

# Electronic Evidence Act Consultation Paper 1997

**1997 Whitehorse YK**

**Uniform Electronic Evidence Act**

**CONSULTATION PAPER**

*March, 1997*

The purpose of this paper is to explain some legal problems associated with the use of computer-generated records in evidence before courts and administrative tribunals, to propose options for a Uniform Electronic Evidence Act and to solicit comments on those options.

The Uniform Law Conference of Canada proposes to hold its consultation on these options during the spring of 1997, with a view to preparing a draft statute by June for adoption at its annual meeting in August.

We would like your help in making this the best statute possible. Would you please send **comments no later than April 30, 1997**, to the

Uniform Law Conference of Canada  
622 Hochelaga, Ottawa, Ontario K1K 2E9,  
fax (613) 941-4165,  
or by e-mail to John Gregory at [\*\*gregoj@gov.on.ca\*\*](mailto:gregoj@gov.on.ca).

Technical background readings are available on this subject. In particular the Uniform Law Conference has published three substantial works on electronic evidence; they were published in the Uniform Law Conference of Canada Proceedings for 1994 1995 and 1996. Other sources are cited in those works.

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## **BACKGROUND**

### **MAJOR CONSIDERATIONS**

#### **ADMISSIBILITY**

1. Authentication
2. Best Evidence Rule
  - In Favour of an Integrity Test for Admissibility
  - Against an Integrity Test for Admissibility
  - Options for Best Evidence Rule
3. Hearsay

## **WEIGHT**

### **MINIMUM STANDARDS**

1. National Standard
2. Digital Signatures

### **TRADING PARTNER AGREEMENTS**

### **CONCLUSION**

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#### **Background**

[1] The proliferation of computers has created a number of problems for the law. Many legal rules assume the existence of paper records, of signed records, of original records. The law of evidence traditionally relies on paper records as well, though of course oral testimony and other kinds of physical objects have always been part of our courtrooms too.

[2] As more and more activities are carried out by electronic means, it becomes more and more important that evidence of these activities be available to demonstrate the legal rights that flow from them.

[3] The law is not badly broken as it stands. Most electronic records are in practice being admitted in litigation. However, courts have struggled with the traditional rules of evidence, with inconsistent results. The common term "reliability" has caused confusion between the principles of authentication, best evidence, hearsay and weight.

[4] What is worse, many records managers and their legal advisors have not been confident that modern information systems, especially electronic imaging with the paper originals destroyed, will produce records suitable for use in court.

[5] The uncertainty is beginning to lead to a proliferation of narrowly focused laws by which various government departments across the country authorize the use of the records from their own computer systems or in dealings between those departments and the part of the public they regulate. This creates a serious risk of incompatibility of information systems, even within the same jurisdiction.

[6] Likewise, some provinces have legislated on electronic evidence, but not consistently with each other. As a result, businesses active in more than one jurisdiction may have to keep records differently for use in different parts of the country.

[7] The Uniform Law Conference of Canada (ULCC) believes that the law should be modernized, clarified, and harmonized so that public and private sectors alike can make the best technical decisions possible about how to produce and keep records, with a minimum of uncertainty about how their legal rights will be affected.

[8] In reviewing proposals for law reform, the Conference must balance a number of factors: the nature of the threshold that should apply to the admissibility of electronic

evidence; the burden of proof on the proponent or opponent of the evidence; and the procedural requirements to ensure a proper examination of electronic evidence adduced before the court.

[9] In short, the law should accommodate the use of technology. It should also be neutral as to technology: people should be able to choose to use paper or any form of technology without prejudice to their legal rights. In fact, technology evolves so quickly that any law tied too closely to a particular technology risk being out of date almost before it is enacted.

[10] This does not mean that technology can be applied without regard to form. It means that the way the law will apply to technological choices should be as certain as possible, so those choices can be made for practical reasons.

### **Major Considerations**

[11] The principal difficulty in presenting electronic records to a court or tribunal is ensuring that they are accurate. Electronic records may be more vulnerable than paper records to undetectable modification, intended or unintended. What changes, if any, have to be made to the law to ensure the admission of reliable evidence under clear, fair and workable rules?

[12] The relevant parts of the law of evidence present two large issues for electronic records: admissibility and weight. The nature of electronic records presents challenges in both areas. However, the ULCC believes that the current law is capable of resolving these challenges with only minor modifications.

### **Admissibility**

[13] This is in our view the key to the debate on rules for electronic evidence. Should the special vulnerability of electronic records to undetectable change be recognized at this stage? Should the quality of the record have to be demonstrated in order for the records to be admissible? If computer records are inherently less reliable, in terms of integrity than paper, would it be fair to apply rules of admissibility to electronic records which are less stringent than rules applied to paper-based records?

[14] The alternative is to leave such questions until the weight of the records comes to be appraised.

[15] There are three major hurdles associated with the admissibility of documentary evidence:

#### **Authentication**

Is the record what it purports to be? The record must be identified and linked to its source.

#### **Best Evidence Rule**

How close is the record to its "original" version? Has its integrity been maintained or are there differences between the record and its "original" version?

Hearsay

Can the document be relied on as evidence of the truth of its contents? Does it meet the tests of reliability and necessity?

[16] A note of caution should be raised about the word "reliability" in this context. The nature of "reliability" varies with the rule under consideration. For authentication, reliability means that the record is what it purports to be. For the best evidence rule, reliability means that the record is accurate or has integrity. For hearsay, reliability relates to the truth of the contents of the record. Some discussions, including previous ULCC publications, have not distinguished between these meanings. The current consultation document tries to avoid the term, in order to avoid the confusion.

### **1. Authentication**

[17] Authentication of any record requires the presence of a live witness under oath and available for cross-examination who testifies about the identity of the records. There have been a number of proposals considered by the ULCC relating to authentication of electronic evidence which impose stringent requirements to prove the integrity of the record-keeping system. However, the ULCC believes that authentication is a test of identity and not integrity.

[18] In our view, the usual procedure for authenticating a record works equally well for paper or electronic records. That is, the proponent would continue to satisfy the burden of establishing the authenticity of his or her evidence by the introduction of evidence capable of supporting a finding that the record is what its proponent claims it to be.

### **2. Best Evidence Rule**

[19] The best evidence rule requires the proponent of evidence to produce the best evidence available to that party, which has traditionally meant in practice the closest to an original document. This presents two challenges for electronic records.

[20] First, ordinary data records do not have a meaningful "original", and certainly do not have an original that is distinguishable from their display on a screen or by printout. (Neither is "closer" to the electronic record than the other, any more than one printout is more original than another from the same electronic data.)

[21] Second, those who transfer paper records to electronic images often want to destroy the paper originals, to save storage costs. (They also seek easier document management.) Some people worry that deliberate destruction of originals may lose the sympathy of a court for presenting electronic images of them, because the originals are not available as a result of a deliberate act of the party wanting to rely on the record.

[22] In the view of the ULCC, solutions which have been devised to deal with paper-based records are not readily applicable to electronic records. Courts have tried to characterize printouts as originals, or as duplicates of an original core data base, or as reliable copies.

Some reform proposals have also tried to create a category of "duplicates" which would include photocopies, certified true copies, and electronic images, and which would be considered equivalent to the original for the purpose of satisfying the best evidence rule. These attempts are all artificial.

[23] Rather than try to apply the search for an original document to electronic records, the ULCC proposes searching for the principle behind the best evidence rule.

[24] The "function" of the best evidence rule is to ensure the reliability, that is to say the integrity, of the record to be produced in evidence. It is presumably easier to tell that an original paper record has been altered than to determine any alteration by viewing a copy. In the electronic world, there may or may not be any original paper version of the electronic record. Therefore, the search for integrity of an electronic record has to proceed in another way.

[25] As Ken Chasse said in his 1994 paper for the Conference, at para 46,

...the law should move from "original" to "system", that is, from a dependence upon proof of the integrity of the original business document to a dependence on proof of the integrity of the record-keeping system. This means that the best evidence rule loses most or all of its application in this field...

[26] Stated another way, the integrity of the record-keeping system is the key to proving the integrity of the record, including any manifestation of the record created, maintained, displayed, reproduced or printed out by a computer system.

[27] For example, the Quebec Civil Code, articles 2837 - 2839<sup>1</sup>, and the recent amendments to the New Brunswick Evidence Act on Electronically Stored Documents, S.N.B. 1996 c. 52<sup>2</sup>, both require that the integrity of the records be demonstrated as a condition of being admitted. Both statutes achieve this by requiring evidence as to the reliability of the computer system that produced the records, though the New Brunswick statute does not say so expressly.

[28] The New Brunswick statute also requires that the paper originals of imaged documents be destroyed in order that the images be admissible. This residual preference for paper over electronic records in the view of many members of the ULCC is unfortunate. The law should be neutral as to the technology that people use to manage their records. The fact that imaging has or had a paper original is irrelevant. Many members of the ULCC think that all electronic records should be judged by the same standard. The Act should be neutral as to whether original paper records should be retained, so long as if they are destroyed, this is part of the normal course of business and not in contemplation of litigation.<sup>3</sup>

[29] The ULCC therefore recommends that the law be clarified to ensure that the proponent of an electronic record not have to demonstrate that the record is, or is close to, an "original".<sup>4</sup>

[30] The next question is whether the reliability of the system should have to be demonstrated when the evidence is to be admitted or after admission, when its weight is to

be determined. The integrity of the record to be admitted is relevant on admission and in determining its weight. At which stage should the issue of integrity be primarily determined - admissibility or weight?

### **A. In Favour of an Integrity Test for Admissibility**

[31] Computer records may be inherently so unreliable that it is unfair to apply rules of admissibility to electronic records which are less stringent than rules applied to paper-based records or to eliminate altogether any rules regarding integrity at the admissibility stage.

[32] Information on the integrity of the records is within the knowledge of the proponent of the evidence so it is not unduly difficult to have to support them. On the other hand it would be unfair to admit them when the (potential) opponent has no information that would permit a successful challenge.

[33] Requiring the proponent to demonstrate integrity at the admission stage would require "foundation" evidence that the opponent could cross-examine. If the proponent is not required to adduce foundation evidence to support admission of the electronic record, then the opponent would have to call its own witnesses to challenge the integrity of the record. The best or even the only witness who could testify to the integrity of the proponent's system would be an employee of the proponent. If the opponent called such a witness, the opponent could not cross-examine him or her. Therefore, if the proponent is required to give foundation evidence at the admissibility stage, a fairer test of the record can be made.

[34] The need to call foundation evidence is likely to encourage responsible record-keeping, since anyone wishing to introduce electronic records will have to be able to withstand cross-examination on the integrity of the system.

### **B. Against an Integrity Test for Admissibility**

[35] An integrity test for admissibility creates a hurdle and an expense to litigants where in most cases the integrity of the records will not be challenged.

[36] Legitimate uses of electronic evidence can be subjected to procedural abuse in litigation, even if there is no serious dispute about the integrity of the records.

[37] Tactical considerations will likely persuade the proponent to call evidence to support the weight of a record, particularly if the record is challenged by the other party.

[38] The clear trend in the law of evidence is to expand admissibility of evidence, subject to challenges to its weight.

### **C. Options for Best Evidence Rule**

[39] Some members of the ULCC favour a uniform statute with no test of integrity at the admission stage. They would simply not replace the current best evidence rule with any substitute. Others advocate at least a minimal test before admission. Here are some of the options for an integrity test at the admission stage.

[40] We see four options here, which we will describe briefly: in order for electronic evidence to be admissible, the law should:

i) demand a full investigation of the system that produced the electronic evidence and the manner in which such electronic evidence was produced, to meet at least the Canadian General Standards Board standard for Microfilm and Imaged Documents as Documentary Evidence, as proposed by Ken Chasse in his 1994 paper for the Conference at paragraphs 86 to 90.

OR

ii) demand prior notice to the opponent that the proponent is going to produce the evidence in electronic form and to give evidence of the general reliability of the computer system that produced it if the opponent objects to its admission, as suggested by Ed Tollefson in his 1995 article for the Conference at paragraph 139.

OR

iii) demand some oral or affidavit evidence of the integrity of the system, supported by a presumption that the electronic record is reliable unless the party opposing admission of the record rebuts that presumption.

OR

iv) demand nothing more than the usual oral evidence to satisfy the requirement of authentication in order to identify the record.

[41] The ULCC has concluded that the first two options here are not desirable. The first option, largely the CGSB standard, would often be too burdensome, particularly where the integrity of the records was not seriously challenged. Many people would find the demands on their record keeping practices too severe.

[42] Likewise, having to give notice that one intended to produce electronic records in evidence provides a technical barrier that would be subject to abuse or overly narrow interpretation. It would add unnecessary expense to litigation.

[43] The third option, the requirement of an affidavit or oral evidence that the computer system that generated the electronic evidence is reliable, is more promising. For example, the statute could provide that it would be sufficient for the proponent to make an assertion to the effect that the computer system was working properly at the relevant or material time and by including any supporting evidence the proponent may wish to provide to support such assertion. The presentation of such affidavit or oral evidence would raise a rebuttable presumption regarding the integrity of the electronic record.

[44] Extensive proof of the system would become necessary only if the original foundation was challenged, or if the court on its own expressed any concern about the integrity of the evidence. Tactically, in such case, the proponent would likely lead additional evidence to address the concerns raised by the opponent or the court.

[45] The third option would give the opponent the chance to cross-examine the proponent or the proponent's systems expert, as opposed to being limited to calling witnesses that the opponent cannot cross-examine. The prospect of that cross-examination would inspire careful record-keeping by the proponent and make the proponent legally accountable for alleging the reliability of the system.

[46] In the context of this third option, a number of questions can be posed. What should be the onus on the opponent to rebut the statutory presumption created as to the integrity of the electronic record? Should the opponent be required to rebut the presumption on a balance of probabilities? Or, should it be sufficient for the opponent merely to raise a reason to doubt the integrity of the record, thereby requiring the proponent to adduce evidence to satisfy the court of the integrity of the computer system.

[47] The ULCC solicits the readers' views on the content of an affidavit in support of the integrity of the system and on what it would take to rebut a presumption in favour of the integrity so that the proponent must lead further evidence.

[48] In our view, a uniform statute on electronic evidence should adopt either the third or the fourth options listed: a minimal quality test backed by a presumption, or no test at all beyond having a witness identify the record. Otherwise we think that legitimate uses of electronic evidence can be subjected to procedural abuse in litigation even if there is no serious dispute about the integrity of the record. However, we invite further discussion of this issue as we do for all the propositions of this paper, express or implied.

[49] In addition, the ULCC also proposes to address the use of records by parties who did not create them. Such parties should not have to prove the reliability of someone else's system. Quebec's presumption in the Civil Code in favour of third parties seems desirable: the third party need prove only that the data entry were part of an enterprise.

[50] Likewise, a uniform statute should preserve current rights of parties to waive legal requirements for admission of documents against each other, and rights that arise from the common law about documents which are in the possession of the opposing party and are relied on in civil proceedings or which are in the possession of the accused.

### **3. Hearsay**

[51] A document is hearsay because it is a second-hand representation of information about a matter to which the statements in the document relate, as opposed to statements made by an eye-witness who can be cross-examined. Hearsay is inadmissible unless it falls into a statutory or recognized common law exception. Two of many exceptions to the hearsay rule are the business records rule and the general exception to the rule against hearsay.

[52] The business record rule was developed at common law, and in most provinces and in the federal jurisdiction has been replaced or supplemented by statute. The Civil Code of Quebec contains an equivalent rule.

[53] Generally speaking, if a record is created in the ordinary course of business and is (a type) relied on in the business, then it is admissible. Some rules require that it be created



more or less at the same time as the event recorded, and sometimes by a person with a duty to record it. The theory is that these circumstances give the record sufficient assurances of the truth of its contents that it may be admitted.

[54] It will be noted that the rule does not require separate proof of the truth of a record's contents. The making and the use of the record in the course of business provides sufficient guarantee of the truth of the record's contents to support admission.

[55] A second exception is through the evolving common law of hearsay. There is a trend that any evidence shown to be reliable as to the truth of its contents and necessary to the determination of an issue will be admitted.

[56] The ULCC believes that electronic evidence does not demand any change to the rules on hearsay. The character of the record can be sufficiently demonstrated under existing law to meet the exceptions, regardless of the medium of the record.

[57] This conclusion would also leave in place other rules providing for the admission of hearsay, such as those covering public records and bank documents.

[58] We note in concluding on this point that the law on hearsay, notably on the admission of business records, is not uniform across Canada. Some provinces and the federal government have (non-uniform) statutes on point, others do not. The present recommendation does not affect the status quo regarding hearsay.

## **Weight**

[59] Once the record is admitted, it may of course be challenged on a number of grounds, including its lack of integrity, lack of truthfulness and lack of relevance to the issue. Has it been tampered with? How is the security to be demonstrated? Have the data degraded over time?

[60] Proving such deficiencies is up to the opponent of the evidence, who has at least a tactical burden of doing so. Tactically the proponent may lead evidence in response, to support the weight of the record.

[61] If the proponent were not required to support the integrity of the record to have it admitted, the opponent could be in a difficult position in challenging the weight of the electronic record. The best person to give evidence on the reliability of the proponent's system is probably the systems manager of the proponent, who if called by the opponent to testify, cannot be cross-examined.

[62] The weight of evidence is traditionally not the subject of statute. It depends very much on the facts of the case at bar.

[63] Nonetheless, the UNCITRAL Model Law provides as follows in Article 9(2):

Information in the form of a data message shall be given due evidential weight. In assessing the evidential weight of a data message, regard shall be had to the reliability of

the manner in which the data message was generated, stored or communicated, to the reliability of the manner in which the integrity of the information was maintained, to the manner in which its originator was identified, and to any other relevant factor.

[64] Alternatively, instead of this mandatory approach, it would be possible to set out factors in the statute that the court may, but need not, consider. A disadvantage of this approach, however, is that, in practice, setting out such discretionary factors sometimes become minimum requirements.

[65] On balance, we believe that the statute should not give guidance on the factors that go to weight. The factors can be suggested to courts and counsel and records managers by the literature in the field, which includes the Model Law and the papers of the ULCC, as well as academic and practical literature.

## **Minimum Standards**

[66] The proposals above may be criticized as leaving too much uncertainty to creators or managers of electronic records. When will one's affidavit in support of admission be acceptable, and when will it need to be supplemented? How should one supplement it? Are there no standards that can be fixed ahead of time as "safe", so that complying with them guarantees admissibility of one's records? Lesser or other standards may be acceptable as well, but should there not be some guarantee available?

[67] Two candidates present themselves as minimum standards: the National Standard of the Canadian General Standards Board, already briefly mentioned above; and standards for creating records with digital signatures. Each is discussed in turn.

### **1. National Standard**

[68] We have been urged, particularly by the Canadian Information and Image Management Society, to support by legislation the National Standard on Microfilm and Electronic Images as Documentary Evidence (CAN/CGSB-72.11-93). In particular we have been asked to provide that records created and kept in compliance with the National Standard are admissible and (presumed?) reliable.

[69] After serious reflection, we have decided not to recommend such support, even through a statutory presumption of reliability. We have three reasons. First, the presumptive standard would in practice become a minimum, since it would be a standard of inadequacy of other, lesser procedures to ensure reliability. Second, compliance with such a presumptive standard may lead to a tendency to not properly scrutinize the records further as to weight. Third, the National Standard is in our view beyond the means of many legitimate users of electronic images.

[70] Other procedures may be developed that support reliability adequately for litigation. One thinks of the requirements of the New Brunswick statute. Its policy aims at a standard below that of the National Standard but acceptable to the N.B. Legislature.

[71] Leaving the National Standard out of the legislation in no way reflects on its validity or its usefulness. It may well become a de facto standard in the courts. The Society has told us that Revenue Canada now allows taxpayers that keep electronic records according to the standard to dispose of their original records. That is powerful testimony of the strength of the standard in guaranteeing integrity of records made and maintained in accordance with it.

[72] We simply think that the National Standard should be left to make its own way. The general absence of other statutory criteria for weight of evidence reinforces us in this belief.

## **2. Digital Signatures**

[73] Record-makers may use digital signature technology for various purposes: to ensure data integrity of records and messages, to ensure that senders of messages created or received by the computer system cannot repudiate the fact that they sent such messages, and, in conjunction with encryption technology, to maintain confidentiality of information during transmission. It has been suggested that digital signature technologies serve to ensure the integrity of data and that their use may be relevant as foundation evidence or in the event that the integrity or weight of the electronic record is challenged. As these technologies are continuing to evolve and their application is not yet widespread, it may be premature to consider reference to digital signature technology as a minimum standard for the purpose of creating a statutory presumption. This consultation paper does not examine the value or necessity of a specific rule or a statutory presumption of reliability for digital signature technology as applied to electronic records. At this time, a number of governments are separately examining the value of this technology.

## **Trading Partner Agreements**

[74] Many users of electronic data interchange agree to standards for the transmission of their messages and the confirmation of them, along with log systems to ensure that their messages are accounted for. Such "trading partner agreements" often provide that records that comply with the agreed standards may not be challenged on the ground that they are electronic in form or otherwise unsatisfactory under the rules of evidence.

[75] Some people doubt that such agreements are valid, as they appear to contract out of the rules of evidence. It is arguable that parties may validly agree to certain facts whose existence is owed to following processes prescribed in their agreement. We are inclined however to think that these general agreements should be enforced, as between the parties only. Naturally contract defences and fraud would vitiate an agreement, but an attempt to enact a private code of evidence should not.

[76] The ULCC proposes that its uniform act should authorize private agreements on how to deal with evidence arising out of electronic transactions between the parties to the agreements.

## Conclusion

[77] Despite the variety of electronic records and the differing approaches the courts have taken to them - while generally admitting them, the issues for reforming the law of evidence are relatively straightforward. The ULCC believes that reform need address only two or three problems: the presence of a (low) barrier at the time of admission; the abolition of the search for original records or some other format as good as an original; and clear authority of the court to judge the integrity of a record by the integrity of the system that produced such record, either for admissibility and weight, or for weight alone.

[78] We believe that if the law is amended to ensure that the quest for an original electronic record is abandoned, or the original of an electronic record, then the questions of solicitors and record managers will be largely relieved. The demand for reform on a statute-by-statute basis should also disappear.

[79] Users will face the need to establish the integrity of their records, based largely on the reliability of their systems in maintaining the records. Some will be disappointed that we do not endorse a particular industry standard for reliability. We believe that, over time, the amendments proposed in this paper will provide greater flexibility and accommodate technological innovation.

[80] The ULCC welcomes your views.

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## Footnotes

*Footnote: 1 Article 2838 presumes the reliability of the record where it is proved that the data entry is carried out systematically, without gaps and is protected against alterations. Such presumption is also made in favour of third parties who seek to admit the record if it is proved that the data entry were part of a business enterprise. Therefore, in some cases, the Quebec Civil Code provisions require the production of evidence relating to the reliability of the system which created the records.*

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*Footnote: 2 The New Brunswick statute provides that a print-out of a document is admissible for all purposes, as is the original document, if it is proved that the original document is copied by a process of electronic imaging or similar process and is electronically stored in the course of an established practice to keep a permanent record of the document. Additionally, it must be proven that the original document no longer exists and that the print-out is a true copy of the original document.*

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*Footnote: 3 The United Nations Model Law on Electronic Commerce provides (in Article 9(1)):*

*In any legal proceeding, nothing in the application of the rules of evidence shall apply so as to deny admissibility of a data message [i.e. an electronic record] in evidence:*

*(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.*

*In our view the Model Law's Article 9(1)(b) may require that someone who wants to use an electronic image will have to destroy the original and may have to demonstrate that this destruction was reasonable. This appears unnecessarily restrictive.*

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*Footnote: 4 This recommendation applies only to the general rules of evidence. Other particular statutes may expressly or by implication require the production of an original record. Each jurisdiction should examine its own statutes and decide how to accommodate the policy behind the requirement for an original, to see if the present recommendation could apply. Article 8 of the United Nations Model Law on Electronic Commerce may be helpful.*

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*March 1997*