TECHNOLOGY AND EVIDENCE LAW: AUSTRALIAN DEVELOPMENTS

Memorandum by
THE GOVERNMENT OF AUSTRALIA
(Prepared by the Law Reform Commission of Australia)

Information Technology and Society

New information technology: One of today's most dynamic technologies is the new information technology. This generic expression refers to the development of a whole range of electronic and mechanical devices which generate, process, store and communicate information. They do so in ever increasing quantities, at ever increasing speed and consistently diminishing cost. Many countries of the world, including those in the Commonwealth of Nations, are undergoing the rapid development of the so called fourth economic sector, the "information sector". The most obvious and pervasive aspect of the new information technology is the computer. For example, it has been estimated that in Australia computers are already part of an industry with an annual turnover of $1,500 million a year. This sum comprises an estimated $400 million a year in imports and the salaries of some 77,000 employees, now estimated as employed in the computer and associated industries in Australia. More than 11,000 computers are at present in use in Australia, most of them small and medium scale systems installed since 1970.[1] The advent of microprocessors promises the rapid proliferation of "home computers". Everywhere in Australia, one can see the rapid advance of computerization: processing reservations at the airline terminal, offering kerb-side banking transaction with an "automated teller", taking care of records in hospitals and courts, offering printouts of statutes and case law, processing correspondence and documents in offices and handling the cashflow and credit information of retail stores, to name but a few.[2]

2. These developments, which are international in character and rapid in development have been stimulated by two major technological advances during the 1970s:

- The rapid extension of miniature technology by the development of integrated circuits containing ever expanding components reduced to a tiny wafer of crystal silicon by procedures of photo reduction (the so-called "microchip"); and
- The extensive linkage of computers by telecommunications permitting vastly increased storage of information and encouraging the exponential growth of transmission of data over local and national boundaries.[3]

3. Legal context: The last mentioned development, so called "transnational data flows" (TBDF) presents perplexing problems that will require legal attention at national and international levels. Already in UNESCO, the Council of Europe, the Organisation for Economic Co-operation and Development (OECD), the Nordic Council and elsewhere TBDF problems have been identified. Some efforts have already been addressed to the social and legal issues that result. The areas of concern include:

- the need for greater legal protection of privacy (data protection and data security);
- the implication for access to government information and the international on-line operation of local freedom of information laws;
- the impact of the new technology on vulnerability to terrorism, accident, industrial dislocation etc;
- the need for new laws to deal with computer crime, including crime having international components;
- the implications for conflicts of laws, state sovereignty and economic protectionism of the new technology;
- the need to adjust intellectual property and other aspects of business law for the new technology; and

- the implications of the technology for the legal profession, particularly in countries where that profession is highly dependant on computer-susceptible land title conveyancing.

The need for review of the laws of evidence, especially in countries following the common law tradition, is simply one aspect of the need for a major review of legal systems in the Commonwealth of Nations following the rapid introduction of new information technology. It is important to see the impact of the technology on the law of evidence in its wider context. Computers and automatically computer-generated material represent only the most obvious and well recognised aspects of the new technology. Other relevant developments include:

- the rapid expansion and perfection of photocopiers;
- the development of microform procedures;
- the rapid expansion in the use of sound and video recorders;
- the invention and widespread use of the Breathalyser and like equipment to test intoxicated drivers;
- the development of devices for measuring the speed of vehicles e.g. radar; and
- the significant advances in surveillance equipment, optical and audio.

4. The trial system: The tradition of the common law trial system is well known. It is a tradition of the continuous oral trial, by which relevant evidence is offered by witnesses who come before a court or tribunal and whose testimony may be challenged by testing cross-examination and answered by conflicting evidence. This trial system has many merits. They include especially:

- the openness of curial determination of disputes based upon material, oral and written, which is openly presented, typically in a public trial;
- the opportunity is afforded to the opposing parties to confront or challenge and test evidence which is offered against them; and
- the procedure offers to the general community the opportunity, if it chooses to do so, to see the public resolution of disputes, according to law, upon material openly disclosed before the court or tribunal;
- its adversary structure enables the parties to maintain a high degree of control over the presentation of their cases.

5. Evidentiary obstacles: The advent of new information technology presents a number of problems to the common law rules of evidence. Amongst the rules of evidence law which are most likely to stand in the way of evidence being admitted where modern technology has been adopted are the following three rules:

(i) The hearsay rule: which prevents evidence being given by a witness of the out of court statements of another person. A well known example of the hearsay rule operating to render inadmissible in a criminal trial vital and apparently reliable business records was Myers v DPP[5];

(ii) The "best evidence" rule: which prevents the tendering of a copy document e.g. photocopies or microfilm, unless the original has been destroyed, lost or unless its absence can be accounted for; and

(iii) Rules on evidence produced by a machine: Before evidence can be received, it must be established that the equipment was reliable and accurate at the time that the evidence was produced. Only in relation to equipment well known to work accurately will a court presume accurate operation.

The advent of the new information technology renders the continuance of some of these rules, developed in earlier times, unreasonable and indeed impossible. Clearly, it would be intolerable, as society rapidly adopts computers, photocopiers, word processors and other technologies, to require in all cases that every person who contributed to a much used and thoroughly relied upon computer record or other device, should be available to prove orally his individual contribution. Equally it would be unacceptable to require proof in every case of the operation of the equipment. Particularly would this be unreasonable in the event of computer material originating or generated in a foreign jurisdiction, transmitted, possibly across the world by TBDF. The common law rules were often unreasonable in the

case of reliable business and government records before computerization. They become even more unreasonable when computerization is employed. Yet mistakes, accidental or deliberate, do occur. It is not appropriate to accept, without any precaution or reservation the printout of every computer or the product of every photocopier as if the technology itself were always an indisputable guarantee of accuracy: providing protection against false, negligent or even malicious and misleading information. An American judge undoubtedly spoke for a large constituency when he complained in a judgment that as "one of many who had received computerized bills and letters for accounts long since paid", he was not prepared to accept the product of a computer " as the equivalent of holy writ". A compromise must be made between:

- adherence to the common law rules of evidence devised in the days of the quill pen with their insistence upon procedural fairness and the production of the "best evidence", on the one hand; and
- recognition of the rapid penetration of new information technology in society, its enormous efficiencies, its transborder characteristics, its overwhelming reliability, its common use by mankind and the gross inefficiencies and costs that would be inflicted if, in every case, strict adherence to traditional rules of evidence were insisted upon.

Making this compromise between the traditional laws of evidence and the new technology is easy neither in concept nor execution. The task is made no simpler by the urgency of providing solution that will ensure that courts and tribunals can receive into evidence the rapidly expanding bulk of computerized data and other technological produced evidence, because such material is, effectively, the only available information upon which the issues for trial can be accurately and justly determined. The law would be brought into even greater disrespect in the community if, in the face of the rapid deployment of computers, photocopiers and other devices, it continued to place unreasonable evidentiary obstacles in the way of the admission of such material before a legal decision-maker.

6. Guiding principles: In deciding what solution should be advanced for the evidentiary problems created by modern information technology, consideration must be given to:

- the hurdles, if any, that should be placed in the path of the party tendering the evidence, in order to secure the public policies upheld by the law of evidence;
- the safeguards that should be built into the trial system to ensure a fair hearing for the party against whom technology evidence is offered, and;
- the weight to be given in the decision-making process to any technological evidence which is admitted.

In resolving these questions, and in devising legislation to overcome the evidentiary problems created by modern technology, a number of policy objectives have already emerged in Australia. Amongst the chief of these, the following can be mentioned:

(i) Aid to Fact-finding: All relevant evidence should normally be admissible, unless a clear ground of policy justifies its exclusion. Barriers should not to erected to admissibility except for good cause.

(ii) Fairness: Testing the Evidence: The other party should be given an adequate opportunity to test the evidence. To achieve this, the party against whom technological evidence is led might need enhanced rights of discovery e.g. to examine a computer program and advance notice that technological evidence is to be used. An alternative approach is to impose procedural restrictions in the nature of safeguards which must be compiled with before technological evidence will be admitted at all.

(iii) Cost Saving and Efficiency: To enable governments and business to adopt technological advances without prejudicing admissibility, and not to impose unnecessary costs or impositions, additional costs might be considered either at the point of use of the equipment (e.g. a requirement that affidavits be made) each time a set of microfilms is made or in relation to the court proceedings themselves.

(iv) Flexibility: Cumbersome procedures should be capable of waiver where there is no genuine dispute. It is also important that legislation should be capable of accommodating future technical developments.

(v) Technological Neutrality: The legislation should not give any preference to one type of equipment over another except for some good reason relating to its performance. For example, it has been suggested that Australia's reproduction legislation does not enable the admissibility of microfilm produced by laser and other techniques which do not produce a photographic negative. Most breadth analysis legislation is specific to particular breathalyser equipment.

(vi) Uniformity: Increasingly today business must give thought to the admissibility of their records not only in the jurisdiction in which the records are kept but also anywhere else they do business or might be sued. Uniformity is an important step towards ensuring reciprocal operation.

(vii) Other purposes to be served include:
. clarity and simplicity of the reform legislation; and
. a reasonable degree of certainty of its operation.

Australian Approaches: Legislation and Law Reform

7. ALRC reference: In Australia, the Australian (Federal) Law Reform Commission (ALRC) is at present in the midst of a major review of the law of evidence applicable in Federal and Territory courts. Until now, Federal courts in Australia have applied the laws of evidence of the State or Territory in which they happen to be sitting.[6] This rule was an improvisation appropriate in the early days of Australian Federation because of the small number and docket of the Federal courts. The establishment, within the past ten years, of the Federal Court of Australia and the (Federal) Family Court of Australia, as well as the growth of the business of the Territory courts has rendered it appropriate to review the original approach and to consider whether, as in the United States, a Federal evidence law should now be developed. The laws of evidence, particularly statutory laws of evidence, vary significantly from one Australian jurisdiction to another.[7]

8. The terms of reference to the ALRC refer specifically to:

> the need for modernisation of the laws of evidence used in Federal Court and; review of the laws of evidence ... with a view to producing a wholly comprehensive law of evidence based on concepts appropriate to current conditions and anticipated requirements.[8]

The ALRC has produced a widely distributed discussion paper, Reform of Evidence Law.[9] In it, attention is drawn to the impact on the law of evidence of technological change and to the general inadequacy of legislative attempts so far in Australia to address this issue:

> Attempts have been made throughout Australia to deal with the problems created by existing rules of evidence for the tendering of computer produced evidence. Technology in this area, however, continues to develop at a rapid rate and the question arises whether current law is adequate for new information media and where the problems are in fact being experienced in tendering evidence which consists of material stored in computers, processed by computers and produced by computers. Do the laws of evidence need modification to facilitate proof of telex, satellite and other modern forms of communication? Are there problems in the use of evidence produced by modern equipment such as satellite photographs? Do the laws of evidence prevent the use of videotape evidence and should this be allowed? It might be of great convenience and less expensive to allow oral evidence to be recorded and given in this way. The disparity between the community's use and the law's use of survey evidence has already been noted.[10]

The ALRC is proceeding towards the production of a comprehensive report with a draft proposal for a new Federal Evidence Act. The Commission has the assistance

of a number of distinguished consultants, including Federal and State judges, law teachers, practising barristers, government officials and an expert academic psychologist. The project is being led by Commissioner T.H. Smith, a Melbourne barrister. It is hoped that a draft report with a comprehensive Bill will be produced in mid-1983. Already, the Commission has produced a series of 12 research papers dealing with particular areas of law of evidence.

9. A number of the present Australian laws of evidence and proposed changes do address the impact of technology on the laws of evidence mentioned above. The Chief relevant research papers in this connection are:

R.P.1 Comparison of Evidence Legislation
R.P.3 Hearsay Evidence Proposal
R.P.4 Secondary Evidence of Documents
R.P.8 Manner of Giving Evidence
R.P.9 Hearsay Law Reform - Approach?

10. State reform inquiries: In addition to working closely with its expert consultants, the ALRC is co-operating actively with other law reform agencies which have delivered or are currently working upon proposals for reform of the law of evidence in Australia. The Queensland Law Reform Commission completed a major review of evidence law in that State in 1975. The New South Wales Law Reform Commission has completed two reports and many other papers on aspects of the law of evidence in that State. Its Report on the admissibility of business records[11] became the basis for legislation in New South Wales, Commonwealth and other Australian jurisdictions.[12] The Law Reform Commission of Western Australia has a reference before it relating to copying and micrographic technology. The South Australian Law Committee is working actively on a general project for the reform of the law of evidence. Through the Australian Law Reform Agencies' Conference and by direct communications the law reform agencies are co-operating on evidence law reform. The need for co-operation is illustrated by the disparities that have already emerged in legislation so far passed concerned with the admissibility of technologically stored, created or transmitted information.

11. Legislation: general features: It is possible to identify certain features of the Australian legislation so far enacted. The following generalisations can, it is believed, be made:

(i) Technology Lag: The legislation tends to lag behind technological development. The non-application of microfilm legislation to laser techniques has been mentioned above. Another case arises from the use of "on-line" computers by bank customers such as now is becoming common in Australia. Even under a broadest Australian legislation, entries made by customers when affecting transactions at "automatic tellers" may not qualify for admissibility under the Federal and New South Wales legislation. These typically require that information be recorded in the computer records of a business by a "qualified person". It is doubtful whether a customer at an automatic teller can be so described. Likewise computer-generated evidence (which is produced without any imminent intervention) is not admissible under any of the technological evidence legislation in some Australian jurisdictions, although it may be admissible at common law provided the rules of evidence produced by a machine can be satisfied.[13]

(ii) Admissibility and Reliability: The tendency in legislation to date has been to impose very strict conditions upon the admissibility of evidence. These generally relate to the reliability and accuracy of the equipment and of material produced by the equipment. It can be argued that many of these matters should be considered in deciding what weight to give to the evidence rather than controlling the admissibility of the evidence.

(iii) Cumbersome Procedural Requirements: Some of the Australian legislation has been criticised for imposing unnecessary procedural requirements. Examples include requirements that running affidavits be made as photocopies, microfilm and other copies are made. Some of these requirements may seem cumbersome and even impracticable.

(iv) Lack of Notice: In legislation dealing with computers and reproduction, no significant efforts have generally been made to require notice to be given to the other party so that he may be given the opportunity and assistance which would be needed to make a proper check on the reliability of the technological equipment and its product.

(v) Complexity of Legislation: The Australian legislation varies from jurisdiction to jurisdiction. Much of it is quite complex. In addition, in relation to what might broadly be called "business records", there is a differing amalgam of laws from one Australian jurisdiction to the next. This amalgam is made up, in each jurisdiction, from treatment of some or all of the following:

- public documents;
- business and government records;
- photocopies produced by "approved machines" and use of legislative sanctions
- procedures on unapproved photocopiers;
- banker's books;
- computer records

In some jurisdictions, for example, computer records are distinguished from other business records.

(vi) Overlap: In some cases a document is admissible under two or more pieces of legislation, and sometimes the common law as well. For example legislation of the states and Territories relating to the proof of statements in documents and records including business records could be used to tender the testimony which the reproductions legislation is designed to preserve (same applies to computer records).

(vii) Different Common Law obstacles overcome: Admission of technological evidence might be prevented by more than one exclusionary rule. Some of the legislation overcomes the hearsay rule. Some (e.g. legislation which makes certain copies as admissible as the original) overcomes the requirements of the rule regarding secondary evidence of documents, and any "best evidence" requirements, but not the hearsay rule. The N.S.W. and Federal business records legislation, for example, overcome all these obstacles.

Australian Legislation

12. Five classes It is not possible in a paper of this length to identify all of the Australian legislation, Federal and State, by which attempts have been made to modify the common law rules of evidence to facilitate the introduction of technological evidence. A few examples will, however, demonstrate the general features listed above: the lack, so far, of a simple principled and coherent attack on the problem of technological evidence and the need for reform. These propositions will be illustrated by reference to Australian legislation on:

- reproductions by photocopying, microfilm and otherwise;
- copy documents legislation;
- legislation relating to public documents;
- legislation of business records; and
- legislation specific to computer and computer generated records.

13. "Reproductions" legislation This legislation is designed to enable the admissibility of photocopies, microfilm or other copies produced by machines which might be regarded as accurate and reliable, for evidentiary purposes, as original documents. The principal problem raised by the common law rules of evidence was the need for the person who made the copy to give testimony as to the correctness of the copy or the accuracy of the machine when it made the copy. The other problem created by the common law is the requirement either to prove that the original has been destroyed or cannot be found, or to produce it. The "reproductions" legislation compliments pre-existing legislation and common law rules, which continue in force. If the legislation has not been compiled with, it

can still be possible to fall back on those rules. The legislation is not uniform across Australia. The Victorian legislation is used for comparison. Its content may be summarised as follows:

(i) Official Reproductions: A reproduction of a document in the custody of officers such as the Register of Titles or the Commissioner for Corporate Affairs may be tendered if it bears a certificate that it is a reproduction of that document.

(ii) Business Documents: A reproduction of a document made or used in the course of a business can be tendered upon proof that the reproduction was made in good faith and that either the original has been destroyed or lost or that it is not reasonably practicable to produce it. The negative must still be in existence. Provision is made for proof by affidavit which must describe the machine or process by which the machine copy or negative was made and that the processing was properly carried out in the ordinary course of business by the use of apparatus and material in good working order and condition.

(iii) Approved Machines: Provision is also made for machines to be approved if the Attorney-General is satisfied that the machine automatically photographs documents passing through it in normal operating conditions at a speed which will prevent interference by the operator in the course of copying a document. In the case of reproductions made by such machines, it does not matter whether the document copied is still in existence or not. Proof is required, however, that the photographing was properly carried out in the ordinary course of business by the use of apparatus and material in good working order and condition and that the 'negative' was made in good faith by means of such machine and the print reproduces the image on the negative and that the negative is still in existence. This can be done by means of an affidavit.

14. Copy Documents Legislation: There is also legislation in the Australian Capital Territory, South Australia, and the Northern Territory which relates to the tendering of copy documents. In these jurisdictions there is no "reproductions" legislation. Copy documents legislation is also found in some other States and Territories.

(i) Australian Capital Territory: The Evidence Ordinance 1971, enables the tendering of a machine copy or a reproduction of official documents certified to have been made while in the control or custody of public officers and whether the original document is in existence or not. The section relates to reproductions of documents which by law must be lodged with government bodies. There is also a provision enabling facsimiles to be tendered upon proof to the satisfaction of the court that the copy was taken or made from an original document by means of a machine, that it was compared with the original, and that notice to produce the original has been given.

(ii) The Northern Territory: There There is legislation dealing with the photographs of old records. This relates to documents held by the Crown or "prescribed corporations".

(iii) South Australia: Reproductions of business records and other documents may be admitted under two general provisions - s.45a and s.45b of the Evidence Act 1929-1979 which extend to "any reproduction of an original document (or business record) by photographic, photostatic, lithographic, or other like process." The reproduction will be admissible if it is apparently genuine. There is a discretion in the court, however, to exclude a reproduction if it is of the opinion that:

(a) the person by whom or by whose direction it was prepared can and should be called;
(b) the evidentiary weight of the document is slight and outweighed by the prejudice that might be caused to any of the parties; or
(c) the admission of the document is otherwise contrary to the interest of justice. Directions are also given as to the manner in which the weight to be attached to the document should be established.

State and Territory legislation which relaxed the hearsay rule to enable statements in documents and records to be tendered contain provision which enable copies to be tendered. There are two approaches:

(i) South Australia, New South Wales and the Northern Territory. A copy may be tendered if undue expense or delay would otherwise be caused. It has to be certified as a true copy in such manner as the court may require.

(ii) Tasmania, Victoria, Western Australia, Queensland, and the A.C.T. A general discretion to admit copies is given, and the court also decides on the appropriate way to authenticate the copy.

15. Legislation Relating to Public Documents: The legislation in the various Australian jurisdictions to facilitate the admission of 'public documents' is extensive. It contains both a general provision relating to documents of a public nature and a number of specific provisions dealing with particular descriptions of public registers and files. These include:

(a) Registers of British vessels and ship's articles;
(b) Registers of newspaper proprietors;
(c) Documents filed in Corporate Affairs offices;
(d) Registers of births, deaths, marriages and adoptions;
(e) Documents recording convictions in Australia and outside Australia;
(f) Judgments and other court documents both inside and outside Australia;
(g) Crown Grants, Letters Patent, leases and other documents of title.

The general and specific provisions overlap. In addition the provision in the reproductions legislation cover much of the same ground insofar as it relates to secondary evidence of official records. The provisions vary from one jurisdiction to another. Many categories of documents are not dealt with in some jurisdictions.

16. Legislation on Business Records: As was mentioned above, the hearsay rule is one of the main obstacles to the admission of technological evidence. For example, much that is contained in business and government record consists of or includes hearsay statements. In Australia considerable inroads have been made by legislation into the rule against hearsay, in relation to financial and general business records - now increasingly and rapidly automated. The legislation generally distinguishes between civil and criminal proceedings. Generally, the legislature has seen fit to permit such second-hand written hearsay to be received, subject to specified safeguards where it is contained in some form of record and where the supplier of information or the maker is either called or is unavailable. In some instances, it is enough that the document forms part of the records of a business and was made in the case of that business. Discretions excluding evidence otherwise admissible under the legislation are included (with the exception of the A.C.T. - civil proceedings, and Tasmania - business records). There is, however, no consistency in the inclusion of or terms of such discretions.

17. The broadest civil provision is arguably that in South Australia, which allows any apparently genuine document purporting to contain statements of fact of which the person who made the statement or at whose direction it was prepared had personal knowledge, admissible in evidence. It shall not be admitted where the court is of the opinion that the person by whom or at whose direction the document was prepared should be called or the prejudicial effect outweighs the probative value, or it will be contrary to the interest of justice. In addition, in South Australia and elsewhere, there are provisions (based on or developed from the 1938 English legislation) which enable the tendering of a document made by a person with personal knowledge of the matters stated; and of "continuous records" or records of "a business" (which expression generally includes public administration) - which contain statements made by a person without personal knowledge of the matters recorded. Generally there is a requirement that the maker of the document or the supplier of the information contained in the document be called to give evidence unless unavailable.

18. Computer records and output: The hearsay rule has been modified in most jurisdictions in an attempt to cope with the new technology of computers. Two different approaches have been taken in the legislation:

(i) One has been to enact legislation which in terms specifically deals with computers records and computer produced evidence.

(ii) The other approach has been to include computer records and computer produced evidence within the general legislation regarding business records.

The former approach has been taken in Queensland, Victoria, South Australia, and the A.C.T. The provisions differ but generally require proof of threshold matters relating to the reliability of the computer and its operations, as to whether the information was recorded in the ordinary course of business and other similar matters. In this type of legislation, there is usually a provision enabling the formalities to be proved by certificate. There is also a discretion to exclude the evidence notwithstanding compliance with the conditions of admissibility. The other approach, followed in the New South Wales and Federal legislation, is to treat the computer records in the same way as business records generally and simply to require proof of the making of the statements in the record in the course of or for the purpose of the business, that the record forms part of the record of the business, and that the statement was made or derived from information supplied by a qualified person in the course of or for the purposes of the business. It is also permissible that the statement contain information derived from one or more devices. As to the reliability of the computer and its operations and like matters, these are treated as matters going to weight and not admissibility. Generally, the legislation has taken a far more cautious approach to the admissibility of written hearsay in criminal than in civil proceedings.

Law Reform Proposals

19. Background: In the research papers published by the ALRC dealing with Federal evidence law reform of the hearsay rule and of the secondary evidence of documents rule have been tackled directly. Attention has been paid to important reforms of the hearsay rule effected in England by the Civil Evidence Act 1968. Close attention has also been paid to the United States Federal Evidence Rules 1975 and to the recent Report of the Joint Federal/Provincial Task Force on evidence and the draft Uniform Evidence Act recently published in Canada. The universal attempt to reform the law of evidence to accommodate technologies evidence illustrates the general significance of this problem for most countries of the Commonwealth of Nations.

20. Secondary evidence: In the research paper on Secondary Evidence of Documents, the ALRC suggested a number of modifications to the common law requirements. The proposals include:

(i) Duplicates: The accuracy of modern reproduction techniques and the convenience of tendering copies produced by them warrant their general recognition. It was suggested that the approach of the U.S. Federal Rules, as modified by the New York State Law Revision Proposal and by the Canadian Task Force proposal, should be adopted. This would mean that a duplicate would be admissible in evidence to prove the contents of the original document, whether the original document is in existence or not, unless there is a genuine question raised as to the authenticity of the original, the continuing effectiveness of the original or the accuracy of the duplicate.

(ii) Other Secondary Evidence: In the case of other secondary evidence, it has been suggested that the approach taken in the U.S. Federal Rules the original is not required and other evidence of the contents of a writing, recording or photograph is admissible if the originals have been lost or destroyed (unless in bad faith); or the original is not obtainable or is in the possession of the opponent; and

(iii) Reproductions other than Writings: To remove uncertainty about the scope of the common law, provision is proposed to permit the tendering of secondary evidence of the contents of modern information storing media.

21. Commercial and Government Records: In its research papers the ALRC has indicated that the above proposals will often not be satisfactory for dealing with

secondary evidence of commercial and government records, particularly where they are kept in photocopy form or on microfilm. It has proposed special provisions for such records. For example it is proposed that a distinction should be drawn, as in the present reproductions legislation, between copy documents that form part of the records of a business, (which should include commercial organisations, government departments and instrumentalities) and those that do not. It is in the business records area that the need to reform the common law is most clearly demonstrated. Normally there is a pressure for accuracy and reliability of business records, because the business itself relies upon the records. Where documents have been reproduced which are not kept as part of the general records of a business, that pressure is likely to be less. The NSW Law Reform Commission in its Report commented that the fact that the records were to be used by the business provided a strong incentive for accuracy. Where the reproductions are made and kept by businesses as part of their records, then there is a sufficient guarantee of reliability and accuracy to justify their admissibility simply on proof of the fact that they were made and kept in the ordinary course of business.

22. The ALRC proposed business record provisions are like those in New South Wales and the present Federal law with some modifications. They address the problems to both the hearsay rule and secondary evidence of documents rule. The ALRC has commented that the legislation which specifically and, in terms, deals with computer records reveals an anxiety about the accuracy of evidence produced from computers and a suspicion of computers. The legislation sets out conditions of admissibility which are concerned with the reliability and accuracy of the equipment and systems. A combination of the two approaches is to be found in the American approach to business records which treats computer based evidence as coming within the business records exceptions to the hearsay rule. Under the approach evidence is required that:

(a) The record was made in the regular course of business, at or near the time of the act, condition or event which it evidences;
(b) A qualified witness must testify to the identify and mode of preparation of the record;
(c) The sources of information and method and time of preparation of the record must be such as to indicate its trustworthiness.

Satisfying these requirements, however, can involve a vast amount of extremely difficult technical evidence.

23. While it is true that errors, accidental and deliberate, occur and can occur at the very stage of the record keeping process, the fact is that they tend to be the exception rather than the rule, they tend to occur at the stage when the information is fed into the system, and normally, there are techniques available which can be, and are, employed at each stage of the record keeping process to eliminate error. The approach taken in the Australian Federal and New South Wales business records legislation, already in force, is to leave the party against whom the evidence is led to challenge the evidence. There are also provisions enabling the court to order production of related documents and further printouts. This is the only practical approach to receiving this sort of evidence. To require extensive proof, on each occasion, of the reliability of the computer records would be to place a costly burden on the party seeking to tender the evidence, to give the opposing party a substantial tactical weapon, and to add reasonably and unprofitably to the work of the courts. In many cases there will be no bona fide issue as to the accuracy of the record. It is more efficient to leave the party against whom the evidence is led to raise any queries and make any challenges it may have.

24. It is necessary, however, to ensure that the other party is protected. Two of the more important proposals for the protection of the party against whom the hearsay evidence may be led are the modernisation and extension of the procedures of discovery and a notice and counter-notice procedure.

25. As to public documents the trend in legislation specifically dealing with this category of record is to enable certified, sealed, or signed copies to be tendered in evidence and to relieve the party tendering the document of the necessity of proving the authenticity of the certificate, seal or signature or the authority of the person who purported to certify, seal or sign the documents. The ALRC has

proposed that this approach should be taken and applied generally to a broad category of public documents. There should be a residual power in the court, however, to order persons involved in the record-keeping to be called to give evidence. This safeguard becomes necessary if a more general approach to public documents is to be taken.

Alternative Approaches

26. Following the publication of the above law reform proposals and the consideration of some of the submissions received upon them and upon an earlier general suggestions for reform of the hearsay rule, the ALRC has more recently published a research paper which includes proposals suggesting much more radical reforms of the hearsay rule and the secondary evidence rule. These would have clear implications or the admission of computer evidence and, indeed, technological evidence generally. In the research paper Hearsay Reform - Which Approach?[14] an attempt is made to spell out the three possible approaches to hearsay evidence law reform. They are applicable in the other relevant areas of the common law:

(i) Rules Approach: The first offers fairly detailed rules, with minimum judicial discretion, in order to maximise the certainty of the admissibility of the evidence, including technological evidence, so long as procedural and other pre-conditions and other requirements are met. This, basically is the approach taken by current Australian evidence law. It is the approach reflected in the specific ALRC reforms proposed above.

(ii) Judicial Discretion Approach: The second approach, borrowing from a residual hearsay discretion contained in the United States Federal Evidence Rules[15], seeks to substitute for the highly specific hearsay evidence rule and exceptions a much more general test. The "price" for a radical simplification of the numerous technical requirements to overcome the hearsay rule is a considerable increase in the judicial discretion to admit or reject hearsay evidence according to the concurrences of the particular evidence in question. Simplification of the law is proposed. But this is to be achieved by a greatly enhanced discretion. The discretion would be exercised by reference to four tests, generally stated:

(a) Reliability: That the evidence was likely to reliable.

(b) Convenience: That the evidence was more probative on the point for which it was offered than any other evidence which the proponent could procure through reasonable efforts.

(c) Justice: That, balancing the arguments for admission and rejection of the evidence, it would be fair and in the interests of justice to receive the evidence.

(d) Countervailing Reasons: That there are no countervailing reason of law or public policy that required the rejection of the evidence, such as the rules that require or permit courts to reject even reliable and probative evidence obtained: unfairly or unlawfully; as a result of threats or violence; or in circumstances that would make its admission unsafe.

(iii) Abolish the Exclusionary Rules: The third proposal, also set out in the recent discussion of the hearsay rule, suggests a still more radical approach, namely abolition of the hearsay rule and substitution of a broader power in the judiciary to exclude relevant evidence by reference to such considerations as:

(a) whether the probative value of the material could be so slight that reception would not be justified by the time that would be wasted;

(b) whether it would be procedurally fair to an opponent to admit the evidence particularly without notice;

(c) whether difficulties with the evidence could be adjusted by reference to the weight given to it, rather than by rejecting its admission entirely;

(d) whether differing rules should apply in the criminal trial, having regard to the reasons of public policy that limit hearsay in a technological and other evidence not strictly proved, whether liberty and reputation are at stake.

The ALRC is still evaluating submissions that are being received on these research papers. To date they heavily favour the first type of approach. The rapid developments in information technology suggests the need for much simpler rules of evidence that will ensure that the law can adapt to changing technology. Such technology continues to present itself in great complexity and variety. Furthermore, it is often argued that the law of evidence has become unduly complicated and is not fully understood by witnesses and other laymen, including scientists and technologists, whom the courts also serve. On the other hand, judges and lawyers, brought up in the traditions of our trial system and aware of the public policies which the hearsay rule and other laws of evidence serve, tend to resist radical reforms. They point to the need for predictability in the trial process and procedural fairness to the parties confronted by evidence, including technological evidence, which cannot readily be tested in court and quickly met by contrary evidence in the trial setting.

Conclusions

27. This paper has not purported to present a complete review of the subject of the impact of new information technology on the Australian law of evidence. It has not dealt, for example, with the rapid development of Australian legislation designed to facilitate the admission of evidence produced by breathalysers and other like devices for breath, blood and body sample analysis.[16] It has not dealt with the issues of the admission of radar and amphometer evidence, designed to help police and the courts in the substitution of scientific evidence for impressionistic oral evidence. It has not dealt with an important recent development in Australia, namely proposed legislation on the use of sound recordings of confessions to police. The Criminal Investigation Bill 1981 presently before the Australian Parliament includes provisions based on an earlier ALRC Report[17] for the acceptance into evidence of sound recordings of confessions and admissions made to members of the Australian Federal Police.[18]

28. However, enough has been said to illustrate the rapid penetration of Australian society by remarkable advances of new information technology, particularly computers linked by telecommunications. In a country of Australia's size, these developments are especially beneficial. They are worldwide developments. They have implications, some of which have been mentioned, for the law beyond domestic jurisdiction.

29. In Australia, legislative changes have already been enacted in order to address these problems and to modify the laws of evidence. However, the illustrations in this paper indicate the disadvantage of adjusting the laws of evidence to particular technologies and the complexity of the law that can emerge as a result.

Footnotes

1. Committee of Enquiry into Technological Change in Australia (Myers Committee) 1980, Vol.1, 25.

2. A. Moyes, "The Impact on Society of Information Technology" in Information Technology Council Technological Change - Impact of Information Technology, 1980, 83.

3. D.G. Beanland, "The New Technology" in ibid, 3-4. See generally M.D. Kirby, "The Computer, the Individual and the Law" (1981) 55 Australian Law Journal 443.

4. R. David and JEC Brierley, Major Legal Systems in the World Today, (2nd ed.), 1978, 328.

5. [1965] AC 1001.

6. Judiciary Act 1903 (Cwlth) ss.79, 80.

7. Australian Law Reform Commission, Evidence Research Paper No.1, Comparison of Evidence Legislation in Federal Courts and Courts of Territories, 1981 (A. Sowden). For a general review of the topic of this Paper see T.H. Smith, "Legality - Information Technology and the Laws of Evidence" (1981) 1 Journal of Law and Information Science 89.

8. Australian Law Reform Commission, Annual Report 1981 (ALRC 19), 67.

9. Australian Law Reform Commission, Discussion Paper No.16 Reform of Evidence Law 1980 (ALRC D.P. 16).

10. Ibid., 10.

11. New South Wales Law Reform Commission, Report on Evidence, Business Records LRC 17, 1973.

12. Evidence Act 1898 (N.S.W.) ss.14A-14C, 14CD-CV, 43C; Evidence Act 1958 (Vic.), ss.55-56; Evidence Act 1977-1979 (Qld), ss.92-103; Evidence Act 1929-1979 (S.A.), ss.59a-59c, 45-45b, 34c-34d; Evidence Act 1906-1979 (W.A.), ss.79B-69E; Evidence Act 1910 (Tas.), ss.40A, 81A-81Q; Evidence Act 1980 (N.T.), ss.42B; Evidence Ordinance 1971 (A.C.T.), ss.28-45; Evidence Act 1905 (Cwlth), Pt.IIIA.

13. Cf. The Queen v Weatherall (1981) 27 SASR 238.

14. Australian Law Reform Commission, Evidence Research Paper No.9, Hearsay Law Reform - Which Approach?, 1980.

15. United States Federal Rules of Evidence, Rule 803 (24).

16. Australian Law Reform Commission, Alcohol, Drugs and Driving, (ALRC 4) 1976, 27-8. Each State of Australia has statutory provisions to facilitate the admission of such evidence by certificates. The differing approaches of the legislation, and the recommendations of the ALRC in the context of the Australian Capital Territory are set out in ALRC 4.

17. Australian Law reform Commission, Criminal Investigation (ALRC 2), Interim.

18. Criminal Investigation Bill 1981 (Cwlth), ("admissibility of oral confessions"). For comment on the admissibility of tape recorded evidence see the note on Cornwell v Papfield, unreported decision of the Supreme Court of New South Wales, 24 July 1981 in D. Robinson, Case Note, (1982) I Journal of Law and Information Science 175.