall not be denied legal effect or enforceability solely by reason that an electronic document was used in its formation.

Comment: The Act does not purport to change the general law of contracts. This section ensures that electronic communications are capable of conveying the kinds of intention that are necessary to support contractual relations. In particular, actions that do not involve detailed language, such as clicking on icons on computer screens, are expressly made acceptable for contract purposes.

Involvement of electronic agents

21. A contract may be formed by the interaction of an electronic agent and a natural person or by the interaction of electronic agents.

Comment: The law has been unclear whether automated means of communication such as electronic agents could convey the intention needed to form a contract where no human being reviewed the communication before the contract was made. This section makes it clear that this can be done, both where a natural person communicates with an electronic agent and where a communication has an electronic agent at both ends.

Errors when dealing with electronic agents

- 22. An electronic document made by a natural person with the electronic agent of another person has no legal effect and is not enforceable if the natural person made a material error in the document and
 - (a) the electronic agent did not provide the natural person with an opportunity to prevent or correct the error;
 - (b) the natural person notifies the other person of the error as soon as practicable when the natural person learns of it and indicates that he or she made an error in the electronic document;
 - (c) the natural person takes reasonable steps, including steps that conform to the other person's instructions, to return the consideration received, if any, as a result of the error or, if instructed to do so, to destroy the consideration; and
 - (d) the natural person has not used or received any material benefit or value from the consideration, if any, received from the other person.

Comment: The law has rules about the effect of mistakes. Particular concerns have been expressed about computer communications, however, for two reasons. First, it is easy to hit a key when typing quickly, or click a mouse on the wrong spot on a screen, and by doing so send a command with legal consequences ("the single keystroke error"). Second, much electronic commerce is done by electronic agents, as noted in the comment

to the previous section. The electronic agents may not be programmed to respond to a subsequent message saying "I didn't mean that."

This section supplements the general law of mistake where an electronic document is created or sent in error by a natural person to an electronic agent. The person who sends it must give notice of the error as soon as practicable, respond to instructions, and not benefit from the mistake. In essence, the non-mistaken party must be placed substantially in the position he or she or it would have been in if the mistake had not been made. For transactions that cannot be unwound, this may not be possible, and the section may not apply. For example, an order to purchase shares in a company may result in a purchase that depends on a further sale, and the chain of purchases and sales cannot be retraced, much less undone, if the original order turns out to have been mistaken.

In addition, the section applies only if the legal entity to which the message was sent did not provide a method of preventing or correcting the error. The Act does not tell people how to do this, but one may imagine a message on a screen saying "You have ordered X at \$Y. Is this correct?" If the person confirms the first order, this section would not apply. This provision gives online merchants a way of giving themselves a good deal of security against allegations of mistake, and encourages good business practices in everybody's interests.

Time and place of sending and receipt of electronic documents

- 23. (1) Unless the originator and the addressee agree otherwise, an electronic document is sent when it enters an information system outside the control of the originator or, if the originator and the addressee are in the same information system, when it becomes capable of being retrieved and processed by the addressee.
 - (2) An electronic document is presumed to be received by the addressee,

- (a) when it enters an information system designated or used by the addressee for the purpose of receiving documents of the type sent and it is capable of being retrieved and processed by the addressee; or
- (b) if the addressee has not designated or does not use an information system for the purpose of receiving documents of the type sent, when the addressee becomes aware of the electronic document in the addressee's information system and the electronic document is capable of being retrieved and processed by the addressee.
- (3) Unless the originator and the addressee agree otherwise, an electronic document is deemed to be sent from the originator's place of business and is deemed to be received at the addressee's place of business.

(4) For the purposes of subsection (3)

- (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 to which the electronic document relates or, if there is no underlying transaction, the principal place of business of the originator or the addressee; and
- (b) if the originator or the addressee does not have a place of business, the references to "place of business" in subsection (3) are to be read as references to "habitual residence".

Comment: Computer communications usually depend on intermediaries, whether privately contracted services like value-added networks (VANs) or public Internet service providers (ISPs) or others. On the Internet, messages travel in packets through unpredictable combinations of computers on their way to their destination. This complicates deciding when messages are sent and received, and where. The law often

makes it important to know these things.

This section provides that a message is sent when it leaves the control of the sender. This means effectively that the sender cannot recall it any more, whether from the original system or from some other system acting as dispatch agent or computing service. If the sender and the addressee are in the same system - say a big system like sympatico.ca or aol.com - then the message is sent when the addressee could retrieve and process it.

The section provides a presumption, not a rule, on when a message is received. Current practices of storing and checking messages suggested that it was premature to create any rule about receipt. The UN Model Law deems a message to be received when it enters an information system within the control of the addressee, or where it is accessible to the addressee. However, people may not check their e-mail regularly, especially if they have several addresses. The section says that if they designate an address, or use it for a purpose, then they will have a duty to check that address for appropriate messages.

If the addressee does not designate or use an address for the purpose for which someone wants to send a message, then the message is not presumed to be received until the addressee has notice of it, and is able to retrieve it and process it. The section does not require actual retrieval and processing, in order to prevent people from avoiding receipt by refusing to open messages that they could open if they chose to. However, the consent principle of section 6 continues to operate, so someone who is told that an electronic message is available on his or her system may still be able to decline to deal electronically at all and insist that a writing requirement be satisfied on paper.

Subsection (2) does not say "unless otherwise agreed", as do subsections (1) and (3). This is in part because it is a presumption. Where a presumption applies rather than a rule, the parties may be able to agree to the existence of facts that qualify for the presumption, thus in effect altering the burden of proof. If the addressee designates a

system by agreement or by conduct, that will lead to a presumption of receipt. If the sender can show that the message entered the designated system and was retrievable, the addressee may have trouble rebutting the presumption. Parties may also agree on what the addressee is capable of processing. The present state of electronic communications is not thought to support an agreement that would make receipt easier to prove, e.g. by agreeing that a message is received when sent.

It may be that ISPs will not have the logs or other evidence of the time at which messages were received in their systems. Senders who really need to know for sure that their messages have been received will want to get evidence of actual receipt, such as acknowledgements from the addressees.

The section does follow the Model Law in providing that messages are presumed to be sent from and received at the principal place of business of the sender or recipient. Computer servers are often in different places, and people may access messages from different places. Unless the parties agree otherwise, these variations should not affect the legal rights arising from the communications.

PART 3

CARRIAGE OF GOODS

Comment: This part addresses a particular sector of economic activity, the carriage of goods. It was the only one on which the UN Model Law chose to provide rules, though the UN left open the potential for future additions. The carriage of goods is frequently international, so harmonization of the law across borders may be very useful. The main point of this part is to provide an electronic equivalent of certain shipping documents (a term used regardless of the means of shipment), such as bills of lading. Sometimes these documents are negotiable, which means that the documents themselves carry the value of the goods they list. As a result, they must be unique. Creating a unique electronic

document is challenging. Section 25 says what the electronic document must do to serve the function of the shipping document on paper. The operation of the Part is explained in paragraphs 113 to 122 of the Guide to Enactment of the Model Law.

Actions related to contracts of carriage of goods
24. This Part applies to any action in connection with a contract of carriage
of goods, including, but not limited to,
(a) furnishing the marks, number, quantity or weight of goods;
(b) stating or declaring the nature or value of goods;
(c) issuing a receipt for goods;
(d) confirming that goods have been loaded;
(e) giving instructions to a carrier of goods;
(f) claiming delivery of goods;
(g) authorizing release of goods;
(h) giving notice of loss of, or damage to, goods;
(i) undertaking to deliver goods to a named person or a person authorized to
claim delivery;

- (j) granting, acquiring, renouncing, surrendering, transferring or negotiating rights in goods;
- (k) notifying a person of terms and conditions of a contract of carriage of goods;

- (l) giving a notice or statement in connection with the performance of a contract of carriage of goods; and
- (m) acquiring or transferring rights and obligations under a contract of carriage of goods.

Comment: This section lists the types of activity that may be affected by the rules in this Part.

Documents

- 25. (1) Subject to subsection (2), a requirement under [enacting jurisdiction] law that an action referred to in any of paragraphs 24(a) to (m) be carried out in writing or by using a paper document is satisfied if the action is carried out by using one or more electronic documents.
- (2) If a right is to be granted to or an obligation is to be acquired by one person and no other person and a provision of [enacting jurisdiction] law requires that, in order to do so, the right or obligation must be conveyed to that person by the transfer or use of a document in writing, that requirement is satisfied if the right or obligation is conveyed through the use of one or more electronic documents created by a method that gives reliable assurance that the right or obligation has become the right or obligation of that person and no other person.
- (3) For the purposes of subsection (2), 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.
- (4) If one or more electronic documents are used to accomplish an action referred to in paragraph 24(j) or (m), no document in writing used to effect the action is valid unless the use of electronic documents has been terminated and replaced by the use of documents in writing. A document in writing issued in these

circumstances must contain a statement of the termination, and the replacement of the electronic documents by documents in writing does not affect the rights or obligations of the parties involved.

(5) If a rule of [enacting jurisdiction] law is compulsorily applicable to a contract of carriage of goods that is set out in, or is evidenced by, a document in writing, that rule shall not be inapplicable to a contract of carriage of goods that is evidenced by one or more electronic documents by reason of the fact that the contract is evidenced by electronic documents instead of by a document in writing.

Comment: This section permits the use of electronic documents for the carriage of goods, if the documents comply with this section. Subsection (2) is the electronic functional equivalent of a unique document. If rights are to be given to one particular person, then the electronic document must be in a form that gives reliable assurance that the rights or obligations represented by the document are those of that person and no other. The Act does not say how this might be done. As elsewhere, it provides the legal consequences for doing it.

Subsection (4) guards against the risk that no two media can simultaneously be used for the same purpose. While it may happen that someone who starts dealing with electronic documents may have to switch to paper at some point, this section sets out rules to ensure that everyone will know which version of a document is effective.

Subsection (5) ensures that other rules about documents for the carriage of goods, such as the Hamburg Rules applicable under the *Carriage of Goods by Water Act*, apply to electronic documents though the terms of these rules seem to contemplate paper. Not only are electronic documents permissible in general, but their use does not take the documents out of the scope of such compulsory rules.

Notes on sources and comparisons

United Nations Model Law on Electronic Commerce

This is the main source of the principles of the Uniform Act.

http://www.un.or.at/uncitral/english/texts/electcom/ml-ec.htm

United States - Uniform Electronic Transactions Act

This is the main American state-level initiative on e-commerce, the product of the National Conference of Commissioners on Uniform State Laws. Reports of the meetings of the Drafting Committee and related documents and commentary can be found in the ETAForum.

http://www.law.upenn.edu/library/ulc/ulc.htm

http://www.webcom.com/legaled/ETAForum

Singapore

The first country in the world to adopt the UN Model Law was Singapore.

http://www.cca.gov.sg/eta/index.html

Australia

Australia has published a thorough analysis of how the Model Law could be applied in a common law federal state. It prepared a draft statute for public consultation, and on June 30, 1999, introduced a bill in Parliament.

http://www.law.gov.au/ecommerce/

United Kingdom

The United Kingdom has been working with similar principles. Its draft legislation was presented in July 1999.

http://www.dti.gov.uk/cii/elec/ecbill.pdf

New Zealand

The New Zealand Law Reform Commission reported on the principles of the UN Model Law and their potential application in New Zealand.

http://www.lawcom.govt.nz/EComm/R50Con.htm

Canada

The federal government introduced legislation to implement the principles of the Model Law to federal legislation in 1998, in Part 2 of Bill C-54, the Personal Information Protection and Electronic Documents Act.

http://www.parl.gc.ca/36/1/parlbus/chambus/house/bills/government/C-54/C-54_2/C-54_cover-E.html

Some provinces have general statutes permitting electronic filing of information with government, usually in a manner to be prescribed in regulations, program by program or statute by statute.

Business Regulation Reform Act, S.O. 1994 c. 32
Business Electronic Filing Act, S.N.S. 1995 c.3
Electronic Filing of Information Act, S.S.1998 c. E-7.21
Business Paper Reduction Act, S.B.C. 1998 c. 26

Much provincial legislation is on line at http://legis.acjnet.org/

Future work on signatures

A number of bodies are trying to advance the law on electronic signatures, usually by giving special status to signatures with particular characteristics. Among them are the United Nations Commission on International Trade Law (UNCITRAL) and the European Union. Canada's Bill C-54, noted above, contained provisions about "secure electronic signatures".

UNCITRAL:

http://www.un.or.at/uncitral/english/sessions/wg_ec/index.htm

European Union:

http://europa.eu.int/comm/dg15/en/media/sign/index.htm and http://www.ipso.cec.be/ecommerce