## **Australian Research Team Report**

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## Introduction

Australia's archival system reflects the country's federal structure; each state and territory, and the Commonwealth at the national level, has legal and administrative arrangements in place for the management and preservation of records. Legislative reform in recent years has resulted in new laws that reflect changing directions in the role of archival authorities, establishing them as standard-setting bodies concerned with the totality of record activity—with both the long term preservation of archival records and the accountable management of public records in the interests of good governance.<sup>1</sup>

The Australian records and archives industry and its network of national and state archival institutions have developed cooperative arrangements that ensure consistency of record-keeping practice. Vigorous debate on both theory and practice has taken place. The records continuum model has been adopted as the framework in which diverse developments have emerged—from the Australian Records Management Standard, which provided the basis of the International Standard, to record-keeping metadata standards.

Legislation, policy, standards, codes of practice, and guidelines are some of the tools that archival authorities use to establish good record-keeping principles and practice. Usually standards are issued nationally or by a lead state, supported by guidelines and codes of best practice. Other jurisdictions then adopt and adapt these benchmark standards and codes of practice. For example, the Australian Records Management Standard was issued as a voluntary national standard, but was mandated by most archival authorities in their jurisdictions. It has also been adopted by private sector organizations, particularly those seeking accreditation under the quality suite of standards (ISO 9000 suite). The development of legislation, standards, codes of practice, and guidelines takes into account international standards and benchmark practice, and the outcomes of research projects nationally and internationally. For example, the Australian Records Management Standard and related standards issued by national and state archival authorities have drawn on the findings of both the Pittsburgh Project, especially the "Functional Requirements for Electronic Records," and the first UBC Project; while the record-keeping metadata standards issued by the National Archives of Australia and the State Records Authority of New South Wales were developed within the framework provided by the Monash Recordkeeping Metadata Schema.<sup>2</sup> This schema in turn drew on analyses of existing national

<sup>&</sup>lt;sup>1</sup> No distinction is made between archives and records in most Australian archival acts. Since 1997 the title of all acts adopts the term record rather than archives. The change reflects the archival authority's role over the totality of records through record-keeping standards. Victoria dispensed with the legislative distinction between records and archives as early as 1973 in the Public Records Act. The Commonwealth Archives Act 1983; State Records Act 1997, South Australia; and State Records Act 2000, Western Australia do not have the distinction. However, the New South Wales Act (1960) established three categories of record (public records, public archives, and state archives). In the State Records Act (1998), the distinction between "State record" and "State archive" is retained, the latter term now defined to mean records (regardless of location) over which the new State Records Authority (SRA) has assumed control. From Chris Hurley, "From Dust Bins to Disk-Drives and Now to Dispersal: the State Records Act (New South Wales) 1998," Archives and Manuscripts 26, 2 (November 1998), fn. 1, 407.

See also Ted Ling, "Setting Standards: Archival Legislation and Recordkeeping Principles," in *Convergence, Joint National Conference, Conference Proceedings*, the Joint National Conference of the Australian Society of Archivists and the Records Management Association of Australia, 2–5 September 2001, Hobart, pp. 93–99.

Apart from the Australian Capital Territory and the Northern Territory, all Australian administrations have records legislation or bills. Both the Australian Capital Territory and the Northern Territory have exposure drafts and a bill respectively; Queensland has a Public Records Bill 1999.

<sup>&</sup>lt;sup>2</sup> Australian Recordkeeping Metadata Schema (RKMS), Release Version 1.0, 31 May 2000 (available at <http://www.sims.monash.edu.au/rcrg/research/spirt/index.html>). National Archives of Australia developed

and international archival descriptive standards, and the metadata requirements explicit or implicit in other records and archives standards and statements of best practice.

The outcomes of the Authenticity, Preservation, and Appraisal Task Forces of InterPARES will have an impact in Australia as existing legislation standards, policies, codes of best practice, and guidelines are revised and new tools developed. Processes for taking into account such research outcomes are already a routine part of such revisions and developments in Australia.

Many recent developments in Australia in the areas just described already incorporate the kinds of principles and criteria articulated in the "Strategy Task Force Report." In addition, more generic Australian legislation supports the Strategy Task Force principles, including evidence acts, electronic transaction legislation, and, to a lesser extent, freedom-of-information acts and copyright acts. Privacy legislation on the whole is less supportive, in particular as personal data that identify the parties to a transaction—which is essential to the reliability of the record—are required to be de-identified once their "immediate" use has ceased.

Below are comments from an Australian legislative perspective, together with some policy references, on the records preservation policies, strategies, and standards recommended by the "Strategy Task Force Report."

Recordkeeping Metadata Standard for Commonwealth Agencies Version 1.0 (NAA, May 1999), in parallel with and within framework provided by it; NAA standard available at: <a href="http://www.naa.gov.au/recordkeeping/control/rkms/summary.html">http://www.naa.gov.au/recordkeeping/control/rkms/summary.html</a>.

Industry Partner, State Records Authority of NSW, developed exposure draft of *NSW Recordkeeping Metadata Standard*, based on RKMS; NSW standard available at: <a href="http://www.records.nsw.gov.au/publicsector/erk/metadata/rkmetadata.htm">http://www.records.nsw.gov.au/publicsector/erk/metadata/rkmetadata.htm</a>>.

| Principle                                                                                                                                                                             | Australian Comments                                                                                                                                                                                                                                                                                                                                                       |
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| address records specifically rather than digital<br>objects generally; that is, it should address<br>documents made or received and set aside in<br>the course of practical activity. | Recent Australian archival legislation and<br>standards support a provenancial definition of a<br>record; see for example the <i>ACT Records Bill</i><br>and the AS4390 definition: "Records created<br>or received and maintained by an organisation<br>or person in the transaction of business or the<br>conduct of affairs and kept as evidence of such<br>activity." |
|                                                                                                                                                                                       | Older legislation is more object-based, for<br>example the Commonwealth <i>Archives Act</i><br><i>1983</i> –Sect 3. <sup>i</sup> National Archives policy specifies<br>capture of electronic information that is used for<br>practical activity, even if it does not have all the<br>criteria as identified in the Authenticity Task<br>Force (ATF) report. <sup>ii</sup> |
|                                                                                                                                                                                       | The Australian <i>Evidence Act 1995,</i> Dictionary<br>Section 3, Part 1 defines a document as "any<br>record of information." This is far less specific<br>than records legislation.                                                                                                                                                                                     |
| focus on authentic electronic records.                                                                                                                                                | All agencies as defined in modern Australian<br>archival legislation must make and keep "full<br>and accurate records," regardless of who has<br>custody. The standard on "full and accurate<br>records" was first developed by SRA NSW (see<br>NSW <i>Records Act 1998</i> Sect 12), and is based<br>on the Pittsburgh Requirements.                                     |
|                                                                                                                                                                                       | Some classes of records have higher degrees<br>of authenticity requirements than others, e.g.,<br>see <i>Electronic Transactions Act 1999</i> Sect 4—<br>exceptions for records of high risk of fraud,<br>including visa and citizenship records. <sup>iii</sup>                                                                                                          |
|                                                                                                                                                                                       | The <i>Electronic Transactions Act,</i> Sect 11, (3) relates to integrity of information. It states that the integrity of information contained in a document is maintained if, and only if, the information has remained complete and unaltered, apart from:                                                                                                             |
|                                                                                                                                                                                       | <ul> <li>a) the addition of any endorsement; or</li> <li>b) any immaterial change; which arises in<br/>the normal course of communication,<br/>storage or display.</li> </ul>                                                                                                                                                                                             |
|                                                                                                                                                                                       | The Copyright Amendment (Digital Agenda) Act 2000, Sect 16B on removal or alteration of electronic rights management information supports the integrity of a work, i.e., that it not be altered; and the author should be linked permanently to it.                                                                                                                       |

| recognize and provide for the fact that<br>authenticity is most at risk when records are<br>transmitted across space (i.e., when sent<br>between persons, systems, or applications) or<br>time (i.e., either when they are stored offline, or<br>when the hardware or software used to<br>process, communicate, or maintain them is<br>upgraded or replaced). | Provisions that address this principle already<br>exist in archival authorities standards and<br>guidelines, e.g., see the National Archives of<br>Australia "Preservation and migration of<br>electronic records"<br><http: er="" recordkeeping="" sum<br="" www.naa.gov.au="">mary.html#information&gt;.</http:>                                                                                                                                                                                                                                                     |
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| recognize that preservation of authentic<br>electronic records is a continuous process that<br>begins with the process of records creation and<br>whose purpose is to transmit authentic records<br>across time and space.                                                                                                                                    | This principle is embedded in Australian records continuum theory and practice. Recent Australian archival legislation (see fn. 1), standards and guidelines, developed within the records continuum framework, take a holistic approach to the regulation and management of records. See, e.g., the <i>DIRKS Manual</i> <a href="http://www.naa.gov.au/recordkeeping/dirks/summary.html">http://www.naa.gov.au/recordkeeping/dirks/summary.html</a> . Australian Standard AS 4390–1996, Records Management, and International Standard ISO 15489, Records Management. |
| be based on the concept of trust in record<br>keeping and record preservation and<br>specifically on the concepts of a trusted record-<br>keeping system and the role of the preserver as<br>a trusted custodian.                                                                                                                                             | The Australian Standard addresses this<br>principle in specifying record-keeping<br>responsibilities and accountabilities. This<br>principle has also been incorporated in recent<br>law, e.g., NSW 1998 Sect 10; WA Act 2000,<br>Sect 10 and Sect 29 (which establishes the<br>archival authority as auditor with powers to<br>enter premises, or an independent body).                                                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                               | The National Archives policy on "The custody of archival electronic records" also supports this principle. <sup>iv</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| be predicated on the understanding that it is not<br>possible to preserve an electronic record as a<br>stored physical object: it is only possible to<br>preserve the ability to reproduce the record.                                                                                                                                                        | The National Archives policy on "The custody of<br>archival electronic records" includes<br>requirements based on this principle—e.g.,<br>relating to maintaining records and their<br>associated metadata in an accessible form<br>through successive migrations.                                                                                                                                                                                                                                                                                                     |
| recognize that the physical and intellectual<br>components of an electronic record do not<br>necessarily coincide and that the concept of<br>digital component is distinct from the concept of<br>element of documentary form.                                                                                                                                | See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| specify the requirements a copy of a record<br>should satisfy to be considered equivalent to an<br>original.                                                                                                                                                                                                   | The Commonwealth <i>Evidence Act</i> Sect 47(2) allows for "a document that is not an exact copy of the document in question but that is identical to the document in question in all relevant respects."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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|                                                                                                                                                                                                                                                                                                                | The NSW <i>Electronic Transactions Act</i> Sect 11 states: "If a person is required to retain a document that is in the form of paper that requirement is taken to have been met if the person retains an electronic form of the document."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                | The Commonwealth <i>Electronic Transactions</i><br><i>Act 1999</i> Sect 2 says: "If, under a law of the<br>Commonwealth, a person is permitted to<br>produce a document that is in the form of<br>paper, an article or other material, then, instead<br>of producing the document in that form, the<br>person may produce, by means of an electronic<br>communication, an electronic form of the<br>document."                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| integrate records appraisal in the continuous process of preservation.                                                                                                                                                                                                                                         | This principle is also embedded in Australian records continuum theory and practice, e.g., the appraisal procedure in <i>DIRKS</i> and the Monash Recordkeeping Metadata Schema.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| explicitly state that the entire process of<br>preservation must be thoroughly documented<br>as a primary means for protecting and<br>assessing authenticity over the long term.                                                                                                                               | This principle is supported by the National Archives policy on preservation (see above).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| explicitly recognize that the traditional principle<br>that all records relied upon in the usual and<br>ordinary course of business can be presumed<br>to be authentic needs to be supplemented in<br>the case of electronic records by evidence that<br>the records have not been inappropriately<br>altered. | Legal advice on the <i>Commonwealth Evidence</i><br><i>Act</i> 1995 states: 'While the 'original document<br>rule' has been abolished, it is still necessary for<br>parties to authenticate evidence of the contents<br>of documents given by one of these alternate<br>ways. For example, in relation to a document in<br>writing that is signed, it remains necessary to<br>lead evidence (if the point is contested) that the<br>signature appearing on the document is the<br>signature of the person who has purported to<br>sign it. In the case of computer records, it is<br>necessary to give evidence that the computer<br>output is what it purports to be." For more on<br>the <i>Evidence Act</i> provisions, see <i>Records in</i><br><i>Evidence</i><br><http: overvie<br="" recordkeeping="" www.naa.gov.au="">w/evidence/contents_page.html&gt;.</http:> |

| recognize that the preserver is concerned with<br>both the assessment and the maintenance of<br>the authenticity of electronic records. The<br>assessment of the authenticity of electronic<br>records takes place before records are<br>transferred to the custody of the preserver as<br>part of the process of appraisal, while the<br>maintenance of the authenticity of copies of<br>electronic records takes place once they have<br>been transferred to the preserver's custody as<br>part of the process of long-term preservation. | In Australia, this would be regarded as an<br>implementation strategy issue rather than a<br>principle.                                                                                                                                                                                                                                                                             |
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| Draw a clear distinction between the preservation of the authenticity of records and the authentication of a record.                                                                                                                                                                                                                                                                                                                                                                                                                        | This is not enunciated in Australia, in these<br>terms. However recordkeeping metadata<br>standards require preservation of "in time"<br>person metadata, as well as other metadata to<br>indicate that any changes have taken place.                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | In Australia the current authentication regulatory framework is inadequate because it rejected initial recommendations for a statutorily based central root registration authority. <sup>v</sup> See the National Office for the Information Economy, Establishment of a National Authentication Authority, A Discussion Paper, 19 August 1998 <http: www.noie.gov.au=""></http:> . |

<sup>&</sup>lt;sup>1</sup> S3. Interpretation, "record means a document (including any written or printed material) or object (including a sound recording, coded storage device, magnetic tape or disc, microform, photograph, film, map, plan or model or a painting or other pictorial or graphic work) that is, or has been, kept by reason of any information or matter that it contains or can be obtained from it or by reason of its connection with any event, person, circumstance or thing."

<sup>&</sup>lt;sup>ii</sup> "The digital data that make up these email messages, database systems, websites and other information systems have significance beyond the immediate business needs of the Commonwealth agency that creates and maintains them. As this data is created, used, and communicated in the course of an agency's business, it also provides useful evidence–a record–of that agency's past activities." <http://www.naa.gov.au/recordkeeping/er/summary.html#information>

<sup>&</sup>lt;sup>iii</sup> S4 "Certain other laws not affected. This section does not affect the operation of any other law of the Commonwealth that makes provision for or in relation to requiring or permitting electronic forms of documents to be produced, in accordance with particular information technology requirements:

<sup>(</sup>a)on a particular kind of data storage device; or

<sup>(</sup>b)by means of a particular kind of electronic communication.

Exemption—migration and citizenship documents."

<sup>&</sup>lt;sup>iv</sup> In 2000, National Archives of Australia began to develop the technological infrastructure to accept archival electronic records into custody and to provide for their ongoing access over time. NAA acts at this point as the preserver. Agencies act as creators and preservers as they remain responsible for managing electronic records of archival value until they are transferred to the archives custody. This involves maintaining the records and their associated metadata in an accessible form through successive migrations of hardware and software. See <a href="http://www.naa.gov.au/recordkeeping/er/summary.html#information">http://www.naa.gov.au/recordkeeping/er/summary.html#information</a>.

<sup>&</sup>lt;sup>v</sup> The role of root certification authority is to support the certification of subordinate intermediate certification authorities and to hold root cryptographic information. The authority of a digital signature depends on the existence of a public key infrastructure (PKI), which is a hierarchical organization of certification authorities

invested with the competence to authenticate the ownership and characteristics of a public key. The effectiveness of such infrastructure depends on the continuity of the chain of trust guaranteed by those certification authorities. As private sector organizations take on the role of certification authorities, there are currently no mechanisms in place to guarantee the continuity of the chain of trust in the event that the organization ceases to exist.