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Civil Section Documents - Proposals for a Uniform Electronic Evidence Act

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[See 1995 Proceedings at page 65.]

[1] Computers are everywhere nowadays. People rely on them for business and for personal matters. This means that what they produce often turns up in the courts, as do most other aspects of contemporary life.

[2] The Uniform Law Conference of Canada has undertaken to adopt uniform legislation to ensure that computer records can be used appropriately in court. We are asking for comment on some draft legislation, to ensure that it will be useful for this purpose.

[3] The present document contains three parts:

A. A brief overview of the law of evidence and how computer records may fit into it now.

B. A draft of a short statute to facilitate the use of computer records in evidence, plus annotations of that statute.

C. A draft of longer statutory provisions to rework all of the law that applies to the admission of records in evidence, including computer records. This draft is also annotated.

[4]

Inviting Response

1. Do we need this kind of legislation at all? Is there a problem?

2. If so, are the current drafts good ways to solve the problem? Are they

too restrictive or too permissive?

3. Do you prefer the short statute or the long one, or some intermediate solution?

4. How can the draft statutes, or your preferred statute, be improved?

[5] ***We hope that the attached text will help you form constructive answers. Other comments are also welcome. Comments may be submitted in English or in French.***

[6] If you know someone else who might be interested in the subject, or who might want to comment, feel free to copy this package and pass it on.

[8] Responses will be most useful to us if they are received before July 21, 1995. We will have to submit them to delegates to our annual meeting in time for them to prepare for the discussion in early August. We will then redraft one or both statutes in response to the comments, ideally for adoption during the year.

[9] We will send a copy of our final uniform statute to everybody who sends us comments, unless they do not want to receive it.

[10] Once the Uniform Law Conference adopts a uniform statute, it is up to the federal, provincial and territorial governments to enact it (or some version of it) as part of their laws. If you are interested in the subject, and if you think our final product is useful, you may wish to ask your government to enact it.

[11] This document has three parts:

A. Legal background - principles of documentary evidence
B. Short draft statute and annotations
C. Long draft statute and annotations

[12] An extensive survey of the legal issues in this field, written by Ken Chasse for the Uniform Law Conference, has been published in the Proceedings of the Uniform Law Conference for 1994. It contains

references to cases and statutes that deal with electronic evidence. A very brief appendix of legal sources appears at the end of this document.

A. Some principles of documentary evidence

[13] The basic rule of evidence is that it must be the (sworn) oral account of facts of which the witness has personal knowledge. The witness is available in person in court to have his or her account tested by cross-examination.

[14] Information of which the witness does not have personal knowledge is "hearsay", that which the witness heard someone say (or which he/she learned in some other way without experiencing it first hand.) (The witness's opinions make up a distinct class of evidence, which is sometimes relevant to electronic records too.)

[15] Information in documents or other records is hearsay, since the person presenting the information as evidence in court does not have personal knowledge of that information. If the witness had the personal knowledge, it would not be necessary to use the documents to prove the facts in them.

[16] The traditional rule is that hearsay evidence is not admitted. This general rule has been eroded substantially in recent years. An argument can even be made that there is no longer a ban on hearsay evidence. There is simply a rule that hearsay evidence must be demonstrated to be reliable and its admission necessary to the proper adjudication of the case. For the purposes of this paper, we do not need to decide whether the present admissibility of hearsay evidence is a matter of exception or a matter of rule.

[17] Two subsidiary rules of evidence apply to documentary evidence. The first is the "best evidence" rule: to prove something in court, you must use the best evidence that can be produced. "Best" means closest to direct sworn oral evidence. This produces a hierarchy of documents judged on such criteria as when they were made, by whom they were made, their status as "original" documents or copies, and the like.

[18] The second subsidiary rule is an "exception" to the rule barring hearsay evidence. Courts have long agreed that documents should be admitted to prove the information they contain. The common law developed criteria for admissibility, such as that the documents were produced at the same time as the events they recorded; that they were produced in the ordinary course of the business of the party creating them; and that they were used and relied on by the creator in his/her/its business.

[19] These rules have been replaced or overlaid with statutory rules in the federal and provincial Evidence Acts. Many Canadian statutes classify documentary evidence depending on its origin and its form. Different rules apply to each. Government and other public documents are treated in one way, business records in another, business records that are also banking records in a third.

[20] The courts have interpreted these sections in inconsistent ways, sometimes appearing to apply "bank" standards to other documents, or "other" standards to bank documents. They have also used the common law tests of contemporaneity and the like in applying the statutory tests. This may be in part because they have not distinguished in every case when they were deciding admissibility and when they were judging the weight of the evidence.

[21] These criteria are aspects of the one of the tests for the admission of hearsay evidence: reliability. The other test is necessity. One of the main reasons admitting a document is necessary is because the oral evidence is not available. The person who has direct knowledge of what is reported in the document is not available, or the information is such a routine bit of data among much else that no one could reasonably be expected to recall learning or receiving the particular information to be proved.

[22] The "necessity" test has given rise to some confusion because the term is also used to justify using a copy of a document instead of an original. However, this justification is an aspect of the best evidence rule, not the hearsay rule. Applied to documents, the best evidence rule means that an original document is the preferred evidence. Sometimes this too

has been altered by statute. Some statutes provide that a photograph of a cheque is admissible without proving how it came to be produced or used.

[23] Additional provisions have been made for other photographic and microfilmed documents. Some of them show their origins by requiring that the original (paper) documents must be retained for a period of years as well as the microfilm. (Presumably this allows parties to test the reliability of the microfilm by looking at the originals, even though the microfilm is admissible as is.)

[24] As a result, the law is somewhat confusing in theory. Not all the contentious issues have been mentioned here. However, documentary evidence is regularly used without serious problems of principle.

electronic evidence

[25] Electronic evidence is a version of documentary evidence. As a result, both of the above tests for the use of documentary evidence apply to it: the best evidence rule and the hearsay rule. How this is done and how it should change, if at all, is the subject of this consultation.

[26] Electronic evidence is information that is recorded electronically. It may be created electronically or simply stored electronically. It may be on paper at one or more stages of its "life" and electronic at others, such as a fax (though faxes are generally treated as copies of paper records rather than as computer records). It may exist in more than one place at a time - in two computers, for example. An incomplete sample of electronic records would include those in or created by single computers, computer-to-computer communications, with or without intermediaries and with or without transformation of the messages at both ends, magnetic strips on plastic cards, microcomputers on plastic cards (smart cards), electronic mail, bulletin boards and international communications networks.

[27] The different ways in which computers are used to create, store and retrieve business records involve either communications between computers and humans or computer to computer communications, the

latter being merely a variety of the former with the intervention of a second computer or multiple computers. From the point of view of the law of evidence the different applications of computer technology will not affect the type of evidentiary provisions necessary to accommodate them, if those provisions concern operations common to all computer applications.

[28] Such operations are, for example, the sources of data and information used in databases, the entry of such data and information, business reliance upon such databases, and software reliability. General or specific references to such operations (placed in the business record provisions for example) would be applicable to all computer-produced business records. On the other hand, the relation between computer technology and microfilm could require a special change to the statutes because traditional microfilming has its own provisions in the Evidence Acts in Canada.

[29] Businesses and their lawyers express considerable interest in EDI (electronic data interchange). This can be defined as computer to computer transmission of data in structured forms, i.e. paperless trading. It does not require special treatment apart from *Evidence Act* provisions that apply to other computer-produced records. EDI's special legal issues concern contract law, not evidence law, e.g. trading partner agreements containing terms as to establishing the communications network, allocating costs and risks, determining security procedures, and procedures for verifying content, timing and authenticity of messages. They might also contain evidentiary provisions for settling disputes but they do not require intervention by an evidence statute. The validity of a private code of evidence might be addressed in a statute.

[30] Electronic imaging is a different example. The word "imaging" is commonly used in the information and image management industry itself to mean electronic imaging, which is the capture of exact images or pictures of documents onto optical or magnetic disk by means of an image scanner. It is expected to replace microfilming in the next few years. The electronic records so scanned become part of a computer memory. Technically they may be able to be altered, once in the memory,

in undetectable ways, depending on how they are recorded. As a result, those interested in using imaging technology have prescribed standards for handling the information to increase the security of the information. Imaging straddles the common law and statutory rules relating to microfilm records and business records. Since these two are not consistent, we may need some new rule on imaging.

statutory reform

[31] Some other countries have amended their laws to deal with electronic evidence. Examples appear in Ken Chasse's paper. In Canada, the only general provisions appear in the new Quebec Civil Code. The specific sections appear in the technical appendix to this paper.

some legal guideposts

[32] With this much by way of background, we can now look more closely at the legal issues posed by electronic evidence. Here are some of the key points on which the discussion will turn.

[33] *Admissibility and weight: Should the electronic record be allowed into the courtroom discussion at all? If so, what factors are relevant in determining its effect? Some statutory rules provide that some features of the production of a record may not affect admissibility. Some may affect both admissibility and weight, at which point the question becomes one of clarity of legal rule: how can one manage one's records in away to ensure their best use in litigation, or how can one challenge the use of records produced by the other side?

[34] *Statute and common law: The common law rules for documents were detailed and narrow. Statutes have generally been more flexible and broader. However, they have also been vague enough that courts have reverted to the common law, or created a new common law of statutory reading, to interpret them. Electronic records challenge the vagueness of the statutes even more thoroughly. Should new statutory provisions pick up some of the common law standards and apply them expressly to electronic records, or define the new rules in more detail by some other means?

[35] *Types of document: Is the classification of rules by type of document (business, bank, government) adequate for electronic records, or does the electronic nature of the record unite the statutory classes so similar rules should apply to all?

[36] *Criminal and civil proceedings: The current law, both common and statutory, does not distinguish between evidentiary rules in different types of proceeding, though of course the *Canada Evidence Act* applies largely to criminal actions and the provincial statutes to civil. Is there any case for deliberate variation?

[37] *Role of consent: Is there anything in the nature of evidence that would prevent private parties from setting out by contract what criteria will be used for the admission and the weighing of evidence in litigation between themselves? Is the only concern one of equality of bargaining power in creating such a contract?

[38] Rules of law on this topic should seek to achieve three ends: accurate evidence of reliable records; fairness between proponent and opponent of the evidence; and workability in practice.

[39] Three approaches are possible in reforming and harmonizing the law in this area.

1. to add special subsections for computer-produced records to the existing business record provisions and possibly for imaged records to the microfilm provisions:

*the existing provisions seem to be adequate for traditional precomputer business records and therefore do not have to be disturbed for those records. However most current records are now computer-produced so special rules may be useful for them.

2. to re-write those provisions into an single integrated set of provisions having common definitional, procedural and other support provisions (as the Uniform Law Conference, among others, proposed in the early 1980s):

*this would produce the same legislation for all types of business (and other) records, rather than having separate provisions for computer-produced records and imaged records. If imaging becomes widely used as expected, the two sets of provisions will often have to be used together. Therefore they should be integrated for efficiency so as to reflect that reality.

3. to do nothing and let the existing business record provisions deal with computer- produced records as best they may:

*computer-produced records are being admitted under the existing provisions without the creation of court decisions or new statutes that could inhibit their admissibility or weight.

[40] The next two sections of this consultation paper set out what each of the first two options might look like as a statute. The annotations sometimes refer to a Model Law on Electronic Commerce adopted in May, 1995, by the United Nations Commission on International Trade Law (UNCITRAL), which may become an international standard for law in this field. The text of relevant sections of the Model Law are in the appendix.

[41] The short draft statute was prepared for the Uniform Law Conference. It may be
enacted on its own or incorporated into the current provincial, territorial or federal evidence statutes.

[42] The longer draft was prepared for the federal Department of Justice. For that reason, it is written in the form of amendments to the Canada Evidence Act, but it could be used with little variation by a province or territory that wished to use it in the place of the related provisions of the existing evidence statute. Some of the introductory discussion overlaps with that in this consultation paper, with more attention to the technical law.

B. Short draft statute and annotations

[43] The statute is set out as a whole, followed by the text again with annotations to appropriate sections.

[44]

Uniform Electronic Evidence Act

Application

1. This Act applies to any legal proceeding conducted under the laws of [*enacting jurisdiction*].

Definition(s)

2. "Data record" means information generated, stored or communicated by electronic or analogous means.

Admissibility of data record

3. In a legal proceeding, nothing prevents the admission into evidence of information on the ground that it is in the form of a data record.

Weight of data record

4. If the probative weight of information in a data record is challenged, the weight may be assessed according to one or more of:

(a)the reliability of the means by which the data record was generated, communicated or stored;
(b)the reliability of the means by which the integrity of the information was maintained;
(c) the reliability of the means by which the information is displayed for the use in the proceeding;
(d) the means by which the originator of the information is identified;
(e) any other factor relevant to its weight.

Original record

5(1)Information in the form of a data record has the same status in evidence as an original version of the information if the information is printed on paper or otherwise displayed in a way that accurately reproduces the information in the form in which it was composed, as a data record or otherwise.

(2) Information may be held to be accurately reproduced in a data record despite any addition or change that arises in the normal course of storage, communication or display.

(3) The proponent of a data record may demonstrate that the information is accurately reproduced by evidence that the process or system used to reproduce it reliably reproduces information of the type in question and that the proponent has no reason to doubt the accuracy of the reproduction in the present case.

(4) In subsection (3), "reliably" means with a degree of reliability appropriate to the likely use of the record.

(5) Information stored as a data record in the form of optical images [or microfilm] is presumed to be accurately reproduced for the purposes of subsection (1) if it is stored in compliance with the applicable standard of the Canada General Standards Board current at the time of storage and maintained in compliance with the standard as amended from time to time.

variation by agreement

6. The provisions of this Act may be varied by agreement.

-- OR --

A person may agree with another person that as between them, the admissibility, weight or accuracy of a data record may be determined in a manner set out in their agreement, or that the criteria in this Act may be satisfied in a manner set out in their agreement.

other rules of law

7. The provisions of this Act operate in addition to and not in derogation of

(a) any other provision of [enacting jurisdiction] respecting the admissibility in evidence of any record or the proof of any matter, or

(b) any existing rule of law under which any record is admissible in evidence or any matter may be proved.

[45]

"Short form" statute annotated

Application

1.This Act applies to any legal proceeding conducted under the laws of [*enacting jurisdiction*].

[46] Comment:Enacting jurisdictions must decide whether this Act is to stand on its own or form part of their evidence statute. If it is incorporated into the general
statute, then this section will not be needed. In any event this section should track the application provision of the relevant Evidence Act.

Definition(s)

2. "Data record" means information generated, stored or communicated by electronic or analogous means.

[47] Comment:This is taken from the United Nations Model Law, without examples and without its reference to "optical" means, which seems either ambiguous or redundant. "Communicated" may add to the definition some certainty that a record stored in one computer is admissible even if it had been generated in another.

[48] One can define the data record to be the information or the medium containing the information. The drafting of the other sections, and to some extent the concepts themeselves, depends on which option is chosen.

[49] NOTE: If one defined "record" broadly enough to include electronic records, then one could apply the usual rules that deal with records. We then might not need to provide for some of what is in this draft Act. It might yet be helpful, however, to provide for treating electronic records as originals, and possibly to deal with agreements on evidentiary standards. A redefinition of "record" may work better in a long form statute like that in part C, below, than in a short form such as this.

Admissibility of data record

3. In a legal proceeding, nothing prevents the admission into evidence of information on the ground that it is in the form of a data record.

[50] Comment: This probably states existing law. It is intended to remove doubt. The information in the form ofthe data record must still be otherwise admissible. For example, if it is a business record, it must comply with the usual exceptions to the hearsay rules that apply to business records. The proponent of the record may have to lead evidence that it is a business record, etc.

Weight of data record

4.If the probative weight of information in a data record is challenged, the weight may be assessed according to one or more of:

(a) the reliability of the means by which the data record was generated, communicated or stored;
(b)the reliability of the means by which the integrity of the information was maintained;
(c) the reliability of the means by which the information is displayed for the use in the proceeding;
(d) the means by which the originator of the information is identified;
(e) any other factor relevant to its weight.

[51] Comment:This section is intended to assist the court in judging the weight of the evidence. It is not intended to require the court to look at each factor in each case. The list may assist the proponent in deciding what might be useful to support the electronic record. Sometimes the electronic record will not be disputed at all, and the proponent should not have to satisfy a lot of requirements for theoretical reasons.

[52] Is there any danger that this section will invite attack, or have the effect of requiring proponents of data records to bring this kind of foundation (supporting) evidence even if the electronic character of the record is not in issue at all? Some people think that foundation evidence should be led in every case. Do you agree?

Original record

5(1) Information in the form of a data record has the same status in evidence as an original version of the information if the information is printed on paper or otherwise displayed in a way that accurately reproduces the information in its material form, whether it was first composed as a data record or otherwise.

[53] Comment:This section avoids the question whether a data record "is" an original record. It allows a data record to serve the function of an original in evidence law, if that data record meets certain conditions. (Deeming the data record to "be" the original leads to problems where there is a "real" paper original and a data image of it.]

[54] BUT can one have both the paper original and the computer image in evidence at the same time, or must, or should, the court prefer the paper if it is available? The "best evidence" rule would suggest yes. However, it applies only to evidence produced by a particular party. If A has a paper record and B has an image of it, B is allowed to produce the image as his or her best evidence, if the paper is not accessible. (If A is a party, then he or she can be compelled to produce it for the court.)

[55] This short form statute does not abolish the best evidence rule. Should it? Should we take the clear step of turning the investigation from the integrity of an object (a paper record, a photo) to the integrity of the system that (re)produces it to a court? Such a step would apply only to data records and not to evidence in general.

[56] The Act, even in a minimalist version, should at least prevent the argument that a printout is a copy in some meaningful way or that there is a single original somewhere useful where the data are entered into the computer. The point is to make what is displayed from/by the data record function as the original record, without being the original. That prevents creating multiple "originals" as the data record is copied and printed many times.

[57] Do we need an express rule to say that a printout is an acceptable way of displaying the information in the data record (here or in another section)? The proponent of electronic evidence will always have to demonstrate that the display or printout does show the record. This is a

separate question from whether the record/display accurately represents the "original", if there is another original somewhere.

[58] Information in the form of data records may represent a range of "original" formats. These could be ranked according to whether the information put into the system (input) was in a fixed format or not. However, the proposed statute should work equally well for the whole range, if it is properly conceived and drafted.

[59] On one end of the range is an imaged document that reproduces a physical format of the piece of paper. A traditional microfilm does the same, but it is not a data record.

[60] In the middle are word-processed documents and, further along, e-mail messages, which may have physical forms, paragraphing, footnotes, and the like. Computer- originated faxes and computer-originated microfilm are in this part of the range too, as they keep their format on paper or on film as it was created in the machine.

[61] At the flexible end of the spectrum are computer records of data simply entered. There has to be some format to retrieve or use the information, but making it looks on the screen the way it looks on the page may not be very important to the user. The ability to manipulate the data may be more important, and the data may never be retrieved in the form or order in which they were entered into the system. e.g. business numbers like sales figures.

[62] This section relies on article 7 of the Model Law, which refers to the integrity of the information as it was "first composed in its final form". "Final form" really means "the form material to the use for which the proponent wants to introduce it". That could extend to a draft, or an admittedly amended version. This draft deletes the reference to finality. Should we use the wording suggested here?

[63] Consider the difficulty of proving that the record one has in one's computer is the same as what went into the other party's computer to be sent to you. If two versions are different, how can it be shown where the difference arose? If there is only your version, how do you demonstrate its

accuracy? By a generic test like "this system usually produces good results"? See subsection (3).

(2) Information may be accurately reproduced in a data record despite any addition or change that arises in the normal course of storage, communication or display.

[64] Comment:This language is taken from the Model Law, but without its reference to an "endorsement", which does not seem either clear or clearly achievable.
Ontario's regulation on electronic documents for photoradar permits limited additions to tickets filed electronically, but does not expressly have them serve the function of originals.

(3) The proponent of a data record may demonstrate that the information is accurately reproduced by evidence that the process or system used to reproduce it reliably reproduces information of the type in question and that the proponent has no reason to doubt the accuracy of the reproduction in the present case.

[65] Comment:This is drawn largely from the 1986 draft of the Canada Evidence Act.

(4) In subsection (3), "reliably" means with a degree of reliability appropriate to the likely use of the record.

[66] Comment:This test is drawn from the Model Law, Article 7. Does the rule overlap unduly with s. 4? The two sections serve different purposes: s. 4 to
determine weight, s. 5 to determine capacity to be an "original" for any rule of evidence law requiring production of an original.

(5) Information stored as a data record in the form of optical images [or microfilm] is presumed to be accurately reproduced for the purposes of subsection (1) if it is stored in compliance with the applicable standard of the Canada General Standards Board current at the time of storage and maintained in compliance with the standard as amended from time to time.

[67] Comment:A short form statute should arguably NOT deal with imaging specifically. An imaged record is simply a kind of information (namely the form of
words on paper) that is being offered as a data record. It is admissible under s. 3, if a copy of the "original" is ever admissible. Where the original is destroyed, the image will be the best evidence. Its weight as a copy is determined under s. 4.

[68] On the other hand, imaging is increasingly common, and a statute providing certainty for its use may be helpful. The present provision is not intended to limit users to the CGSB standard. Images may well be admissible and probative without meeting that standard. The standard provides a presumption of integrity, however.

[69] The reference to microfilm may be dubious. The CGSB standard covers microfilm, but most evidence statutes do so too. Most microfilm provides a photographic record, not a data record. We should perhaps limit this provision to computer- originated microfilm records. If so, what language is appropriate?

[70] A short form statute does not seem to be the place to try to remove the six-year- retention rule for traditional microfilm records. We will just ensure that a similar rule is not imposed on imaging.

variation by agreement

6. The provisions of this Act may be varied by agreement.

-- OR --

A person may agree with another person that as between them, the admissibility, weight or accuracy of a data record may be determined in a manner set out in their agreement, or that the criteria in this Act may be satisfied in a manner set out in their agreement.

[71] Comment:Do we have to say that the usual contractual defences apply to the agreement - e.g. fraud, failure of consideration? That probably goes
without saying.

[72] Which version of this section is preferable?
Should we say that the agreement creates only a presumption of admissibility? Probably the parties should be left to decide how firmly they will bind themselves to their private standard.

other rules of law

7. The provisions of this Act operate in addition to and not in derogation of

(a) any other provision of [enacting jurisdiction] respecting the admissibility in evidence of any record or the proof of any matter, or
(b) any existing rule of law under which any record is admissible in evidence or any matter may be proved.

[73] Comment:This is taken from s. 30(11) of the 1986 draft Canada Evidence Act.

Other statutory provisions prevail. Common law rules may apply too. For example, a number of statutes allow for electronic evidence for particular purposes. In addition, this short form statute does not replace the business records rule or other exceptions to the hearsay rule.

[74] BUT we do not want to let the courts import into our electronic records rules either old rules from other statutes requiring original or signed documents, or the old common law business records tests (personal knowledge, duty to know etc) that they have imposed on some of the statutory business records rules

[75]Does each enacting jurisdiction have to review all its existing statutes for possible conflicts and decide whether the new rule or the old should prevail? Or can we devise a satisfactory general rule on conflicts?

[76] Should the new statute say that in the case of conflict, the most permissive provisions prevail? Should it make an exception if the conflicting provisions expressly override this statute? In other words, legislation could require a record to be on paper, or signed by hand, but only if it said so in so many words.

[77] Does this short form work with the present special provisions about banking and public documents?

C. Long form statute to cover all documentary evidence

[78] We turn to the final section, which is a redraft of the business records provisions of the *Canada Evidence Act*prepared for the federal Department of Justice. After a technical introduction, the proposed reforms are summarized, followed by draft provisions themselves and an annotation..

[79] This fuller version would not just repose electronic evidence on the usual rules of evidence, such as those about business records and those about best evidence. It would actively replace those rules in their application to all records, including electronic records. If we rely only on the shorter version, then we will have inconsistent rules across the country for electronic records, as there are inconsistent rules on business documents.

[80] Some of the policy choices in the longer version differ from those in the shorter version as well. We would like to hear which you prefer.

COMPUTER-PRODUCED EVIDENCE

IN PROCEEDINGS WITHIN FEDERAL JURISDICTION

by Ed Tollefson, Q.C.

BACKGROUND

[81] This project is another step in Canada's long and frustrating journey along the road toward reform in the area of Evidence.

[82] The process started in early 1971 when it was decided that one of the first items on the agenda of the newly created Law Reform Commission of

Canada would be a comprehensive review of the law of Evidence. The Commission spent more than four years on the project, studying the problems, consulting the Bar, the Bench and the law professors, and finally, in December, 1975, it published a report and accompanying Draft Evidence Code.

[83] The response of the Bar to the Draft Code was hostile. Many lawyers were opposed to the very idea of codification. Among those who were prepared to consider the content of the Draft Code, there was opposition to a number of provisions, but particularly strong opposition to those provisions that excluded the possibility of resort to the antecedent common law and that gave wide discretion to the trial judge. In the light of this reaction, the Minister of Justice decided not to use the Draft Code as the basis for new Evidence legislation. Instead, the Minister and his provincial counterparts asked the Uniform Law Conference of Canada to examine the problems, and the various legislative solutions proposed in Canada and elsewhere, with a view to developing a Uniform Evidence Actwhich could serve as a model for both the Canada Evidence Act and the provincial Evidence Acts. The Uniform Law Conference accepted the challenge and set up the Federal/Provincial Task Force on Uniform Rules of Evidence.

[84] After more than three years of work, the Task Force delivered its report. The draft legislation accompanying the report was in many ways different from the Commission's Draft Code: it was not a code, but rather a comprehensive Evidence Act, which left certain areas to common law development; its drafting was more precise and detailed than that of the Draft Code; and it reduced the scope of the discretionary powers given to the judiciary. The Uniform Law Conference held a series of plenary sessions in the spring and summer of 1981 to consider the Report, and at its annual meeting in August of that year, with the support of all jurisdictions, it approved a new Uniform Evidence Act based very largely on the Task Force recommendations.

[85] In November, 1982, the federal government tabled its version of the Uniform Evidence Act in the Senate as Bill S-33. The Senate Standing Committee on Legal and Constitutional Affairs held hearings on the Bill

between January and June, 1993. Many of those appearing before the Committee were representatives of the Defence Bar, who alleged that they had not been properly consulted and that the Bill was biased in favour of the Crown. In an interim report on the Bill, the Committee said that it thought that the Department of Justice should conduct further consultations with the Canadian Bar Association, and other groups and individuals who had offered their services, with a view to submitting an amended bill to Parliament.

[86] In response to the Committee's interim report, the Department of Justice established what became known as the Tripartite Committee, composed of three representatives of the defence bar selected by the Canadian Bar Association, three representatives chosen by the provincial Attorneys General, and one representative from the federal Department of Justice. The Tripartite Committee considered each of the criticisms made before the Senate Committee and reached a general agreement on a tentative re-draft of the Bill which took into account several of the criticisms made by the Defence Bar.

[87] In 1985, resolutions were passed unanimously by both the Uniform Law Conference and the Provincial Attorneys General urging the federal Minister of Justice to reintroduce the Evidence Bill. However, shortly thereafter, a number of new ministers of justice and attorneys general (both federal and provincial) appeared on the scene, an important few of whom expressed vigorous opposition to the enactment of a comprehensive Evidence Act either federally or provincially. Finally, in May, 1987, the plans to introduce the Uniform Evidence Act on a nation-wide basis were dropped, leaving each jurisdiction free to do what it thought best as far as Evidence reform was concerned. The federal Department of Justice continued to maintain an interest in the project and that year published, in connection with an international conference in London, a consultation document containing draft legislation that incorporated the revisions to Bill S-33 agreed upon by the Tripartite Committee (hereinafter referred to as the "Proposed Canada Evidence Act").

[88] Interest in reform of the law of Evidence re-surfaced at the 1994 annual meeting of the Uniform Law Conference, where a joint session of the Uniform and Criminal Law Sections, after considering a paper by Mr. Kenneth Chasse on the evidence problems associated the reception of computer output, passed a resolution that a draft uniform statute on computer-produced evidence be prepared. The present consultation document considers what might be appropriate legislative initiatives to deal with computer-produced evidence in proceedings falling within federal jurisdiction.

PROBLEMS WITH COMPUTER-PRODUCED EVIDENCE

[89] As computer-produced evidence almost always takes the form of a printout, it is usually classified under the rubric "documentary evidence". Therefore the party tendering a printout as evidence, the "proponent", must satisfy the same rules, whether statutory or common law, as would have to be satisfied if the document were of a more traditional nature. However, computer technology is so different from what has gone before that it does not readily fit into the existing scheme of things. It strains definitions of terms such as "original", "record" and "copy". It challenges one of the basic assumptions of our laws, namely, that copies are less accurate than original documents. It creates significantly more difficult problems of authentication. Nor are these problems simply legal curiosities, for the computer has revolutionized the way in which business is done and records are kept, and the failure of the law to keep pace with technological developments in this area forces many businesses to operate in two worlds, keeping two sets of records -- the computer records that they use on a day to day basis, and the traditional paper records that are kept in case they are needed for litigation purposes. This duplication of effort and additional cost of storage space for hard copy records, make Canadian businesses less efficient and therefore less competitive in a world-wide marketplace. Moreover the disparity between the law and reality is increasing year by year because of the rapid changes in computer technology. It is therefore urgent that the problems be addressed and that reforms be implemented that will take into account

the needs of business and at the same time protect the rights of individuals.

[90] The problems with the reception of computer-produced evidence may be addressed under the following headings: "Compatibility with the Current Law", "Authentication" and "New Developments".

Compatibility with the Current Law

1. *The Canada Evidence Act*

[91] Most of the problems to date have involved the question whether a computer printout constitutes a "record" or "copy" in the context of sections 29 and 30 of the Canada Evidence Act (or

equivalent sections of provincial or territorial Evidence legislation). These sections deal with the reception into evidence of information contained in banking and business documents respectively. They create statutory exceptions to the Hearsay Rule with respect to the proof of the contents of records "made in the usual and ordinary course of business", thereby reducing interference with the operations of financial institutions and businesses.

[92] With the advent of computerized record-keeping in the banks, the courts soon had to determine whether a statement of account contained in a printout from a bank's computer constituted a copy of an entry in a bank record for the purposes of s. 29 of the Canada Evidence Act. Section 29(1) provides for proof of the contents of any entry in any book or record kept in any financial institution by means of a copy of the entry. In R. v. McMullen, 1 the Ontario Court of Appeal decided that a computer printout was a copy for the purposes of s. 29(1) so long as it satisfied the four conditions of admissibility set out in s. 29(2), namely:

- that the book or record was, at the time of the making of the entry, one of the ordinary books or records of the financial institution;
- that the entry was made in the usual and ordinary course of business;
- that the book or record is in the custody or control of the financial institution;

- that the copy is a true copy thereof, such proof to be given either orally or by affidavit by the manager or accountant of the financial institution. [2]

[93] While the judgment in R. v. McMullen made it clear that computerized record-keeping was acceptable, and that a printout of an entry could be a "copy" for purposes of s. 29, it did not address the question of what constituted the "record" of the bank. This issue arose in R. v. Bell and Bruce, [3] where the bank kept its records on a computer and at the end of each month with respect to each account printed out two copies of a statement of account showing opening and closing balances and all transactions taking place in that month. One copy was sent to the branch (where it was kept for fifteen years) and the other was sent to the customer. The individual transactions were then erased from the computer's memory. On the basis of McMullen, the Defence argued that since the printout was a "copy" of an entry, the "record" had to be the memory of the bank's computer. As the memory no longer contained the details of the statement, the bank had no existing record as required by the third condition of s. 29(2); therefore the printout was not admissible as a copy of the record. The trial judge accepted this argument and dismissed the case, but the Crown appealed. While the Ontario Court of Appeal agreed that in this case the computer's memory did not contain a record of the entry in question, the provisions of s. 29(2) were nevertheless satisfied because the record of individual transactions, which the bank relied on itself, was the printout sent to the branch. Speaking for the Court, Weatherston J.A. said:

McMullen is authority for the proposition that information stored in a computer is capable of being a "record kept in a financial institution", and that the computer print-out is capable of being a copy of that record, notwithstanding its change in form. It is not authority for the proposition that the stored information is the only record, or that a computer print-out is only a copy of that record.

Because of the rapidly changing nature of the technology, it would be impossible to lay down general rules to govern every case. It is always a

question of fact whether any recorded information (in whatever form) is a "record kept in any financial institution", but I think the following general propositions have so far emerged:

1. A record may be in any, even an illegible form.

2. The form in which information is recorded may change from time to time, and the new form is equally a "record" of that kind of information.

3. A record may be a compilation or collation of other records.

4. It must have been produced for the bank's purposes as a reference source, or as part of its internal audit system and, at the relevant time must be kept for that purpose.

Before computers were used by banks, a teller's journal was the original record. The entries in that journal were posted to a ledger, and that became a second record. I have no doubt that the ledgers of all accounts in a branch were collated so as to produce a ledger for the branch, and that became a record. So it makes no difference that the original information changes form, or becomes absorbed in some larger record. The authenticity of the record as evidence is sufficiently guaranteed by compliance with s-s. (2) of s. 29. [4]

[94] An appeal against the decision in R. v. Bell and Bruce was dismissed by the Supreme Court of Canada, [5] in a very short judgment which cited with approval the reasons given by the Court of Appeal. The propositions set out by the Court have provided very useful guidance for other courts and for the banks in their record-keeping. However, one important question still remains to be answered, namely, what is the record where there is a printout which is relied upon on a daily basis, but the information still remains on the memory of the computer? Would the court find that the business reliance on the printout made it the record, or would the information in the memory, as the origin of the printout, be classed as the record for purposes of s. 29?

[95] Unlike s. 29, s. 30 [the business record provision] contains a definition of "record":

30(12) In this section, . . . "record" includes the whole or any part of any book, document, paper, card, tape or other thing on or in which information is written, recorded, stored or reproduced and, except for the purposes of subsections (3) and (4), any copy or transcript admitted in evidence under this section pursuant to subsection (3) or (4).

[96] The definition is almost ludicrously wide -- a "thing on or in which information is . . . stored . . . " would include a bookshelf or a filing cabinet -- which might lead courts to give a narrower interpretation, more consistent with the examples listed at the beginning of the definition.

[97] The courts have sometimes found a computer printout to be a record for the purposes of s. 30, [6] but there has not been any analysis of the issue in any of the cases. The question is of considerable importance because if the court finds the printout is the record, it will be admissible in evidence under s. 30(1) on proof that it was made in the usual and ordinary course of business. [7] If, on the other hand, the record is considered to be found in the computer's memory (as must be intended by many, if not most, businesses which have computerized to avoid paper burden), a printout is classed as being a copy of the record and is admissible in evidence under s. 30(3), but only where it is accompanied by an affidavit setting out the reasons why it is not possible or reasonably practicable to produce the record, and another affidavit of the person who made the copy, setting out the source from which the copy was made and attesting to its authenticity. [8] The irony is that the document that is presented in evidence in each case, i.e. the printout, is identical, but in one case the proponent has to do nothing other than prove that the record was made in the usual and ordinary course of business, while in the other case he has to provide an affidavit explaining the absence of the record and a second affidavit of authenticity.

[98] In R. v. Sunila and Solayman, [9] a prosecution under the Narcotic Control Act, the Crown presented in evidence a printout of data compiled by a computer on board an Airforce surveillance plane, part of which data showed the movements of a particular ship. MacIntosh J. of the Nova Scotia Supreme Court, in an oral judgment, found that the printout would have been admissible as a record under s. 30(1) of the Canada Evidence

Act if it were not for the fact that he also concluded that it was "a record made in the course of an investigation or inquiry" and therefore was an exception that fell within s. 30(10)(a)(i). The Crown also argued that the printout should be admissible under s. 26 of the Canada Evidence Act as a copy of an entry in a "book" kept in an office or department of the Government of Canada, but the judge found that while the word "record" could include a computer, it would do too much violence to the English language to say that "book" included a computer. The judge may well be right as a matter of strict statutory interpretation, for the primary definition of "book" in most dictionaries would include reference to pages bound in a cover. But from a practical point of view, the decision shows the tyranny of words. Because of changes in technology, we can now provide a protective cover by putting the text into a computer. Indeed, it is fair to assume that a great majority of books prepared in the usual and ordinary course of government business today are prepared on a computer, and their original text is to be found in the memory of a computer.

[99] The conclusion that one can reach is that the provisions of the Canada Evidence Act do not provide a particularly comfortable fit for computer-produced evidence. They were not prepared with the computer in mind, so their terminology is inappropriate or ill-defined. Having been prepared with the objective of resolving particular problems, the relevant sections of the Act reveal inconsistencies of approach and unwarranted overlapping which affects all forms of documentary evidence, not just computer-produced evidence.

2. *The Common Law*

[100] Documentary evidence that is not admissible by virtue of a statute may be admissible at common law, and even in cases falling within s. 30(1) of the Canada Evidence Act, by virtue of s. 30(11) the litigant may choose to establish admissibility under the common law. [10] But if the proponent wishes to prove the contents of a document at common law, he must satisfy the Best Evidence Rule, and if the proponent is also asking the court to conclude that the statements in the document are true, he must satisfy the Hearsay Rule.

[101] The Best Evidence Rule requires that where a party wishes to prove the contents of a document, he must produce the original document. The justification for excluding secondary evidence -- such as copies or oral testimony of the original document -- is that any copy may contain

errors, either negligent or fraudulent, and oral testimony about the contents of a document is almost bound to contain some inaccuracies. Moreover, particularly in cases where the authenticity of the original document is in question, tendering secondary evidence, even a high quality copy, could mask important details regarding handwriting, type of paper etc.

[102] Recognizing that in many cases the application of the strict rule requiring the production of the original document would lead to injustice, the common law has developed a number of exceptions where secondary evidence will be permissible. The common law exceptions are based on the principles of necessity and reliability The necessity criterion has been found to be satisfied where it is proved that the original (1) is lost or destroyed (2) is in the hands of an opponent who will not produce it (3) is in the hands of a stranger to the litigation who cannot be compelled to produce it (4) is of such a nature (e.g. a tombstone, inscription on a wall, etc.) that is would be impossible, impracticable or even illegal to bring it into court, or (5) is a public document the production of which would cause inconvenience to the public.[11] To comply with the second principle, namely, "reliability", the secondary evidence being proffered must be "legitimate and trustworthy evidence, inferior to primary [i.e. the original document] solely in respect of its derivative character, and must not consist of conjectural or illegal matters." [12] Perhaps inconsistently, once the court is satisfied that a particular piece of secondary evidence satisfies the threshold test for reliability, the law does not require the production of the best secondary evidence available. Thus, a litigant could produce oral testimony of the contents of the original document even though a high quality copy is available. [13]

[103] If a proponent is seeking to have a computer printout admitted into evidence under the common law, in order to satisfy the Best Evidence Rule, the court will have to determine whether the printout is to be

characterized as an "original document" or a "copy". It is suggested that this question will pose even more difficult theoretical problems than have confronted the courts in relation to the interpretation of the words "copy" and "record" under the provisions of the Canada Evidence Act. This is because the common law Best Evidence Rule tests the admissibility of secondary evidence against the "original document" rather than a "record made in the usual and ordinary course of business". This emphasis on the point of origin may result in printouts always having to be treated as copies, because a printout is not the point of origin: behind the printout is a man-made device from which the printout's message and format originates, and which can reproduce other printouts just like the first when and as often as the device is directed so to do. It would seem to follow that if the printout is a copy, then the computer's memory, as the point of origin of the message, must contain the original. However, this raises the question whether a computer's memory is a "document" at common law. Traditionally, the term "document" has been defined as any material on which written or printed information is conveyed; [14] although, more recently, in Tide Shore Logging v. Commonwealth Insurance Company, [15]Murray J. found that an audio tape was a document.

[104] In addition to satisfying the Best Evidence Rule the proponent of a printout at common law may have to satisfy the Hearsay Rule, for documents are by nature hearsay, being evidence of what was stated on another occasion. The Hearsay Rule precludes the reception of hearsay where it is being adduced for the purpose of proving the truth of the statement. The reason for the exclusion is the common law assumption that better evidence can be obtained by having the person who made the statement called to testify in open court and subject to an oath and cross-examination.

[105] An inflexible application of the Hearsay Rule could exclude very relevant evidence, so over the years the courts developed a number of exceptions where particular circumstances provided

some guarantee of the trustworthiness of the statement, and the evidence could not be obtained in any other way. Gradually there was established an exception with respect to records made under a business

duty, but there were many conditions which had to be met in order for a statement to be admissible as an exception to the Hearsay Rule. Ewart [16] says that to be admissible the record had to be (1) an original entry, (2) made contemporaneously with the event recorded, (3) in the routine, (4) of business, (5) by a person since deceased, (6) who was under a specific duty to another to do the very thing and record it, (7) and who had no motive to misrepresent. The existence of these factors not only established the necessity of resorting to hearsay (the person now being dead) but provided some guarantee of trustworthiness arising from the routine and fear of discipline if there was any breach of the duty. In 1970, in Ares v. Venner, [17] the Supreme Court of Canada expanded this exception by admitting into evidence entries made on the plaintiff's hospital records despite the fact that the nurses who had made the entries were available but had not been called by either side to testify. The Court found that the entries had been made contemporaneously with the observations, and that they had been recorded by someone who had personal knowledge of the matter and who was under a duty to record the observations. In 1990, in R. v. Khan, [18] and in 1992, in R. v. Smith, [19] after examining the fundamental nature of the Hearsay Rule, the Supreme Court of Canada swept aside the pigeon-hole approach to exceptions in favour of a general exception to the Rule based on two criteria --necessity and reliability. While in both cases the necessity criterion was met because the person who made the statement was unavailable to testify, the Court made it clear that other circumstances would also qualify. In a subsequent decision, R. v. B (K.G.), [20] the Chief Justice of Canada explained that reliability was the main criterion, and that where there are very high circumstantial guarantees of reliability the necessity criterion might be satisfied by expediency or convenience. He referred to Ares v. Venner as an example of such a situation. 21

[106] As far as common law exceptions to the Hearsay Rule are concerned, there do not appear to be any problems that would affect computer-produced evidence more than any other kind of documentary evidence. Assuming that there are no questions about possible improper alterations to the text, the great accuracy with which the computer can

reproduce in a printout what is in its memory at the time of printing may in fact enhance the reliability of the document in the eyes of the judge; although the accuracy of the text really is a Best Evidence issue inasmuch as the statement may still be untrue.

Authentication

[107] Many lawyers are unclear on the meaning of "authentication" and how it relates to the "admissibility" of documentary evidence. A good explanation is found in Rule 901(a) of the U.S. Federal Rules of Evidence, which describes authentication in the following manner: "The requirement of authentication or identification as a condition precedent to admissibility is satisfied by evidence sufficient to support a finding that the matter in question is what its proponent claims." In other words, "authentication" is to the admissibility of documentary evidence what "identification" is to the admissibility of an exhibit. Some documents --usually documents under the seal or signature of a public official -- are self-authenticating, but normally the common law requires that the proponent have the document identified by a witness who is acquainted with it. Where the document is a copy, the court must be satisfied that it is an authentic copy of the original. Statutory provisions may also impose conditions that must be met before a document can be treated as authentic: see, for example, s. 29(2) of the Canada Evidence Act with respect to the reception of a copy of an entry in the records of a financial institution, [22] and s. 30(3) with respect to the reception of a copy of a business record. [23]

[108] As Rule 901(a) of the U.S. Federal Rules of Evidence states, satisfying the court of the authenticity of a document is a condition precedent of admissibility, but it does not guarantee that court will find the document to be admissible in evidence: for example, the court may find that the document is an authentic copy of the original, but it will be excluded under the Best Evidence Rule if the original is subsequently produced and authenticated; or an authentic original document will be ruled inadmissible if it is being tendered to prove the truth of its contents and it does not fall within one of the exceptions to the Hearsay Rule.

[109] There are no statutory rules relating specifically to the authentication of a computer printout, so, as with documents in other forms, it is necessary for the proponent to establish that it is what he claims it to be. However, given the technical complexity of the computer, the possibility (remote though it may be) of system failure, and the potential for alteration of the text due to human interference (caused either deliberately or negligently), this may not be easy. The clearest judicial statement to that effect is found in R. v. McMullen [24] (referred to above), dealing with whether a computer printout was a copy for the purposes of s. 29(2) of the Canada Evidence Act, where Morden J.A. (for the court) said:

The nature and quality of the evidence put before the Court has to reflect the facts of the complete record-keeping process -- in the case of computer records, the procedures and processes relating to the input of entries, storage of information and its retrieval and presentation . . . If such evidence be beyond the ken of the manager, accountant or the officer responsible for the records . . . then a failure to comply with s. 29(2) [of the Canada Evidence Act] must result and the print-out evidence would be inadmissible. [25]

[110] However, this investigative approach was not repeated in the judgment of the same court in R. v. Bell and Bruce, [26] where, shortly after stating that in order to qualify as a bank record a document "must have been produced for the bank's purposes as a reference source, or as part of its internal audit system and, at the relevant time must be kept for that purpose", Weatherston J.A. (for the Court) said that "[t]he authenticity of the record as evidence is sufficiently guaranteed by compliance with s-s.(2) of s. 29." [27]

[111] Section 29 only applies to financial institutions, which are required by the nature of their business to balance their books at the end of each day and are subject to regular and stringent audits. Moreover, their computer security systems are presumably such that they are not readily accessible by unauthorized persons. In such circumstances, where a bank manager or accountant swears under s. 29(2) that the entry in question was made in one of the ordinary books or records of the bank, that the

book or record is in the custody or control of the bank and that the copy adduced is a true copy of the entry, a court (as in R. v. Bell and Bruce) might reasonably assume that it is a true copy, leaving it to the opponent of the evidence to produce evidence and arguments to challenge its weight.

[112] But the sense of confidence we may have with respect to the record-keeping of financial institutions is not readily transferable to every business, for the term "business", as defined in the business records section (s. 30(12)), covers everything from the largest multi-national corporation to a one-person business or a volunteer agency. Yet, while the authenticationrequirements of s. 30(3) for copies of business records are almost as stringent as those in s. 29(2) for copies of financial records, the only authentication requirements imposed by s. 30(1) with respect to the admissibility of the record itself are that what is produced is the record (not a copy) and that it was

"made in the usual and ordinary course of business". [28] The assumption upon which this provision is based is that a business, as a matter of self-interest, will maintain accurate and truthful records.
[113]

Perhaps in recognition that many businesses are distinctly "unbusinesslike" in the conduct of their affairs and the control of access to their records, s. 30(6) give the court fairly broad investigatory powers, which it appears to be able to exercise on request or ex proprio motu:

(6) For the purpose of determining whether any provision of this section applies, or for the purpose of determining the probative value, if any, to be given to information contained in any record admitted into evidence under this section, the court may on production of any record, examine the record, admit any evidence in respect thereof given orally or by affidavit including evidence as to the circumstances in which the information contained in the record was written recorded, stored or reproduced, and draw any reasonable inference from the form or content of the record.

[114] The opening words of s. 30(6) are usually interpreted as being a roundabout way of saying that the court may inquire into either the admissibility or the probative value of a record produced. The court also has powers which it may exercise under s. 30(9):

(9) Subject to section 4, [which deals with the competence and compellability of the accused and spouse as witnesses] any person who has or may reasonably be expected to have knowledge of the making or contents of any record produced or received in evidence under this section may, with the leave of the court, be examined or cross-examined thereon by any party to the legal proceeding.

[115] In addition to the powers expressly given to the court under ss. 30(6) and 30(9), Barry J. in R. v. Sheppard [29]excluded a computer printout even though it was found to have been made in the usual and ordinary course of business, because he found that the Crown had failed to prove that the record was reliable. Barry J. said: "In my view the authorities hold that s. 30(1) carries the necessary implication that such a record will be admitted when the judge has examined it and exercised his discretion to accept it as being an authentic record of its contents made in the ordinary course of the company's business." [30]

[116] Therefore, there is authority for the judge to permit or require proof of details of circumstances relating to the operation of the record-keeping system, which in the context of a computerized system could involve proof of "the procedures and processes relating to the input of entries, storage or information and its retrieval and presentation" as suggested by the Ontario Court of Appeal in R. v. McMullen. [31]

[117] Critics of s. 30, many of whom are involved in records management, [32] say that its present provisions do not give enough guidance regarding what the court will be looking for in determining the admissibility of a computer-produced record. As a result, litigants do not know how to prepare for trial, and businesses do not know what steps to take in their record-keeping in order to assure that their documents will be found admissible. If it is left to the courts it may take years to arrive at a satisfactory solution that would apply across the country. Kenneth

Chasse, a lawyer with expertise in the law relating to computers, maintains that another reason that s. 30 requires change as far as computer-produced evidence is concerned is that computer-stored records are subject to risks of destruction or alteration that no other form of stored information is. The risks are in the form of system failures, software problems and the danger of unauthorized access to the file through other terminals in the network or by hackers who may be hundreds of miles away. Moreover, in the case of a text stored on a computer it is extremely difficult and costly to identify alterations as being improper, for the computer leaves few traces that the text was interfered with. Chasse feels that it is unfair to put the party opposing the admissibility of computer-produced evidence to the high cost of conducting an investigation of someone else's computer system. Instead, the proponent of such evidence should be obliged to establish a higher threshold of reliability before the evidence is found to be authentic and admitted. In a paper presented to the Uniform Law Conference at its annual meeting in 1994, Chasse suggests that the problems regarding the reliability of computer-produced records might be resolved by amending the Canada Evidence Act (and the provincial Evidence Acts) to include special requirements for the admissibility of computer printouts as a business record under s. 30, such as proof that the record was made contemporaneously with the event recorded and was made as part of a routine of the business by someone with no motive to misrepresent. [33] Alternatively, he suggests an amendment that would require the judges, in determining the admissibility and weight of records produced by a computer, to go through a checklist of questions such as the following:

- What are the sources of data and information recorded in the databases upon which the record is based?
- Was the data and information in those databases recorded within a reasonable time after the events to which the data and information relates?

- Was the data and information upon which the record is based of a type that is regularly supplied to the computer during the regular activities of the organization?
- Were the entries into the databases made in the regular course of business?
- Did the business rely on those databases in making business decisions at or about the time the record was made?
- Did the computer programs used to produce the output, accurately process the data and information in the databases involved?
- Did the security features used provide a guarantee of the integrity of the record? [34]

[118] He suggests that a supervising officer of any well-run information or record-keeping facility would be the only witness required to answer these questions, except in cases where a unique software was being used and the supervisor cannot testify to its history of reliability.

[119] Those who oppose the introduction of special requirements with respect to computer-produced evidence argue that the fact that a record was made in the usual and ordinary course of business shows that the business was prepared to rely on it in making business decisions, and this should be enough to satisfy the admissibility threshold for any form of business record. They point out that s. 30 already contains extensive means for challenging both the admissibility and weight of computer-produced records tendered in evidence. They warn that in a large business it might be very difficult, time-consuming and costly to answer some of the questions in Mr. Chasse's checklist, and might require calling several witnesses. [35]

[120] While the two sides do not agree on the appropriate solution, there is a measure of agreement on the problems with the current law. First, there is a great deal of uncertainty about how the law, particularly s. 30(6), will be applied, and this makes it difficult for the parties to prepare for litigation and for businesses to know how they should keep their records. Second, there are risks to the integrity of records kept on a computer that

do not exist with respect to other forms of information processing and storage, and if alterations are made, either negligently or deliberately, they can be extremely difficult to detect. Third, s. 30(1) provides little assurance that the record produced to the court is the same as the one that was originally made in the usual and ordinary course of business, for while self-interest may be an adequate guarantee that most businesses will maintain accurate and truthful records, it is not true for many others. The second and third problems combined place the party opposing the introduction of computer-produced business records in a difficult situation.

New Developments

[121]There are two recent developments in relation to computer-produced evidence which need to be examined in considering the appropriateness of current laws of evidence. The first relates to contracts made, computer to computer (electronic data interchange--EDI) and the second is the new technology of "electronic imaging".

1. *Electronic Data Interchange -- EDI*

[122] Sometimes referred to as "paperless trading", EDI involves computer to computer communication on agreed upon topics, using agreed upon formats. The Automatic Teller Machines (ATMs) are the most common example, where a computer takes instructions, contacts another computer which acts upon the instructions, updates your account, and gives instructions to the first computer in terms of delivering money and issuing a statement of the transaction. Some government departments are now trying out EDI as a way of receiving payments, receiving offers and bids, making payments to beneficiaries etc. Most of the legal problems in relation to this kind of business communication are of a contractual nature. The evidence problems associated with litigation involving such contracts appear to be no different from those arising in other contract disputes. Therefore no special action in relation to Evidence law need be taken.

2.--*Electronic Imaging*

[123] Electronic imaging involves using a scanner to capture an image of a document, digitize it and store it on a magnetic or optical disk, which can be viewed on a computer screen. Storage on an optical disk is non-erasable so that it provides an electronic equivalent of microfilming. Indeed, some suggest that it is likely to become the preferred method of storing documents that originate in hard copy, because it takes less space and, being readily accessible by computer, is more convenient than microfilm. The Canadian General Standards Board (CGSB), in collaboration with representatives from government and industry, has developed a national standard for the preparation, control and storage of microfilm and electronic images. [36]

[124] As the industry views imaging and microfilming in the same context, it is natural to inquire whether similar conditions to those set out in s. 31 of the Canada Evidence Act should be applied also to imaging. Section 31 makes a print from a photographic film (including microfilm) of (a) an entry in a book or record kept by, or (b) any bill of exchange, instrument or document held by, a government or a select group of corporations admissible in evidence to the same extent and for the same purposes as the object photographed would have been admitted. As a condition of admissibility it must be established by evidence of someone with personal knowledge that the film was taken in order to keep a "permanent record" of the document and that the object photographed subsequently was destroyed by or in the presence of one or more of the employees of the government or corporation, or was lost or delivered to a customer. [37]

[125] While linking imaging to microfilming would perhaps help to establish its acceptability, it might be argued that technologically it is a specialized computer operation and legally it ought to be dealt with as such. Moreover, s. 31 itself needs to be reconsidered, for it is out of date, is limited in availability and overlaps the area covered by s. 30. Any extensive revision of the documentary evidence provisions of the Canada Evidence Act ought therefore to rationalize these two sections and ss. 26 and 29 that also overlap s. 30. [38]

[126] If on the other hand it is decided that there is merit in modifying s. 31 to include electronic imaging, the accessibility of this method of storage

should not be limited as at present to the government and a few large corporations. It is also questionable whether destruction of the item photographed should be a requirement for the admissibility of the photographic print. The reason for the requirement originally was to establish the necessity of resort to the secondary form of evidence. But this is not required in s. 30, and now it appears that the common law itself regards the necessity criterion as being satisfied by expediency or convenience where the reliability of the secondary evidence is very high. [39] There are many situations where it is important to have an unalterable copy and also keep the original for archival purposes.

[127] To enhance the authority of such a copy, it would obviously be desirable for the proponent to prove that the copy, whether by imaging or microfilm, was made and stored in substantial compliance with the CGSB Standard on the subject. However, it is questionable whether that needs to be legislated as a condition of admissibility, for standards in an evolving field of technology do tend to change frequently; moreover, it would probably be wise to maintain some degree of flexibility, as non-compliance with some of the details of the Standard perhaps should affect the probative value rather than the admissibility of the reproduction. In any event, once the Bar and Bench become aware of the Standard, it will be used as a basis for supporting or attacking this kind of evidence.

CONSIDERATIONS IN APPROACHING THE PROBLEMS

[128] In considering how to resolve the problems involved in computer-produced evidence, the Federal Government must, of course, give due weight to the resolution passed by the joint session of the Uniform Law Section and the Criminal Law Section at the 1994 annual meeting of the Uniform Law Conference of Canada that was referred to at the beginning of this paper. That resolution recommended that "the Conference prepare a draft uniform statute on computer produced evidence *based on a special rather than comprehensive reform, and with a view to leaving most of the*

factors of admissibility and weight of the evidence to the discretion of the court." [Emphasis added.]

[129] While too much detail in legislation can create inflexibility, wide, unfettered judicial discretion has the potential for creating uncertainty in the application of the law. This was noted in directions given by the Uniform Law Conference, at its annual meeting in 1979, to the Federal/Provincial Task Force on Uniform Rules of Evidence. In part, those directions read: "Although legislative statement can assist in making the law of evidence more understandable and more certain, *provisions which create wide discretions in the trial judge, especially with respect to admissibility, can reduce, rather than increase, the very certainty and uniformity that are rationales for legislating*."[40][Emphasis added.] This observation has perhaps particular relevance in relation to amendments to the *Canada Evidence Act*, because it applies primarily in criminal proceedings. We have seen in the foregoing review that uncertainty as to how the law will be interpreted and applied to computer-produced evidence is a major part of the problem, making it difficult for counsel and businesses alike to know what to do to prepare themselves for litigation.

[130] The challenge therefore is to devise a reform proposal that provides a clear statement of the law, while at the same time preserving the ability of the judge to use his/her common sense in making rulings on the admissibility of evidence.

[131] The resolution of the joint session of the Uniform Law Section and the Criminal Law Section also recommended that the draft uniform legislation be "based on special rather than comprehensive reform". This resolution must, of course, be read in the light of the fact that the only subject before the joint session was computer-produced evidence, and the Uniform Law Conference already has a comprehensive Uniform Evidence Act, which was adopted by the Conference, with the support of all jurisdictions, in 1981 after three years of work by the Federal/Provincial Task Force on Uniform Rules of Evidence and numerous special plenary sessions. [41]

[132] As Bill S-33, the federal version of the Uniform Evidence Act died on the Order Paper, and there has not yet been any reform of the documentary evidence provisions of the Canada Evidence Act, an "appropriate" solution to the specific problems associated with computer-produced evidence may involve amendments that affect other types of documentary evidence.

[133] **SUMMARY OF SUGGESTED REFORMS**

This paper has addressed the problems with computer-produced evidence under three headings: Compatibility with the Current Law, Authentication, and New Developments. The following is a summary of the main recommendations for addressing those problems. In addition, there are a few "Miscellaneous Recommendations" designed to eliminate ambiguities and inconsistencies or to make the law in this area more "user friendly". For details, see Appendix "A" (proposed draft amendments to the Canada Evidence Act) and Appendix "B" (the commentary on the proposed draft amendments).

Compatibility with the Current Law

[134]As mentioned above, computer technology is so different from what has gone before in the area of information processing and storage that it clashes with the distinctions the law draws between "record" and "copy" and between "original document" and "secondary evidence". We need to modify our terminology and concepts to accommodate the reality of the computer, and in particular we need to clarify how computer-produced evidence fits into the Best Evidence Rule. The

following are terms that require definition in the amendments in order to attain this objective: (the actual wording of the definitions will be found in the attached draft provisions).

"Record"

[135] Though used in several sections in the Canada Evidence Act, the word "record" is only defined for the purposes of s. 30, and even that definition is not clear insofar as computer-produced evidence is concerned: for example, is a printout the record or a copy for purposes of

s. 30? A new definition, applicable to all the documentary evidence provisions, should be introduced, clarifying that the word includes a record capable of being read electronically by a computer or other device. This would include the new technology of electronic imaging.

"Computer"

[136] There is no definition of "computer" either in the Canada Evidence Act or the Interpretation Act. Since most of the proceedings to which the Canada Evidence Act applies are criminal, the same terminology as appears in the Criminal Code, and the definitions found in s. 342.1(2) of the Code, should be used. These terms and definitions ("computer program", "computer system" and "data") were approved in the consultation process on Bill S-33, and were adopted in the "Proposed Canada Evidence Act".

"Original"

[137] As was pointed out above, computer technology does not fit readily into the conceptual framework of the Best Evidence Rule. It is particularly difficult to say whether the intelligible output of a computer system (usually a printout or the image on the screen) should be treated as an "original" or as a "duplicate" (see below). On the one hand, there is obviously a point of origin in the computer system that existed before the intelligible output, and on which the output is based; but, on the other hand, that point of origin cannot be sensed by us unless it is turned into intelligible output. So, while from a theoretical point of view, the particular array of data stored in the computer system should be classed as the original record, from a practical point of view the intelligible output should also be treated as an original, as this is the only way that the data stored in the computer can be (or ever could have been) put into evidence. It is therefore recommended that both be classed as original records. This approach is consistent with that stated by the Ontario Court of Appeal (approved by the Supreme Court of Canada) in R. v. Bell and Bruce (above).

[138] While the above proposed amendments would, to a large extent, overcome the problems of compatibility that currently exist with regard to

computer-produced evidence, they would create another anomaly, by attributing a higher degree of legal recognition to a record which is produced by a computer than to a record produced by a technology of equal or superior reliability. It is therefore recommended that as part of the current amending process, amendments be introduced that would recognize that certain types of reproductions, such as photocopies, microfilm and electronic imaging, are so reliable that they essentially "duplicate" the original, and these "duplicates" should be admissible in evidence to the same extent as the original itself, even though the original may still be available. This proposal was the subject of extensive consultation by the Federal/Provincial Task Force on Uniform Rules of Evidence, and it was included in the Uniform Evidence Act and Bill S-33. None of the critics of Bill S-33 opposed the introduction of this change.

Authentication

[139] Apart from cases involving the use of computer printouts in financial institutions, there is a conspicuous lack of clarity and predictability in relation to what sort ofauthentication the courts will require for computer-produced records. Despite the fact that the "business records" provision has been on the books for a quarter of a century, the courts have still not developed any reasoned, consistent approach as to what will be required of a proponent of a computer-produced business record. Moreover, with the exponential growth in the use of personal computers, it is important that the law anticipate litigation involving computer-produced records that do not qualify either as financial or business records. This is not an area that can best be dealt with by individual courts on a case-by-case basis, for not only does it involve complex technical questions but also significant policy considerations. It is therefore recommended that the Canada Evidence Act be amended in the following manner.

1. There should be a statement of what authentication is and who bears the evidential burden with respect to it. This would involve no change from the existing law, but as authentication is generally not well-understood, and there are no handy reference books on the subject, it would be convenient for practitioners and judges to have been the basic rules spelled out in a readily accessible place.

2. The proponent should be required to notify each other party of his intention to tender in evidence a computer-produced record so that the other party will be alerted to the fact and can make preparations accordingly. Notice is also a necessary preliminary to a waiver of proof of authenticity proposed in the next recommendation.

3. In recognition that in the vast majority of cases the authenticity of the record will not be in issue, the amendments should provide that proof of the authenticity of the record shall be deemed to be waived unless within five days after receiving the notice from the proponent the other party has filed with the court a notice requesting proof of the record's authenticity.

4. The amendments should indicate how the proponent of a computer-produced record can satisfy the evidential burden as to its authenticity. This might be done (a) by comparing the record with the data supplied to the computer system, or (b) by evidence that the system reliably processes data of the type in question, and there is no reasonable ground to believe that correspondence between the record and the data supplied has been adversely affected in any material particular by any conduct or circumstance. The amendments should also provide that this evidence may be given either as testimony or by affidavit, and the court may require evidence to be given by the custodian of the record or some other person qualified to testify on this issue.

5. Finally, there should be a provision parallel to the existing s. 30(6), dealing specifically with computer-produced records that are being admitted into evidence as business records under s. 30(1). Unlike s. 30(6), the new provision should make it mandatory rather than discretionary for the judge to conduct a hearing into the circumstances surrounding the making, storage and reproduction of the record where the judge finds that "there is reasonable ground to suspect" that it may not satisfy the admissibility requirements of s. 30(1), or that its probative value may be in doubt. The subsection should also include a suggested list of matters to be explored. These proposed changes are designed to meet two of the chief complaints against s. 30(6), namely, its uncertainty of application by the courts and its lack of specificity on the question of what the courts will

want to know. The judge could, of course, examine any other relevant questions to round out the inquiry.

[140] It may seem that there is duplication between items 4 and 5 above, but in fact there is not. They serve different purposes. Item 4 addresses authenticity only, while item 5 addresses the issue of whether the record is not only what its proponent claims it is but whether it is admissible under s. 30(1) as an exception to the Hearsay Rule, and, if so, whether there is any reason to question its probative value. Furthermore, item 5 does not apply at all to computer-produced records that are not being tendered as records made in the usual and ordinary course of business. In some instances, however, the court might find it convenient to deal with the two steps at the same time.

New Developments -- Electronic Imaging

[141] Earlier in this consultation document, three options for dealing with this emerging technology were discussed. The simplest option would be to treat documents produced by either electronic imaging or microfilm as "duplicates" (which they are) and therefore admissible in evidence to the same extent as if they were originals. Under this option, there would no longer be any need for the microfilm section (s. 31), and it could be repealed. A second option, based on the similarity in the product of the two technologies, would be to treat electronic imaging as being of the same genre as microfilm, which would then be incorporated into s. 31. This option would be attractive primarily in the event that the proposed amendments regarding "duplicates" were not enacted. A third option, which is a variation of the second, could repeal the present s. 31 and replace it with a section which would create a super-category of duplicates, specifically designed to replace the original in court proceedings and for other official purposes. The benefits of the new section would be available in a wider range of circumstances than permitted under the present section. It was felt that as each of these three options had merits, and therefore draft provisions have been prepared for the consideration of those involved in the consultation process.

Miscellaneous Recommendations

[142] The attached proposed draft amendments to the Canada Evidence Act also contain a few amendments that do not fall into any of above three categories but are rather in the nature of house-keeping amendments, which are designed to tidy things up.

- In relation to the Best Evidence Rule, three amendments: the first, to define "public record"; the second, to assure that when the original record is not available the proponent will present the best secondary evidence that can be obtained by the exercise of reasonable diligence; and the third, to prevent a proponent from adducing secondary evidence of the contents of a record where the unavailability of the original or duplicate is attributable to the bad faith of the proponent. All of these amendments were recommended by the Federal/Provincial Task Force and appeared in the Uniform Evidence Act, Bill S-33 and the "Proposed Canada Evidence Act".
- In relation to Authentication, an amendment providing for the Governor in Council to make regulations respecting the form and contents of an affidavit by the custodian of the record regarding the nature, reliability, security etc of the computer system. This was recommended by the

Association of Records Managers and Administrators and was included in the "Proposed Canada Evidence Act".

- In relation to the admissibility of business records, an amendment to clarify that a record made in the usual and ordinary course of business is admissible even if it contains multiple hearsay or opinion. This was recommended by the Federal/Provincial Task Force on Uniform Rules of Evidence and appears in the **Uniform Evidence Act**, Bill S-33 and the "Proposed Canada Evidence Act".
- Finally, in relation to the organization of the Canada Evidence Act, an amendment that would put the documentary evidence provisions into a separate and distinct Part of the Act for the convenience of drafting definitions applicable only in that Part.

[143]

Proposed Amendments to the Canada Evidence Act (computer-produced evidence)

1. The Canada Evidence Act is amended by adding thereto, immediately after section 18, the following new headings:

PART I.1 - DOCUMENTARY EVIDENCE

Interpretation

2. The said Act is further amended by adding thereto the following section:

18.1 In this Part,

"computer program" has the same meaning as in section 342.1 of the Criminal Code;
"computer system" has the same meaning as in section 342.1 of the Criminal Code;
"data" has the same meaning as in section 342.1 of the Criminal Code;
"duplicate" means a copy that is a reproduction of the original made from the same impression as the original, or from the same matrix, or by means of photography, including enlargements and miniatures, or by mechanical or electronic re-recording, or by electronic imaging, or by chemical reproduction or by other equivalent technique that accurately reproduces the original;
"electronic imaging" means a process by which a visually perceivable record is scanned and an exact image of the record is captured electronically and stored in a manner that can be read and reproduced by a computer system;
"original" means
(a) in relation to a record, the record itself or any duplicate intended to have the same effect by a person executing or issuing the record,

(b) in relation to a record that is a photograph, the photograph itself, its negative or any print made from the negative, and

(c) in relation to a record produced by a computer system other than as a result of electronic imaging,

- (i) an array of data stored in a computer system that on command is capable of being identified and retrieved as intelligible output by a computer program, or
- (ii) a printout or other intelligible output of data supplied to a computer system;

"photograph" includes a still photograph, photographic film or plate, microphotographic film, photostatic negative, x-ray film and a motion picture;

"public record" means any Act, ordinance, statutory instrument, regulation, order in council, proclamation, official gazette, journal, treaty or other record issued by or under duly constituted legislative or executive authority.

"record", except where the context requires otherwise, includes the whole or a part of any correspondence, memorandum, book, plan, map, drawing, diagram, pictorial or graphic work, photograph, microform, sound recording, videotape, or other form or material on or in which information is recorded or stored, that can be read or understood by a person or by a mechanical, electronic or other device.

"record produced by a computer system" includes any record made on, stored in or reproduced by a computer system

3. The said Act is further amended by adding immediately after section 18.1 the following heading and new sections:

Best Evidence Rule

18.11 Subject to this Act or any other Act of Parliament, production of the original is required in order to prove the contents of a record.

18.12 (1) A duplicate is admissible to the same extent as an original unless the court is satisfied that there is reason to doubt the authenticity of the original or the accuracy of the duplicate.

(2) Where an admissible duplicate cannot be produced by the exercise of reasonable diligence, a copy other than a duplicate is admissible in order to prove the contents of a record in the following cases:

(a) the original has been lost or destroyed;

(b) it is impossible, illegal or impracticable to produce the original;

(c) the original is in the possession or control of an adverse party who has neglected or refused to produce it, or is in the possession or control of a third person who cannot be compelled to produce it; or

(d) the original is a public record or is recorded or filed as required by law.

(3) Where an admissible copy cannot be produced by the exercise of reasonable diligence, other evidence may be given of the contents of a record.

(4) Evidence of the contents of a record shall not be receivable on behalf of the proponent of the record other than by way of the original or a duplicate where the unavailability of the original or a duplicate is attributable to the bad faith of the proponent.

4. The said Act is further amended by adding after section 18.12 the following heading and sections:

Authentication

18.13 Subject to this Act or any other Act of Parliament, or exception provided by the common law, the proponent of a record has the burden of establishing its authenticity, which burden may be satisfied by the introduction of evidence capable of supporting a finding that the record is what its proponent claims it to be.

18.14 (1) Unless the court orders otherwise, no record produced by a computer system shall be admitted in evidence under this Part unless the proponent of the record has, at least seven days before its production in

the legal proceeding, given to each of the other parties notice of his intention to produce the record and notice that the record was produced by a computer system, and has, within five days after receiving any notice requesting production of the record given by any such party, produced it for inspection by that party.

(2) Unless the court orders otherwise, production of the record in the form of a printout or other intelligible output of the computer system constitutes compliance with a notice given under subsection (1) to produce the record for inspection.

(3) Where the proponent of a record produced by a computer system has given notice to an other party in accordance with subsection (1), proof of the authenticity of the record shall be deemed to have been waived by that party unless within five days after receiving the notice that party has filed with the court a notice requesting proof of the record's authenticity.

18.15 (1) The authenticity of a record produced by a computer system may be established by
(a) evidence that on comparison the record produced by the computer system corresponds in every material particular to the data supplied to that system; or

(b) evidence that the computer program used by the computer system to produce the record reliably processes data of the type in question and that there is no reasonable ground to believe that the correspondence between the record in question and the data supplied to that system has been adversely affected in any material particular by any process or procedure or by any malfunction, interference, disturbance or interruption.

(2) The court may require that evidence respecting the authenticity of a record produced by a computer system be given by a custodian of the record, or other qualified witness.

(3) Evidence of a custodian of the record, or other qualified witness, may be given by affidavit unless the court requires that it be given by way of testimony in court.

(4) Where evidence under subsection (3) is offered by affidavit,

(a) it is sufficient for a matter to be stated to the best of the knowledge and belief of the affiant; and

(b) it is not necessary to prove the signature or official character of the person making the affidavit if the official character of that person is set out in the body of the affidavit.

(5) The Governor in Council may make regulations respecting the form and contents of the affidavit referred to in subsection (3).

5. Subsection 30(1) of the said Act is repealed and the following substituted therefor:

30. (1) A record made in the usual and ordinary course of business is admissible whether or not any statement contained in it is hearsay or a statement of opinion, subject, in the case of opinion, to proof that the opinion was given in the usual and ordinary course of business.

6. The said Act is further amended by adding thereto, immediately after subsection 30(6) thereof, the following subsection:

(6.1) Where the court finds with respect to a record produced by a computer system that due to events or circumstances associated with any stage of its production there is reasonable ground to suspect that the record may not satisfy the requirements for admission in evidence under subsection (1), or if admitted in evidence the record's probative value may be adversely affected, the court shall conduct a hearing to address the issue and for that purpose may receive any additional evidence in respect thereof, which may be given by affidavit unless the court requires that it be given by testimony in court, including evidence in relation to

(a) the nature and sources of the data and instructions supplied to the system at all relevant times;

(b) the procedures that were followed, and the procedures that should have been followed in the preparation and supply of data to the system, and the storage, transmission and production of the record by the system; and

(c) any process, procedure, malfunction, interference, disturbance or interruption that adversely affected, or might reasonably be thought to have adversely affected, the supply of data to the system, or the storage, transmission or production of the record by the system.

7. The said Act is further amended by adding at the beginning of subsection 30(7) thereof, the following words:

(7) Subject to section 18.14 in the case of a record produced by a computer system,

8. Subsection 30(8) of the said Act is repealed, and the following substituted therefor:

(8) Where evidence is offered by affidavit under this section,
(a) it is sufficient for a matter to be stated to the best of the knowledge and belief of the affiant; and
(b) it is not necessary to prove the signature or official character of the person making the affidavit if the official character of that person is set out in the body of the affidavit.

9. The definition of "record" in subsection 30(12) is repealed, and the following substituted therefor:

"record" for the purposes of subsections (3) and (4) does not include a copy of a record admissible under subsection 30(1).

10. (Option # 1) **Section 31 is repealed.**

10. (Option #2) **Subsections (2) and (3) of section 31 are repealed and the following substituted therefor:**

(2) A print, whether enlarged or not, from any photographic film, or a duplicate made by electronic imaging, of

(a) an entry in any book or record kept by any government or corporation and destroyed, lost or delivered to a customer after the film was taken or the electronic imaging took place,

(b) any bill of exchange, promissory note, cheque, receipt, instrument or document held by any government or corporation and destroyed, lost or

delivered to a customer after the film was taken or the electronic imaging took place, or

(c) any record, document, plan, book or paper belonging to or deposited with any government or corporation,
is admissible in evidence in all cases in which and for the purposes which the object photographed, or of which an electronic image was taken, would have been admitted on proof that

(d) while the book, record, bill of exchange, promissory note, cheque, receipt, instrument or document, plan, book or paper was in the custody or control of the government or corporation the photographic film or electronic image was taken thereof in order to keep a permanent record thereof, and

(e) the object photographed, or of which an electronic image was taken, was subsequently destroyed by or in the presence of one or more of the employees of the government or corporation, or was lost or was delivered to a customer.

(3) Evidence of compliance with the conditions prescribed by this section may be given by any one or more of the employees of the government or corporation, having knowledge of the taking of the photographic film or electronic image, of the destruction, loss, or delivery to a customer, or of the making of the print or duplicate by electronic imaging, as the case may be, either orally or by affidavit sworn in any part of Canada before any notary public or commissioner for oaths.

10. (Option #3) **Section 31 is repealed and the following substituted therefor:**

31. (1) In this section

"business" has the same meaning as in section 30; and

"photographic film" includes any photographic plate, microphotographic film and photostatic negative

(2) A print, whether enlarged or not, from any photographic film, or a duplicate made by electronic imaging, of

(a) an entry in any book or record kept by a business,

(b) any bill of exchange, promissory note, cheque, receipt, instrument or document held by a business, or

(c) any record, document, plan, book or paper belonging to or deposited with a business
is admissible in evidence in all cases in which and for the purposes which the object photographed, or of which an electronic image was taken, would have been admitted on proof that

(d) while the book, record, bill of exchange, promissory note, cheque, receipt, instrument or document, plan, book or paper was in the custody or control of the business the photographic film or electronic image was taken thereof, following nationally recognized standard procedures, in order to keep a permanent record thereof for official purposes.

(3) The court may require that evidence of compliance with the conditions prescribed by this section be given, orally or by affidavit, by the custodian of the record or other qualified witness having knowledge of the taking of the photographic film or electronic image, or of the making of the print or duplicate by electronic imaging, as the case may be.

(4) Where evidence is offered by affidavit under this section,

(a) it is sufficient for a matter to be stated to the best of the knowledge and belief of the affiant; and

(b) it is not necessary to prove the signature or official character of the person making the affidavit if the official character of that person is set out in the body of the affidavit.

11. The said Act is further amended by adding thereto, immediately after section 36, the following new heading:

PART I.2 - MISCELLANEOUS

[at which point the current provisions resume]

APPENDIX "B"

COMMENTARY ON THE PROPOSED AMENDMENTS TO

THE CANADA EVIDENCE ACT (COMPUTER-PRODUCED EVIDENCE)

1. New Part on Documentary Evidence

[144] It is not essential that a new Part be created, but it serves to simplify the drafting of definitions that are limited in application to the documentary evidence area. This, however, is a matter that should be discussed with the experts in the Legislative Drafting Section.

2. Definition of terms, s. 18.1

[145] *"computer program", "computer system", "data"* -- It is necessary to have a standard set of definitions as the terminology in this area is by no means fixed. Linking the definitions to those used in the Criminal Code is of particular importance because most of the proceedings covered by the Canada Evidence Act are criminal prosecutions. A question that remains to be addressed is whether the definitions should be spelled out in these amendments so that reader would not be required to make reference to the Criminal Code.

[146] *"duplicate"* -- This definition for the most part is taken from s. 119 of the "Proposed Canada Evidence Act", which in turn was based on s. 81 of the Law Reform Commission's Draft Code and Rule 1001(4) of the U.S. "Federal Rules of Evidence". It has been modified to include reproduction of an original by "electronic imaging".

[147] *"electronic imaging"* -- There does not appear to be a suitable definition of this term in Canada. The definition used by the Canadian General Standards Board in "Microfilm and Electronic Images as Documentary Evidence" (CAN/CGSB-72.11.93) is designed for determining whether an imaging process satisfies their procedures, rather than giving a general description that would be useful in court. The definition offered here is in language that even lawyers understand.

[148] *"original"* -- This definition contains three paragraphs, each setting out important rules that clarify the existing law.

[149] Paragraph (a) provides the basic principle that in relation to a record, "original" means "the record itself or any duplicate intended to have the same effect by a person executing or issuing the record". The definition is based on the definition in Rule 1001 of the U.S. "Federal Rules of Evidence", which provides: "An 'original' of a writing or recording is the writing or recording itself or any counterpart intended to have the same effect by a person executing or issuing it." The term "counterpart" is used almost exclusively in relation to leases. Osborne's Concise Law Dictionary (eighth edition) describes it in the following terms: "A lease is generally prepared in identical forms, called the lease and the counterpart respectively. The lease is executed by the lessor alone and the counterpart by the lessee alone, and then the lease and the counterpart are exchanged." As the Dictionary of Canadian Law defines "counterpart" as being "a part which corresponds, a duplicate", it is assumed that the Canadian practice in relation to the execution of leases is different, and the word "counterpart" may be safely omitted. The word "duplicate" is substituted to ensure that only very reliable copies may be regarded as originals. The term "person" is broad enough to permit non-natural persons (e.g., governments or corporations) to treat a copy as an original. This is consistent with the decision of the Ontario Court of Appeal in R. v. Bell and Bruce, [42] where the court concluded that if the bank regarded a printout as its original record, then it was an original record, even though the bank might regard other forms of record as the original at other times or even at the same time.

[150] Paragraph (b) states that in relation to a photograph, original means "the photograph itself, its negative or any print made from the negative". At common law the negative was usually regarded as the original for purposes of the Best Evidence Rule and this could lead to the necessity of calling witnesses to testify to the authenticity of the print as secondary evidence. Treating the print as an original reduces the technicality of the process and was included in the Law Reform Commission's Draft Evidence Code, the Uniform Evidence Act, Bill S-33 and the "Proposed Canada

Evidence Act." It should perhaps be pointed out that where a photograph is taken of a document this provision does not mean that the photograph is an original record of the contents of that document: the photograph is only secondary evidence of the contents of the original document. What the provision means is that in putting forward a photograph as secondary evidence, either the negative or a print may be tendered as the original of the photograph.

[151] Paragraph (c) defines "original" in the following terms for records produced by a computer:

(c) in relation to a record produced by a computer system other than as a result of electronic imaging,

(i) an array of data stored in a computer system that on command is capable of being identified and retrieved as intelligible output by a computer program, or

(ii) a printout or other intelligible output of data supplied to a computer system.

This definition does a number of things. First, it specifies that a computer-produced record that is the result of electronic imaging is not an original. This is because the electronic image is based on a hard-copy original which at the time that it was electronically scanned could have been (and in some cases perhaps still can be) produced in court. Such a printout is therefore a copy, but because of its great accuracy it falls within the definition of a "duplicate". Second, clause (i) recognizes as an original a record as it exists in the computer's memory. It is difficult to describe this phenomenon. It is not possible simply to define the computer's memory (hard disk, floppy) as an original, for it is a repository of records rather than a record itself. Clause (i) is an attempt to describe an "organized" rather than a random collection of data stored in a computer that is capable of being identified and recovered in the form of intelligible output. As the only way that the original in this sense can be dealt with is through some form of intelligible output it is of more theoretical than practical importance; [43] although there will no doubt be occasions when a litigant who is challenging the authenticity of the printout will apply to the

court to have the computer's memory produced for inspection (see proposed new subsection 30(7.1)). Third, clause (ii) defines a printout or other intelligible output as an original record. The term "other intelligible output" would include such things as the image on the computer screen, computer-operated microfilm systems, computer-operated scoreboards and advertising billboards etc. While it can be argued that printouts and other intelligible outputs should be treated as "duplicates" inasmuch as they are the product of an original text stored in the memory of a computer system, given that the record stored in the computer memory can only be ascertained through examining a printout or other intelligible output, practical considerations dictate that they be classed as original records. A final comment is that, unlike the definition of "original" found in the "Proposed Canada Evidence Act", the definition in clause (ii) is not qualified by the words "that accurately reproduces, whether in the same or a modified form" the data supplied to the computer system. [44] It is suggested that these are requirements of authentication, and therefore they are there dealt with in s. 18.13.

[152] *"photograph"* -- The Canada Evidence Act does not have a definition of this term. This definition is based on the one appearing in the "Proposed Canada Evidence Act". It is not an exclusive definition as it uses the verb "includes" rather than "means". However, it would not include videotape, which uses an electronic rather than a chemical process for recording the image. Videotape recording is recognized as a medium in its own right by the definition of "record".

[153] *"public record"* -- This is defined for the purposes of the proposed new s. 18.12. It is perhaps not necessary to define it as there are no doubt definitions to be found in the case law. But only a handful of practicing lawyers in Canada are likely to know where the term is defined, therefore including a definition in the Canada Evidence Act is justifiable on the grounds that it will save lawyers' time and therefore reduce their cost of preparation.

[154] *"record"* -- This is a key term which appears in several of the existing documentary evidence provisions, yet it is only defined for the purposes of s. 30, and even there it is badly defined. This definition, borrowed

largely from the "Proposed Canada Evidence Act", is precise enough to avoid the foolish ambiguities of the existing definition of s. 30, but at the same time is broad enough to include records made or stored in equipment such as a computer or other similar devices that technology may develop. It will also provide a definition that will apply to all the sections in the "Documentary Evidence" Part of the Canada Evidence Act where the term "record" is used, unless the context requires otherwise: for example, in s. 23 the term appears to be used in a restrictive sense, and in s. 30(12) it is defined so as to include a "copy" in some subsections and exclude it in others.

[155] *"record produced by computer system"* -- This definition is intended to make it clear that the word "produced" in this context covers not only the making of the record but also the storage and reproduction of the record by the computer system. It is suggested that "making" also encompasses subsequent alterations of the record.

3. The Best Evidence Provisions, ss. 18.11 and 18.12

[156] As indicated earlier in this consultation paper, the Best Evidence Rule requires that a party wishing to prove the contents of a document to produce the original document unless the case falls within one of the exceptions. The Rule is based on two assumptions, first that if the court is to perform its fact-finding role properly it should have placed before it the best evidence available, and second that secondary evidence of the contents of a document is likely to be less reliable and less accurate than the primary evidence of the original document. While both of these assumptions are still basically sound, they fail to take into account developments in modern technology which permit the production of copies that are extremely accurate -- so much so, indeed, that they are often used interchangeably with the original in day-to-day affairs. Moreover, the old paradigm, based on the distinction between original documents and copies, does not readily fit the reality of electronically stored records.

[157] The proposed provisions re-affirm the validity of the assumption that the courts will perform their fact-finding role in relation to

documentary evidence better if they are provided with the best evidence available (s. 18.11). At the same time, however, they would make a "duplicate" (as defined in s. 18.1) admissible in evidence to the same extent as the original, unless the court is satisfied that there is reason to doubt the authenticity of the original or the accuracy of the duplicate (s. 18.12(1)). These proposals recognize that in all but exceptional circumstances it is useless formalism to insist on the production of the original where a "duplicate" is tendered. In relation to computer-produced evidence, the proposals generally define printouts or other intelligible output as "original" records, but computer-produced records that are a result of electronic imaging are defined as "duplicates" (see discussion of s. 18.1 above).

[158] The proposed new provisions also address an apparent inconsistency in the current law. Whereas the Best Evidence Rule requires (apart from the exceptional cases) that the original document be produced, it does not apply so as to create a hierarchy with respect to secondary evidence; therefore, the proponent may choose to produce oral evidence of the contents of a lost original document, even though a carbon copy is available. The justification that is often given for this anomaly is that no rule is needed because the parties will put forward the best evidence available for fear that adverse conclusions may be drawn from their failure to do so, and that to impose a hierarchy of secondary evidence would give rise to "unnecessary complexity and inconvenience". [45] This premise is questionable, as it seems to assume that self-interest will always favour production of the best evidence available. Skeptics would suggest that the appropriate assumption is that parties are more likely to tender whichever form of evidence favours their case: if this were not so, why would the Best Evidence Rule be required at all? Section 18.12(2) makes an ordinary copy admissible where neither the original nor a duplicate is available, and s. 18.12(3) states that where an admissible copy cannot be produced by the exercise of reasonable care, other evidence (usually oral) of the contents of a record is admissible. This approach is also taken in the Uniform Evidence Act (ss. 133-134), the

"Proposed Canada Evidence Act" (ss. 122-123) and the California "Evidence Code".

[159] The proposed amendments also contain another inducement to produce the best evidence available, for s. 18.12(4) prohibits the reception of an ordinary copy or other lesser evidence of the contents of a record "where the unavailability of the original or a duplicate is attributable to the bad faith of the proponent." This provision is based on s. 128 of the "Proposed Canada Evidence Act", and also finds antecedents in s. 77 of the Law Reform Commission's Draft Evidence Code and Rule 1004(1) of the U.S. "Federal Rules of Evidence". On the other hand, it was recently rejected by the New Zealand Law Commission, which, after noting that in the United States Rule 1004(1) was rarely invoked, concluded that any such occurrences could be dealt with in New Zealand as a matter of weight. [46]

4. Authentication, ss. 18.13, 18.14 and 18.15

[160] It was felt advisable to spell out the existing basic rules of authentication, as this would not only be a convenience to practitioners and judges, but it also would serve as a visible foundation for proposed new measures regarding records produced by a computer system.

[161] Section 18.13 sets out the general rule the proponent of a record has the burden of establishing its authenticity. This rule applies to all documents being tendered for proof of their contents, either for a hearsay or non-hearsay purpose. The opening words of the section preserve exceptions, both of a statutory and common law nature, where the authenticity of the document is either presumed or is to be established in a certain way. (It may well be asked whether for the convenience of the Bar and Bench the Canada Evidence Act should set out these "self-authenticating" and special cases, as was done in Bill S-33, but that is beyond the scope of this consultation document.) The section also states that the burden may be satisfied "by the introduction of evidence capable of supporting a finding that the record is what its proponent claims it to be." This formulation follows that set out in s. 130(1) of the "Proposed Canada Evidence Act", which had as its progenitors provisions in Bill S-33,

the Uniform Evidence Act, the Law Reform Commission Draft Evidence Code and Rule 901(a) of the U.S. "Federal Rules of Evidence". It is also the common law position as stated by the Supreme Court of Canada in U.S.A. v. Shephard [47] with respect to the proper test of the sufficiency of evidence to satisfy burden of adducing evidence (which is now more commonly referred to as the "evidential burden"). This is not a heavy burden, for it does not involve any assessment of the credibility of the witnesses -- that is a matter which goes to the weight of the evidence rather than its admissibility.

[162] Section 18.14(1) is a disclosure provision. It plays the same role with respect to records produced by a computer system as s. 30(7) plays with respect to business records generally, i.e., requiring, as a condition of admissibility for all records produced by a computer system, that the proponent give notice to each of the other parties of his intention to tender the record in evidence. However, in addition it requires the proponent to give notice that the record was produced by acomputer-system. Without such notice the party against whom the record is being tendered would, in many instances, not know that it was computer-produced and therefore would not be as well prepared. The provision also applies to computer-produced records that are being tendered in evidence under s. 30(1) as business records; therefore, for the sake of convenience, and in order to allow notices under the two provisions to be given in the same document, the time for giving the notice under s. 18.13(2) is the same as that under s. 30(7), namely, seven days. There is, however, a question whether seven days is long enough to allow the other parties to carry out any meaningful investigations before the proponent produces the record in the proceedings. Comment on this question, along with any suggestions as to an appropriate time period, would be appreciated.

[163] Under the proposed amendments, in the case of a record produced by a computer system, the "original record" includes both "an array of data stored in the computer system" and "any printout or other intelligible output". To minimize interference with proponent's computer system, s. 18.14(2) provides that unless the court orders otherwise, production of a

printout or other intelligible output will constitute compliance with a request under s. 18.14(1) for production of the record for purposes of inspection.

[164] In recognition of the general reliability of computer-produced records, section 18.14(3), provides the proponent with some assistance in establishing proof of authenticity. If the opposing party does not file a notice with the court requesting proof of the record's authenticity, then he will be deemed to have waived such proof. This provision is designed to avoid unnecessary steps: if the authenticity of the record is not in issue, then there is no reason why the proponent should be put to the expense of proving it. As mentioned earlier in this consultation document, proof of authenticity is a condition precedent to admissibility of a record, but it is not a guarantee of admissibility, and even if the record is admitted into evidence it does not prevent evidence being called with a view to undermining its probative value. Moreover, in the case of a computer-produced record that is admitted into evidence under s. 30 of the Canada Evidence Act as a business record, even if a party failed to file a notice requesting proof of authenticity under s. 18.13(3) it may still be possible for him to challenge the admissibility and/or probative value of the record under the proposed new s. 30(6.1) (see below).

[165] Section 18.15(1) sets out how the authenticity of a record produced by a computer system may be established. Paragraph (a) provides for authentication by comparison of the record produced by the computer system with the data supplied to that system and a finding that the two correspond in every material particular. This method of authentication is probably going to be of limited use, for in a large percentage of cases such a comparison will not be possible. (It would likely be the method used to prove the authenticity of a computer-produced copy of a record of a financial institution under s. 29(2), inasmuch as that section requires the authenticating affiant to swear that it is a "true copy" of the record, and in most instances this would be based on a visual comparison.) Paragraph (b) therefore provides an alternative, whereby the authenticity of the record may reasonably be inferred from evidence of the reliability of the system in processing such data, and evidence that there is no "reasonable

ground to believe" that the correspondence between the record and the data supplied to the system has been adversely affected in any material particular by "any process or procedure or by any malfunction, interference, disturbance or interruption." Read in conjunction with the statement of the burden of establishing authenticity that is set out in s. 18.13, this provision requires that the proponent produce evidence, which if believed would be capable of supporting a finding that it is more likely than not that the computer-produced evidence is in every material particular the same as the data supplied to the system. [48] Looked at from the standpoint of the party opposing the admission of the computer-produced evidence, a reasonable doubt as to the authenticity of the record is not a sufficient basis for the court to refuse to admit the record into evidence on the basis of lack of authentication; although such a doubt might seriously affect the weight of the evidence.

[166] In order to assure that the court is being provided with the best information possible about the computer system (or systems) in question, the procedures followed, the quality of security measures surrounding storage of the record etc., s. 18.15(2) provides that the court "may require that evidence respecting the authenticity of a record produced by a computer system be given by the custodian of the record or other qualified witness". Section 130(3) of the "Proposed Canada Evidence Act" provides that the court "shall require" that such evidence be given by the custodian of the record or other qualified witness"; but desirable as it is to have the best evidence, it is possible that in certain circumstances such a rigid rule would work an injustice. For example, in some small businesses there may not be any identifiable custodian of the record, but there is a secretary who is very well acquainted with the file and can give evidence as to the hardware and software used and who had access to the file. The secretary may not fall within the definition of an "other qualified witness", but clearly is the person the court should hear from. Therefore, in order to provide greater flexibility s. 18.14(2) uses "may" rather than "shall".

[167] It is left to the courts to determine who is included by the term "other qualified witness", but it would clearly include an expert in computer technology or software or a person who had considerable

experience in the operation of the computer system in question. In a prosecution for fraud, for example, where the computer records of the accused were seized, a police expert could testify to capacity of the computer system and software to process the data in question accurately and reliably, as well as to any evidence indicating whether the records, program or equipment used may have been tampered with by somebody other than the accused.

[168] In order to interfere as little as possible with normal business operations, and to keep the cost of litigation reasonable, the proposed amendments permit the custodian or other qualified witness to give their evidence by affidavit "unless the court requires that it be given by way of testimony in court" (s. 18.15(3)). Recognizing that in many cases it would be impossible for such a witness to have personal knowledge of every detail of the operation, s. 18.15(4) permits the making of an affidavit on the basis of "knowledge and belief". [49]

[169] Experience may indicate that there are particular issues that ought to be addressed in the preparation of affidavits, and these issues may change relatively quickly in the light of legal or technological developments. It was therefore recommended by representatives of business managers and administrators, during the consultations respecting Bill S-33, that provision be made for the Governor in Council to make regulations respecting the form and contents of these affidavits. This recommendation is incorporated in s. 18.15(5).

5. The Business Records Exception to the Hearsay Rule, s. 30(1)

[170] The proposed new s. 30(1) is not intended to make any change in the existing law but rather to state more directly what the authorities have suggested the existing provision means. For example, the introductory words of the current s. 30(1) -- "Where oral evidence in respect of a matter would be admissible . . ." -- seem to limit the scope of the exception to cases where the record was made by someone with personal knowledge of what was stated in the record, but a number of authorities maintain that it also permits multiple hearsay. [50] Certainly a single-hearsay rule would limit the utility of the exception in a large business, where many

reports have to be filed on the basis of what other workers have told the person making the report, and where computers are involved it is often impossible say who made the record. The Federal/Provincial Task Force on Uniform Rules of Evidence found that s. 30(1) did not require the supplier of the information to have personal knowledge, and it recommended unanimously that it not be an impediment to the admissibility of a business document that it contains multiple hearsay or opinion. [51] The section is also ambiguous as to whether an opinion is admissible under s. 30(1) if it forms part of a business record. The better view appears to be that it is admissible, because the section uses the word "matter", which is the word used by Hall J. in Ares v. Venner [52] in describing nurses' reports which may contain opinion. [53] But unless there is some indication that the business adopted the opinion, it would seem illogical to allow it into evidence as a hearsay exception under s. 30(1), for that exception is based on statements being trustworthy because of "business reliance". In the debate on the Report of the Federal/Provincial Task Force, the Uniform Law Conference decided that there should be a sufficient guarantee of trustworthiness to justify admission under s. 30(1) if the opinion was given in the usual and ordinary course of business. [54] This is the approach followed in the proposed amendment.

6. Special Provisions for the Examination of Business Records that were Produced by a Computer System s. 30(6.1)

[171] For purposes of determining whether a record is admissible under s. 30(1) and, if so, what probative value it has, s. 30(6) empowers a court to examine the circumstances in which the record was "written, recorded, stored or reproduced"; but it does not require a court to conduct any examination, and it gives no guidance to a judge in determining whether to conduct such an examination. This degree of latitude may be all right when the courts are dealing with the traditional forms of business records where everybody understands the issues and the terminology. However, the lack of predictability in relation to the courts' treatment of computer-produced evidence is a major problem for those who have to prepare for litigation in the area, and this in turn affects all businesses because they do not know what hard-copy records they have to keep to be on the safe

side. The proposed new s. 30(6.1) is designed to improve this situation by providing a threshold at which a court must conduct a hearing for the purpose of examining the background of a computer-produced business record.

[172] The conditions that trigger s. 30(6.1) are, first, that the record in question was produced by a computer system, and, second, "that due to events or circumstances associated with any stage of its production there is reasonable ground to suspect that the record may not satisfy the requirements for admission in evidence under subsection (1), or, if admitted in evidence, the record's probative value may be adversely affected". This threshold requirement means that the opposing party cannot succeed under this subsection by painting a picture of what might of occurred; rather, there must be evidence sufficient to satisfy the judge that there is reasonable to suspect that something is amiss. (However, it would appear that even following the introduction of the proposed new subsection (6.1) the court would continue to have the power to act under s. 30(6) on whatever basis it saw fit.)

[173] If a court finds that these conditions exist, then it is required by s. 30(6.1) to conduct a hearing to address the issue (of whether the record is admissible in evidence, and if so what probative value it should be given), at which hearing additional evidence in respect thereof may be received, which evidence may be given by affidavit unless the court requires that it be given by way of testimony in court. This evidence may include evidence in relation to

(a) the nature and sources of the data and instructions supplied to the system at all relevant times;

(b) the procedures that were followed, and the procedures that should have been followed in the preparation and supply of data to the system, and in the storage, transmission and production of the record by the system; and

(c) any process, procedure, malfunction, interference, disturbance or interruption that adversely affected, or might reasonably be thought to

have adversely affected the supply of data to the system, or the storage, transmission or production of the record by the system.

[174] It is important to note that s. 30(6.1) would not create any new ground for excluding business records. The test for determining the admissibility of business records of all types would continue to be that set out in s. 30(1). Under s. 30(6.1), the courts would be doing nothing more with respect to records that are produced by a computer system than they can do at the present time under s. 30(6). The purpose of s. 30(6.1) is only to make the courts more vigilant in administering the existing rules of admissibility.

[175] Some may argue that inasmuch as the test of admissibility under s. 30(1) is whether the record was "*made* in the usual and ordinary course of business", whatever happened afterwards in terms of storage, transmission and reproduction of the record is irrelevant. Therefore, a court would not be feel obliged to make conduct the hearing prescribed by s. 30(6.1). However, it is suggested that in the case of a record produced by a computer system, the process of *making* the record is not completed until the printout or other intelligible output is produced by the system. For purposes of day-to-day business use, and for production in court, it is the printout or other intelligible output that constitutes the original record. Therefore, circumstances throughout the process, from input to output, that may adversely affect the end product, are of legitimate concern to the court in determining whether the record was made in the usual and ordinary course of business.

7. Amendment to the Notice Provision, s. 30(7)

[176] This amendment makes s. 30(7) subject to the provisions of s. 18.14 so far as business records produced by a computer system are concerned.

8. Affidavit Evidence, s. 30(8)

[177] The existing s. 30(8) is modified by adding a provision that where evidence is offered by affidavit under this section, "it is sufficient for a matter to be stated to the best of the knowledge and belief of the affiant".

This makes the requirement the same as with respect to affidavits of authentication under s. 18.14(4) above, and the same reasons apply.

9. Special definition of "record" for purposes of s. 30, new s. 30(12).

[178] The old definition of "record" in s. 30(12) is replaced by a new definition set out in s. 18.1 which applies throughout the Part. The new definition is broad enough to include not only original records but copies, but the old definition provided that copies were not records for the purposes of subsections (3) and (4). To avoid having to do extensive re-drafting of s. 30, an exception to the general definition of "record" now will appear in s. 30(12).

10. Options for dealing with Microfilm and Electronic Imaging, s. 31

[179] At the present time, special provision is made in s. 31 for the admissibility of microfilm copies in certain very limited circumstances. However, there is nothing specific concerning the new technology of electronic imaging, which scans an original document and is capable of storing and reproducing that image electronically with great accuracy through a computer system. Some suggest that electronic imaging has a number of advantages over microfilm (requires less storage space, access through computers etc.) and therefore is likely to replace it as the preferred method of accurate, full-text, long-term storage. As these two methods of reproducing documents share many similarities any proposal for dealing with imaging should be compatible with the law in relation to microfilming for evidentiary purposes. Three options are proposed for consideration.

Option #1 -- Repeal s. 31.

[180] Most microfilming and electronic imaging is now done by government or businesses as part of their usual and ordinary course of business, and this is likely to continue to be the case. This means that there is a large overlap between the operation of s. 30(1) and s. 31. Assuming that the foregoing legislative proposals are accepted, there will be further overlapping, as images prepared either by microfilming or electronic imaging would fall within the definition of a "duplicate" (see

above, s. 18.1), and, as such, by virtue of s. 18.12(1), would be admissible to the same extent as an original record. The rationale for this option therefore is that with the introduction of the proposed new provisions there would no longer be any need for a special provision for microfilm evidence.

[181] This is the simplest and cleanest option, and it is consistent with the existing Uniform Evidence Act and the "Proposed Canada Evidence Act".

Option #2 -- Amend s. 31 only to the extent necessary to treat electronic imaging as the equivalent of microfilming.

[182] By simply coupling appropriate references to "electronic imaging" with the existing references to photography in subsections (2) and (3) of s. 31, electronic imaging would become the alter ego of microfilming. (The definitions of "electronic imaging" and "duplicate" are found in s. 18.1. If for any reason the proposed amendments in relation to "duplicates" were not enacted, the definition of "electronic imaging" could be incorporated into s. 31 and the reference to a "duplicate" in subsections (2) and (3) of the proposed new s. 31 could simply be dropped, for the word "print" could apply equally to the product of electronic imaging as to a photograph.)

[183] The rationale for linking electronic imaging directly with the well established process of microfilming is that it would have the effect of giving the new technology greater popular recognition and would probably hasten its adoption by government and major businesses as the preferred form of accurate, full-text, long-term storage. However, this rationale probably only holds true if the proposed amendments, making "duplicates" admissible to the same extent as originals, were for some reason not acted upon. Otherwise, it would be much easier to prove an electronic image of a document as being a "duplicate" under s. 18.12 than (as required by s. 31) to find a witness, or witnesses, with personal knowledge (1) that an electronic image was made of the original document for the purpose of making a permanent record thereof and (2) that the document was subsequently destroyed in the presence of one or more of the employees of the government or corporation, or was lost or

delivered to a customer. If these restrictions were eliminated, s. 31 would be a more attractive option than it is now, but it is the restrictions that provide the theoretical basis for this exception to the Best Evidence Rule.

Option #3 -- Repeal and replace the existing s. 31 with a broader provision that would create a category of duplicates specifically designed to replace the original in court proceedings and for other official purposes.

[184] When the existing s. 31 was introduced, it was intended to create a special category of exception to the Hearsay Rule, based on microfilm's capacity to reproduce the original record with a high degree of accuracy and on the necessity created by the destruction of the original. To add to the mystique, it was restricted to important records of government and large corporations. Option #3 is really a modern-day version of this special class of reproduction. It would be more than a "duplicate", for it would not only be admissible in evidence to the same extent as the original, but it would in fact replace the original for court proceedings and other official purposes. Because the process would involve the taking of an image of the original in accordance with nationally recognized standard procedures (although not necessarily one particular standard), it would have a cachet that other forms of "duplicate" would lack.

[185] Even though it is proposed that the restrictions under the existing s. 31 be eliminated, and that the new provision be made available to all businesses (as defined in s. 30) for the full range of business and financial documents, it is not expected that this type of copying would be used as a matter of course. As the cost of making the reproduction in accordance with nationally recognized standard procedures would be considerably more than the cost of making other forms of "duplicates", it likely would be restricted to records that may be the subject of litigation or are otherwise of considerable significance. It is anticipated that, after microfilming or imaging, in the great majority of cases the original hard copy would continue to be destroyed, but destruction of the original would not be a condition of admissibility of the copy as it is under the existing s. 31. There are a number of situations where for historic or archival purposes preservation of the original is desirable. With this

special role, this section could comfortably co-exist with the proposed new s. 18.12

11. New Part I.2 (Miscellaneous)

[186] The reasons for this are purely technical. The alternative would be to include ss. 37 - 42 in Part I.1 (Documentary Evidence) or Part II (taking evidence relating to proceedings in courts out of Canada). The sections do not fit happily with either part, so a new part would seem to be the appropriate solution.

Technical Appendix

[187} Here are some of the main legal references that support the discussion in this consultation paper.

selected statutes

Canada Evidence Act, R.S.C. 1985, c. C-5, ss 29ff
Ontario Evidence Act, R.S.O. 1990, c.E.23, ss 34ff
P.E.I. Evidence Act, R.S.P.E.I. 1988, c. E-ll, s 32ff
New Brunswick Evidence Act, R.S.N.B. 1973, c. E-11, s 49ff
Evidence Act (terrritories), e.g. R.S.N.W.T. 1988, c.E-8, ss 47 ff

United Nations Draft Model Law on Legal Aspects of Electronic Data Interchange

[U.N. document A/CN.9/406, November 1994]

Article 7: Original

(1)

Where a rule of law requires information to be presented in its original form, or provides for certain consequences if it is not, a data message satisfies that rule if:

(a)that information is displayed to the person to whom it is to be presented; and

(b)there exists a reliable assurance as to the integrity of the information between the time wehn it was first composed in its final form, as a data message or otherwise, and the time when it is displayed.

(2) Where any question is raised as to whether subparagraph (b) of paragraph (1) is satisfied:

(a) the criteria for assessing integrity shall be whether the information has remained complete and unaltered, apart from the addition of any endorsement, and any

change which arises in the normal course of communication, storage and display; and
(b)the standard of reliability required shall be assessed in the light of the purpose for which the infomration was composed and in the light of all the relevant circumstances.

Article 8: Admissibility and evidential value of data messages

(1) In any legal proceedings, nothing in the application of the rules of evidence shall apply so as to prevent the admission of a data message in evidence:

(a) on the grounds that it is a data message; or,

(b) if it is the best evidence that the person adducing it could reasonably be expected to obtain, on the grounds that it is not in its original form.

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

(3) Subject to any other rule of law, where subparagraph (b) of paragraph (1) of article [7] is satisfied in relation to information in the form of a data message, the information shall not be accorded any less weight in any

legal proceedings on the grounds that it is not presented in its original form.

Cases

In *R. v. McMullen* (1979), 47 C.C.C.(2d) 499 at 506 (Ont. CA.), and in *R. v. Bell and Bruce* (1982), 35 O.R.(2d) 164, 65 C.C.C.(2d) 377 (Ont. CA.), affirmed without reasons, [1985] 2 S.C.R. 287, 55 O.R.(2d) 287, computer printouts were held to be admissible under the federal banking record provision, s. 29 of the *Canada Evidence Act*. And in *R. v. Vanlerberghe* (1976), 6 C.R.(3d) 222 (B.C.CA.), and *R. v. Bicknell* (1988), 41 C.C.C.(3d) 545 (B.C.CA.), computer printouts were held to be admissible under the business record provision, s. 30 of the *Canada Evidence Act*. And as to the provincial provisions, see for example *Tecoglas Inc. v. Domglas Inc.* (1985), 51 O.R.(2d) 196 (Ont. H.C.), in regard to the business record provision, s. 35 of the *Ontario Evidence Act*.

Setak Computer Services Corp Ltd. v. Burroughs Business Machines Ltd et al (1977), 15 O.R.(2d) 750; 76 D.L.R.(3d) 641 (Ont.H.C.); *Re Waltson Properties Ltd.* (1976), 17 O.R.(2d) 328 (Ont.H.C.); *Matheson v. Barnes & I.C.B.C.* [1981] 1 W.W.R. 435 (B.C.S.C.); *Adderley v. Breamer*, [1968] 1 O.R. 621 (Ont.H.C.).
Northern Wood Preserves Ltd. v. Hall Corp. Shipping, [1972] 3 O.R. 751, affd. 2 O.R.(2d) 335 (Ont. CA.): re other features of the business records rules.

articles

For a discussion of the original requirements at common law, see: Ewart, "Documentary Evidence: The Admissibility at Common Law of Records Made Pursuant to a Business Duty" (1981), 59 *Can. Bar Rev.* 52. In his article, "Documentary Evidence: The Admissibility of Documents Under Section 30 of the Canada Evidence Act" (1979-80), 22 C.L.Q. 189 at 193, note 11, Ewart states: "At common law, a record containing hearsay could be used as evidence of the truth of its contents only if it was (i) an original entry, (ii) made contemporaneously with the event recorded, (iii) in the routine, (iv) of business, (v) by a person since deceased, (vi) who was under a duty to do the very thing and record it, and (vii) who had no

motive to misrepresent." (The two articles appear as chapters of his 1984 work, *Documentary Evidence in Canada*.)

See also: "Strategic Legal Planning for EDI", (1989) 16 *Canadian Business Law Journal* 66; Michael S. Baum, "EDI Law", [1990] *The EDI Forum* 1; Brian D. Grayton, "Canadian Legal Issues Arising from Electronic Data Interchange", (1993), 27 B.C.L.R. 257; and Peter Jones, *EDI Law in Canada*, EDI Council of Canada, 1992. Ken Chasse has several article in different issues of the *Canadian Computer Law Reports*.

Two recent U.S. survey articles are Lynch and Brenson, "Computer Generated Evidence: The Impact of Computer Technology on the Traditional Rules of Evidence", (1989) 20 *Loyola University Law Jl* 919; and Zupanec, D. "Admissibility of Computerized Private Business Records", (1990), 7 A.L.R. 4th 8 at 17..

Quebec Civil Code (the only current Canadian statute)

SECTION VI COMPUTERIZED RECORDS

2837. Where the data respecting a juridical act are entered on a computer system, the document reproducing them makes proof of the content of the act if it is intelligible and if its reliability is sufficiently guaranteed.

To assess the quality of the document, the court shall take into account the circumstances under which the data were entered and the document was reproduced.

2838. The reliability of the entry of the data of a juridical act on a computer system is presumed to be sufficiently guaranteed where it is carried out systematically and without gaps and the computerized data are protected against alterations. The same presumption is made in favour of third persons where the data were entered by an enterprise.

2839. A document which produces the data of a computerized juridical act may be contested on any grounds.

2870.The reliability of documents drawn up in the ordinary course of business of an enterprise, of documents entered in a register kept as required by law and of spontaneous and contemporaneous statements concerning the occurrence of fact is, in particular, presumed to be sufficiently guaranteed.

These provisions require proof of these specific factors: intelligibility, reliability, the circumstances under which the data were entered, the circumstances under which the document was reproduced, systematic entry of data, and protection of data against alterations. Also "the ordinary course of business of an enterprise" is applied to create a presumption in regard to the reliability of documents other than juridical acts.

FOOTNOTES

1 (1979), 47 C.C.C. (2d) 44, at 506.

2 Ibid., at 506. The provision was amended by the Criminal Law Amendment Act 1994, which broadened s. 29(2) so that the evidence may be given by any person employed by the financial institution who has knowledge of the book or record.

3 (1982) 65 C.C.C. (2d) 377.

4 Ibid., at 380-81.

5 [1985] 2 S.C.R. 287.

6 R. v. Sanghi (1971), 6 C.C.C. (2d) 123 (NSCA); R. v. Vanlerberghe (1978), 6 C.R. (3d) 222 (BCCA); R. v. Bicknell (1988), 41 C.C.C. (3d) 545 (BCCA).

7 Section 30(1) provides: "Where oral evidence in respect of a matter would be admissible in a legal proceeding, a record made in the usual and ordinary course of business that contains information in respect of that matter is admissible in evidence under this section in the legal proceeding on production of the record."

8 Section 30(3) provides: "Where it is not possible or reasonably practicable to produce any record described in subsection (1) or (2), a copy of the record accompanied by an affidavit setting out the reasons why it is not possible or reasonably practicable to produce the record and an affidavit of the person who made the copy setting out the source from which the copy was made and attesting to its authenticity, each affidavit having been sworn before a commissioner or other person authorized to take affidavits, is admissible in evidence under this section in the same manner as if it were the original of the record."

9 (1986), 26 C.C.C. (3d) 331 (NSSC).

10 Thus in R. v. Sunila and Solayman, supra, fn. 9, the judge found that though the computer printout was not admissible under either s. 30 or s. 26 it was admissible under the common law as enunciated in Ares v. Venner, [1970] S.C.R. 608.

11 See "Report of the Federal/Provincial Task Force on Uniform Rules of Evidence" (1982), at 380.

12 See Bramble v. Moss, L.R. 3 C.P. 458, cited in "Phipson on Evidence", §1802.

13 The justification for this deviation from the idea that the court should have the best evidence available placed before it is that in most cases it will occur anyway because the litigant would not wish any adverse inferences to be drawn from his failure to produce the most reliable secondary evidence available.

14 See R. v. Daye, [1908] 2 K.B. 333

15 (1979), 47 C.C.C. (2d) 215 (BCSC).

16 J.D. Ewart, "Documentary Evidence in Canada" (1984), at 46-47.

17 [1970] S.C.R. 608.

18 (1990), 59 C.C.C. (3d) 92 (SCC).

19 (1992), 75 C.C.C. (3d) 257 (SCC).

20 (1993) 79 C.C.C. (3d) 257 (SCC).

21 Ibid., at 294.

22 See supra at fn. 1.

23 Supra, fn. 8.

24 Supra, fn. 1.

25 Ibid., at 507.

26 Supra, fn. 3.

27 Supra, fn. 4.

28 There are three other limitations on the scope of the business records exception established under s. 30(1). First, the introductory words of the subsection provide that the record so made will only be admissible "Where oral evidence in respect of a matter would be admissible in a legal proceeding . . . ." Literally this would appear to exclude "double hearsay", i.e.records made by someone who did not have personal knowledge of matter contained in the record; although the caselaw is not entirely clear on this. See Ewart, op. cit. supra, fn. 16, at 87-91. Second, the record must contain "information in respect of that matter". This appears to be nothing more than a statement that the record must be relevant to the issue. Third, s.30(10) provides that nothing in the section renders admissible in evidence certain specified types of records

-- records made in the course of an investigation or inquiry, records made in the course of obtaining or giving legal advice, records in respect of the production of which a privilege exists and is claimed etc.

29 (1992), 97 Nfld & P.E.I.R. 144.

30 Ibid., at 148.

31 Supra, fn. 25.

32 The Association of Records Managers and Administrators (ARMA) maintained continuing pressure on the Department of Justice to have the documentary evidence provisions of Bill S-33, the federal version of the Uniform Evidence Act, re-introduced after it died on the Order Paper in 1983.

33 Ken Chasse, "Computer-Produced Records in Court Proceedings" (June, 1994), at 12. These conditions are based on what was required under the common law exception: see supra, at fn. 16.

34 Ibid., at 25-27.

35 All of these arguments were presented in debate before the Uniform Law Conference at the time the report of the Federal/Provincial Task Force on Uniform Rules of Evidence was being considered.

36 See Microfilm and Electronic Images as Documentary Evidence (1993), Canadian General Standards Board, Ottawa. The Introduction to the Standard states at ii:

". . . some guidelines on evidentiary requirements are included in the standard in order to assist organizations to comply with the business document provisions of the Evidence Acts.

"It is necessary, therefore that there be guidelines and procedures to enable an organization to demonstrate to a court, tribunal or inquiry, that it has a credible image management program capable of copying source records accurately, reliably and in a timely fashion

without loss of value. Therefore, unless otherwise prohibited by law, an organization's senior management can give authority to dispose of its paper source records and rely exclusively on its captured records in the conduct of every day business."

37 For a discussion of the problems with s. 31 see the Report of the Federal/Provincial Task Force on Uniform Rules of Evidence at 398-99.

38 This was done in the Uniform Evidence Act and Bill S-33.

39 See supra, fn. 21.

40 Supra, fn. 11, at 2.

41 See supra, "Background" section.

42 Supra, fn. 3.

43 It was primarily for this reason that it was not included in the definition of "original" found in the "Proposed Canada Evidence Act".

44 The "Proposed Canada Evidence Act" defines "original" with respect to a computer-produced record in the following terms: "(c) in relation to a record produced by a computer system, any printout or other intelligible output that accurately reproduces, whether in the same or a modified form, the data supplied to the computer system."

45 Law Reform Commission of Canada, "Report on Evidence" (1975), at 101. The Advisory Committee Note to Rule 1004 of the U.S. "Federal Rules of Evidence" states the same arguments. Recently the New Zealand Law Commission adopted this approach: see New Zealand Law Commission, Preliminary Paper No. 22, "Evidence Law: Documentary Evidence and Judicial Notice" (1994), at 58-58.

46 New Zealand Law Commission, Preliminary Paper No. 22, "Evidence Law: Documentary Evidence and Judicial Notice" (1994), at 58.

47 (1976), 30 C.C.C. (2d) 424, at 427, per Ritchie J. for the majority of the Court.

48 The Supreme Court of Canada held in Baron v. Canada, [1993] 1 S.C.R. 416, that the term "reasonable grounds" could not be usefully distinguished from

"probable grounds", for "reasonableness" comprehends a requirement of probability.

49 This recommendation was made by the Federal/Provincial Task Force on Uniform Rules of Evidence. See the Task Force Report, supra, fn. 11, at 405.

50 See Ewart, loc. cit. supra, fn. 16, at 87-93.

51 See supra, fn. 11, at 393-94 and 404.

52 Supra, fn. 10.

53 See Ewart, op. cit. supra, fn. 16, at 93-94.

54 Op. cit. supra, fn. 11, at 397, 404 and 522.