# Implementation of Encoded Archival Description at the Australian War Memorial: A Case Study

Carmel McInerny

Carmel McInerny is a senior curator in the Research Centre at the Australian War Memorial. She is responsible for the collections of published books, serials, maps and ephemera and the digitisation of the archival and private records collections. She has wide experience in implementing electronic documentation systems in libraries and museums.

Over the last three years the Australian War Memorial has been creating Encoded Archival Description (EAD) finding aids for its private records and ephemera collections. There has been a steady output of coded documents created for both newly processed collections and for older collections with existing finding aids. Successful implementation can be attributed to the development of a focused business case, the relatively small size of the collection, available resources in terms of knowledgeable and enthusiastic staff and a compatible technical infrastructure. Lessons learnt along the way include the desirability of securing support from all technical staff, a willingness to experiment, knowing that perfection may not be achieved immediately, and a leap of faith in the future of presentation technology to capitalise on the encoding.

## Legacy practice

Before EAD, finding aids describing the collections existed either in Microsoft Word or in typewritten paper format. They were available only on site in the War Memorial's Reading Room. A small number, namely the guides to papers of the writers of the official war histories, were published for wider distribution. There was little standardisation of structure and content.

In 1999 a business planning initiative was identified in the Research Centre to:

- standardise the structure of the finding aids;
- employ electronic formats suitable for loading and searching on the Memorial's website (www.awm.gov.au);
- devise an input format that was easy and attractive for curatorial staff to use;
- investigate practices in the wider archives and manuscript collecting network for compatibility with in-house procedures; and
- meet targets in producing new finding aids and reviewing existing ones (especially for useability and accuracy).

At the time, collection-level entries were available through the Memorial's collection management system. However the content of collections at the item level was hidden from all but those few who knew which collections to search (using printed guides in the Reading Room).

## Why EAD was introduced

Against the parameters of the business initiative, EAD offered a number of solutions:

- It was an international standard specifically for archival finding aids.
- Based on Extensible Markup Language (XML), it offered excellent searching capabilities.
- It had the ability to deal with complex document structures. Users would have a way of navigating through personal papers and ephemera collections' hierarchy of organisation and arrangement.
- We could mark up directly in EAD and convert to Hypertext Markup Language (HTML) on the fly for non-XML capable browsers.
- The logical sequence of the Document Type Definition (DTD) met our requirements for providing information in a manner suitable for online users. For example administrative matters, such as access conditions, copyright, contact details and copying facilities would always appear in the same place in a finding aid and contain consistent (and easily updated) information through the use of entities.
- Information elements were clearly identified and could be made mandatory, ie types of information were grouped together rather than being scattered throughout the guide.

- The elements were input in a logical order, from general to specific:
  - 1. identification of the repository and the collection;
  - 2. information about the collection as a whole;
  - 3. administrative information about the collection; and then
  - 4. description of the particular materials comprising the collection.
- There was exciting potential for different stylesheets to be employed for different display and printing purposes (eg collection systems, online exhibitions, collaborative projects) all based on the same data.

#### Infrastructure

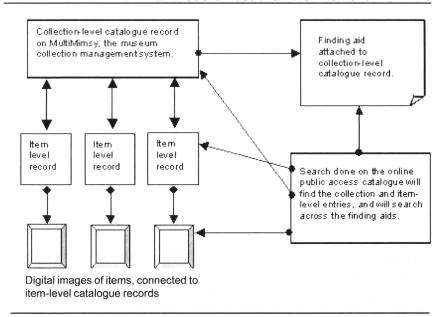
Operating as a museum, archive and library, the Memorial has three systems managing the collections:

- Government archives or official records are arranged and described using the National Archives of Australia's database, RecordSearch. Under the Australian Archives Act 1983 operational records from times of war are the responsibility of the Memorial.
- Books, serials, maps and sheet music are catalogued and managed on a library system using bibliographic standards such as Machine-Readable Cataloguing (MARC) coding.
- Museum objects, private records, photographs, art and ephemera are managed and described using a museum collection management system (CMS), *MultiMimsy*.

In addition a number of Oracle databases provide access to digitised collections mainly from the official records area, eg nominal rolls and monthly war diaries.

The immediate challenge for the Memorial is to move towards integration of these systems for online access through our website. EAD is being used to provide a structure to the finding aids for our private records and ephemera collections where cataloguing each item is not viable.

The diagram on the following page shows how we attach these finding aids to the collection-level records in the CMS. Note that where digital images exist for individual items in a larger collection, the items are catalogued on the CMS, and are linked to their parent collection-level entry. This is done using a feature of MultiMimsy that creates a hierarchical relationship between objects. The ability to search across finding aids is provided by the collection management system online public access catalogue (OPAC) which trawls both the collection-level



Use of a collection management system (MultiMimsy) to document collection-level records and their finding aids at the Australian War Memorial

records and the attached finding aids. On the Memorial's Intranet is a browsable list of all the EAD finding aids. A future development is to make this catalogue of finding aids also available on the Internet for clients not using specific search terms.

#### **EAD** tools

Amongst the first decisions we faced in implementation were the type of software to use to create documents and which specific elements and attributes to employ in encoding. Then we considered how to configure the software for maximum efficiency and how to create print and web-ready versions of the finding aids.

We use Soft Quad XMetal version 2.0 (www.softquad.com). When purchasing the software from a vendor in Sydney we also obtained a 12-month maintenance contract. This software support was particularly important in our situation as the implementation was taking place in a curatorial area rather than the Information Technology section of the Memorial.

Other essential tools are the EAD Application Guidelines, the EAD Tag Library and the EAD Cookbook. These are available through the EAD official website

(www.lcweb.loc.gov/ead), which also supplies all sorts of practical information. We strongly recommend subscription to the EAD list (listserv.loc.gov/listarch/ead.html) for hints and support from other EAD users. The EAD Round Table of the Society of American Archivists website (jefferson.village.virginia.edu/ead) has some very useful help pages including summaries of how many others have approached EAD.

#### What is entered

We use EAD in perhaps its most rudimentary form. We hang our finding aids on the skeleton that EAD provides. As resources permit we may bulk out that coding structure, eg by coding dates, names of people, organisations and places. In the meantime we have managed to code the data hierarchy, order the elements and produce guides compatible with the EAD philosophy.

We did not do this work in collaboration with other institutions, thereby allowing some freedom in decisions made. However we would like to investigate projects in cooperation with other groups as we review decisions made and devise future strategies. We found it especially useful to copy the coding decisions made by others (see under EAD tools above) during our first efforts.

A useful step for us in implementing EAD was to review our existing finding aids by reformatting the data first in Microsoft Word. This is especially important in training new staff. They can first gain an understanding of the order of the elements and the hierarchy in the description. These legacy finding aids are re-authored to bring them in line with the new EAD template and re-keyed or cut and pasted into the template.

The next step is the coding in EAD. We found as staff became comfortable with the process, they would soon begin to input directly into EAD. Even for those familiar with coding such as MARC, frustration levels were minimised if the intellectual content was sorted out first. All new finding aids are authored directly into XMetal and validated against the EAD DTD each time they are saved.

Possibly the most important aid to training is the existence of a well-thought-out template for inputting the data. Development time and effort is essential in devising a template suited to agreed needs, including those of input staff. Obviously those who use EAD only every few months will benefit greatly by more field help text than those coding more frequently. Our templates were created using a cascading stylesheet (CSS) to give a basic encoding structure which guides staff in the markup of the finding aids using XMetal.

Although well-trained staff and a useable template are important, we found initial success is also dependent on the nature of the collection itself, especially its content, useability and accuracy.

We realise we were probably fortunate in that we did not previously have extensive finding aids for our ephemera collections. Funding became available to rehouse and describe them in depth so we were able to use EAD from the first stages. These are generally formed or artificial collections based on format with unknown or various provenance.

Some renumbering was involved but EAD easily accommodates former number schemes (and most importantly searching across these numbers). In the case of the greeting card collection a guide reflecting the hierarchy of the Australian military was possible. Now we are in a position to process potential donations quickly, as we know exactly our holdings by referring to the EAD finding aid and are also able to insert new additions as required. I should note that provenance for such ephemera collections is cross-referenced on the collection management system. Original order is not a guiding principle with this format.

Our collections of personal papers have been described to varying standards over the last eighty or so years since the Memorial commenced collecting. Therefore retrospective conversion of these to EAD has been more problematical than creating the new ephemera lists. We have grouped existing finding aids according to perceived level of conversion difficulty but note that other factors such as the importance of the collection content and digitisation will determine which guides are coded when and by whom.

### **Future opportunities**

An integral part of the implementation of EAD in the Memorial is planning how we can present our encoded finding aids. To date we have focused on their compilation, with access through the Intranet for staff and researchers onsite. Once they are available to the public on the Internet, we will be in a position to evaluate the complete implementation process. Certainly staff involved in answering reference enquiries, donation assessment and exhibition preparation have all provided positive feedback on the ease of use and update of the guides.

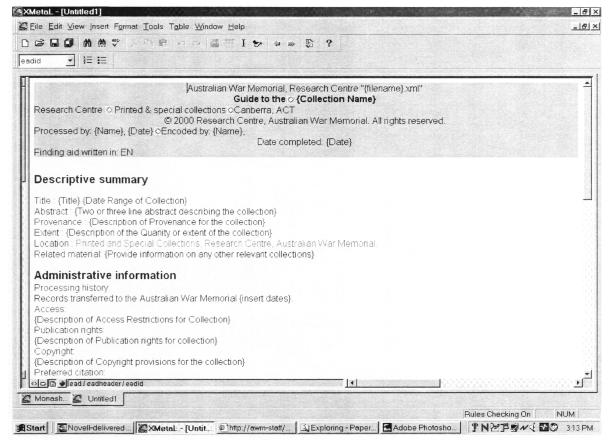
Beyond the implementation phase, we plan to assess future opportunities for EAD in the Memorial. Following are some of our thoughts:

• We will consider the potential of stylesheets to provide a more userintuitive guide - re-purposing for different audiences - no longer small communities of highly skilled scholars but rather a multiplicity of audiences online.

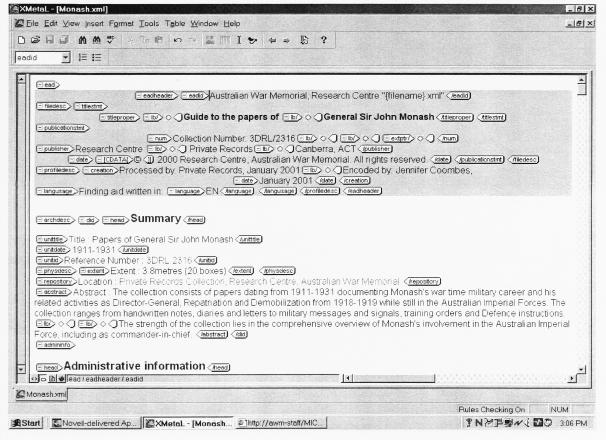
- In the same way that we contribute collection level entries to union lists such as the National Library's RAAM (www.nla.gov.au/raam), we trust that by employing EAD, we are in a position to deliver the required information, through a simple transformation process, to an Australian or international repository of finding aids.
- Use of EAD in our digitisation projects: currently only one complete private records collection with an EAD finding aid is in digital format. A static Word version was used to produce bar-coded targets. These act as place markers to introduce the collection on the preservation microfilm and the digital access version. With future digitisation of private records and ephemera collections we will be in a better position to use the full functionality of the accompanying EAD finding aid.
- We will investigate EAC (Encoded Archival Context) especially for military units and personal names. The Memorial's collection management system provides a mechanism for linking information on creators and subjects with catalogue records and images of the objects and also thesaurus search terms such as place, time period and relevant publications. EAC may provide a useful structure for this data.
- Production of themed lists based on EAD coded content, eg Anzac Day commemoration souvenirs, postcards, greeting cards, invitations, concert programs, newspaper cuttings, etc.

#### Conclusion

The Australian War Memorial, although primarily a museum, has been successful in taking advantage of EAD to structure finding aids for its private records and ephemera collections. Thus far some twenty finding aids have been produced, representing approximately 22% of the total. While this is a relatively small number in terms of the material processed in this manner by some overseas institutions, it is assessed as being successful against the aims of our original business initiative. There are still a small number of technical issues specific to our infrastructure but these are capable of resolution. We will certainly continue with implementation, always mindful of the ultimate aim of making our collections available to a wider, better informed, more self-sufficient user community.



1. This is an example of the template developed for inputting ephemera collections into EAD



2. This is the first section of the Sir John Monash finding aid shown with EAD markup

