



Recordkeeping Guideline

Australian Government Implementation Manual: AGLS Metadata

Version 2.0

May 2006

| © Commonwealth of Australia 2006 |
|---|
| ISBN 1 920807 37 3 |
| This work is copyright. It may be adapted or reproduced for personal, in-house or non-commercial use without formal permission, subject to appropriate citation. The work may not be used for other purposes – apart from any use as permitted under the <i>Copyright Act 1968</i> – without prior written permission from the National Archives of Australia. Requests and inquiries concerning reproduction and rights should be sent to recordkeeping@naa.gov.au or the Publications Manager, National Archives of Australia, PO Box 7425, Canberra Business Centre ACT 2610, Australia. |
| This publication should be cited as: National Archives of Australia, <i>Australian Government Implementation Manual: AGLS Metadata</i> , 2006, published at www.naa.gov.au/recordkeeping/gov_online/agls/cim/cim_manual.html |

CONTENTS

| EXE | CUTIV | E SUMMARY | 5 |
|-----|-------|---|----|
| | Chai | nges from previous versions | 5 |
| | Struc | cture of the manual | 6 |
| 1. | INT | RODUCTION | 7 |
| | 1.1 | What is AGLS metadata? | 7 |
| | 1.2 | Why use AGLS metadata? | 7 |
| | 1.3 | AGLS and the Government Online Strategy | 7 |
| | 1.4 | AGLS and the portals framework | 8 |
| | 1.5 | Describing government services with AGLS | 8 |
| | 1.6 | Aims and audience | 8 |
| | 1.7 | AGLS checklist | 9 |
| 2. | BUS | INESS ISSUES RAISED BY AGLS IMPLEMENTATION | 11 |
| | 2.1 | AGLS and business processes | 11 |
| | 2.2 | Allocating organisational roles and responsibilities | 11 |
| | 2.3 | Choosing a metadata authoring tool | 13 |
| | 2.4 | Metadata storage and access | 13 |
| | 2.5 | AGLS and agency recordkeeping systems | 14 |
| | 2.6 | Keeping AGLS metadata up to date | 15 |
| 3. | AGI | S IMPLEMENTATION REQUIREMENTS | 16 |
| | 3.1 | Which AGLS elements to use | 16 |
| | | Table 1: Australian Government obligation status of the 19 AGLS metadata elements | 17 |
| | 3.2 | Which resources to describe | 17 |
| | 3.3 | Syntax for expressing AGLS metadata | 18 |
| | 3.4 | Analysing resources | 19 |
| 4. | AGI | LS ELEMENT DESCRIPTIONS AND USAGE EXAMPLES | 22 |
| | 4.1 | Creator | 23 |
| | 4.2 | Date | 24 |
| | 4.3 | Description | 25 |
| | 4.4 | Title | 26 |
| | 4.5 | Туре | 27 |
| | 4.6 | Function | 28 |
| | 4.7 | Subject | 30 |
| | 4.8 | Availability | 31 |
| | 4.9 | Identifier | 32 |

| | 4.10 | Publisher | 33 |
|----|------|---|----|
| | 4.11 | Audience | 33 |
| | 4.12 | Coverage | 35 |
| | 4.13 | Language | 36 |
| | 4.14 | Contributor | 38 |
| | 4.15 | Format | 38 |
| | 4.16 | Mandate | 39 |
| | 4.17 | Relation | 39 |
| | 4.18 | Rights | 41 |
| | 4.19 | Source | 41 |
| 5. | WHI | CH QUALIFIERS SHOULD BE USED? | 43 |
| | | Table 2: AGLS elements with mandatory qualifiers | 44 |
| 6. | POST | Γ-IMPLEMENTATION ISSUES | 45 |
| | 6.1 | AGLS compliance and the AGLS logo | 45 |
| | 6.2 | AGLS versions and administrative metadata | 45 |
| | 6.3 | Relationship between AGLS and AGLS extension sets | 46 |
| | APPI | ENDIX 1 EXAMPLES OF AGLS RECORDS | 48 |
| | 1 | Agency home page | 48 |
| | 2 | Collection-level resource (an entry point to a collection of pages on the same topic) | 48 |
| | 3 | Individual media release | 49 |
| | 4 | Service offered both online and offline | 49 |
| | 5 | Offline service | 50 |
| | 6 | Regional grants program | 51 |
| | 7 | Child and Youth Support Service record supporting several portals | 51 |
| | APPI | ENDIX 2 ENCODING SCHEMES | 53 |
| | | AglsAgent encoding scheme | 53 |
| | | AglsAvail encoding scheme | 53 |
| | APPI | ENDIX 3 CONTROLLED LISTS | 54 |
| | | Audience element controlled list | 54 |
| | | Document controlled list | 55 |
| | | Services controlled list | 56 |
| | | Jurisdiction controlled list | 57 |
| | APPI | ENDIX 4 AGLS-BASED TOOLS | 58 |

EXECUTIVE SUMMARY

This implementation manual is designed to assist Australian Government agencies to understand and meet their obligations under the E-Government Strategy to produce webbased descriptions of their information and services using the AGLS Metadata Standard (also referred to in this publication as the AGLS standard).

The current version of the AGLS Metadata Standard, the *AGLS Metadata Element Set*, is Version 1.3 of the AGLS Metadata Standard. It was endorsed by Standards Australia in December 2002 and published as AS 5044 (see http://www.naa.gov.au/recordkeeping/gov_online/agls/metadata_element_set.html).

The aim of implementing the AGLS Metadata Standard is to provide efficient access to descriptions of government resources – information, services and agencies – on the World Wide Web. Compliance with the AGLS standard will ensure a nationally consistent approach to description of government resources. This in turn will help people to locate resources without needing a detailed knowledge of government structures.

This manual sets out Australian Government requirements for the implementation of AGLS metadata and provides practical advice and direction for staff responsible for coordinating agency policy and practice on web-based information and services.

Changes from previous versions

This manual combines and supersedes the information found in four earlier documents:

- Applying the Australian Government Locator Service (AGLS) Metadata Standard in Commonwealth Agencies (National Archives of Australia 2000);
- *Guidelines for the Description of Government Services Using the AGLS Metadata Standard* (National Archives of Australia 2000);
- Commonwealth Implementation Manual: AGLS Metadata, Version 1.1 (National Archives of Australia 2002); and
- AGLS Metadata Creation Guidelines for Use by Portal Consortia (National Office for the Information Economy, unpublished).

The major change between the earlier Guidelines and the Commonwealth Implementation Manual (2002) was the increase in the number of mandatory elements required for Australian Government implementation of the Australian Standard AS 5044. In order to describe services and to aid the process of making government resources available through the portals framework, it was necessary to increase the number of mandatory elements. In addition to the original mandatory elements in the Australian Standard AS 5044, all metadata records must now contain the *Type* and *Description* elements. As well, the *Coverage*, *Language* and *Audience* elements are mandatory for certain resources. *Coverage* is mandatory when the spatial/jurisdiction coverage of the resource content is not the whole of Australia; *Language* is mandatory when the resource is not in English; and *Audience* is mandatory when the target audience of the resource is not everyone. Any agencies accredited by the National Archives as compliant before March 2001, will need to ensure that their metadata records contain all the mandatory elements. The AGLS metadata manager should re-check the site for compliance against the new requirements and add the additional mandatory elements as necessary.

In addition to the change of name from 'Commonwealth' to 'Australian Government' Implementation Manual, the major change between Version 1.1 (2002) and this Version 2.0 is the removal of the requirement for agencies to create and maintain Harvest Control Lists. This is consistent with a decision made by the Australian Government Information Management Office in its capacity as the management agency for the Australian Government Online Entry Point as a result of changes in search engine technology.

Structure of the manual

The manual comprises six section plus appendixes. The introduction provides a basic overview of AGLS implementation and includes a checklist. The subsequent section is intended for agency managers. It outlines 'big picture' business and resource issues that are likely to arise when integrating AGLS into an agency's business processes.

With section three, the manual turns to more technical issues of implementation and concerns implementation requirements. The subsequent section provides detailed descriptions of the 19 AGLS elements and examples of correct usage. Section five discusses the use of element qualifiers. The final section discusses the AGLS logo and looks at post-implementation issues such as AGLS versions and extension sets.

The manual concludes with four appendixes: examples of full AGLS metadata records illustrating the use of correct syntax in Hypertext Markup Language (HTML) and eXtensible Markup Language (XML) formats, the encoding schemes and controlled vocabularies developed by the National Archives, and information on some AGLS-based metadata tools.

1. INTRODUCTION

1.1 What is AGLS metadata?

Metadata can be defined as structured information that describes and/or enables finding, managing, controlling, understanding or preserving other information over time. AGLS is a metadata standard designed specifically for improving the discoverability of resources, both physical and virtual, in an online environment. Organisations can use standardised and structured descriptions of resources in order to improve the visibility and accessibility of resources online. The AGLS Metadata Standard specifies a structure for metadata that can be used on Australian Government websites.

1.2 Why use AGLS metadata?

The aim of using the AGLS Metadata Standard in Australian Government agencies is to ensure that people searching the Australian Government information space on the World Wide Web have fast and efficient access to descriptions of government resources. AGLS metadata should enable people to locate the government resources that they need without having to possess a detailed knowledge of government structures.

Using standardised descriptions enables web-based search engines to do their job more efficiently. This in turn helps ensure that people searching government websites are presented with relevant and meaningful results in response to search requests.

Increasingly, the World Wide Web is becoming the preferred means of gaining access to government resources. People expect to be able to easily find all government information and all government services online. There is little point investing money and effort in publishing information or delivering a service over the web if the intended audience cannot locate it. The use of standardised metadata schemas such as AGLS, will help people find the government resources they require amidst the immense and often anarchic information space of the World Wide Web. A small amount of additional investment in the creation and maintenance of AGLS metadata can significantly increase the return on the initial web publishing investment.

1.3 AGLS and the Government Online Strategy

The Government Online Strategy, issued 6 April 2000, mandated the use of AGLS metadata by Australian Government agencies. The Online Strategy includes:

- a description of the minimum types of information and services agencies are required to make available online;
- a list of the categories of online resources for which agencies are required to create AGLS metadata; and
- the requirement that Australian Government agencies have AGLS metadata applied to all resources outlined in the AGLS metadata obligations by 1 December 2000.

The Online Strategy is available from the Australian Government Information Management Office (AGIMO) website at http://www.agimo.gov.au/publications/2000/04/govonline/.

The Government Online Strategy was updated by the Australian Government's E-Government Strategy in November 2002. The E-Government Strategy reaffirmed the

requirement for Australian Government agencies to comply with the AGLS Metadata Standard (see http://www.agimo.gov.au/publications/2002/11/bsbg).

The National Archives of Australia acts as maintenance agency for the standard and the Archives maintains an AGLS website at http://www.agls.gov.au.

1.4 AGLS and the portals framework

The portals framework is a significant component of the E-Government Strategy and has implications for AGLS deployment. The customer-focused portals framework was endorsed by Cabinet in November 2000 and added to the Online Strategy in December 2000. The framework provides a simple path for discovery of government information and services relating to broad areas of interest. The presentation of subject and customer-focused portals at the Australian Government Entry Point (http://www.australia.gov.au) can provide nationally identifiable first-stop reference points not possible in an agency-based information model.

1.5 Describing government services with AGLS

A service exists where a relationship is established between a business function of a government agency and the identified needs of an individual or group. Examples of government services are family allowance assistance, grants programs and the receipt of payments by government agencies such as the Australian Tax Office. The AGLS metadata obligations in the Government Online Strategy require agencies to describe *all* services, regardless of mode of delivery.

Since AGLS metadata can be used to describe both online and offline services, it is possible for all government services to be visible on the Internet. This means that people will be able to more effectively search government websites to find sufficient information online to decide whether a particular service is the one they require. Even if a service is only provided over the counter and is not available over the Internet, it should still be described on the Internet using AGLS metadata. AGLS metadata may contain information about how to access it, including contact information and opening hours. Because the metadata record may be the only information about the service available to the web user, it is critical that when describing such resources, agencies remain mindful of the customer groups for which the resource will be relevant and create appropriate metadata.

While there are obvious benefits in using the same metadata schema for the description of services and document-based information resources, services are a much more dynamic resource than documents. For resource discovery purposes, therefore, resource description needs to be approached differently when describing a service. This manual shows metadata creators how to use AGLS metadata for the description of government services and provides rules for interpreting AGLS metadata elements when describing services. Appendix 1 provides examples of AGLS metadata for the description of services, and also of the correct HTML syntax.

1.6 Aims and audience

A primary aim of this manual is to promote consistent implementation of the AGLS Metadata Standard by Australian Government agencies. Although the standard has been designed to be flexible so that it can be used in a wide variety of settings, at the same time,

the standard should be applied consistently within the context of the Government Online Strategy and across the whole Australian Government jurisdiction.

Second, the manual aims to encourage and assist Australian Government agencies to undertake AGLS metadata implementation. At first sight, the number of choices agencies must make when adopting the AGLS standard may be a disincentive. Agencies may not be confident to make the decisions and need more explicit guidance. For this reason it was decided to produce this manual. Designed to be used in conjunction with the Australian Standard AS 5044, it provides prescriptive advice to Australian Government agencies and aims to ensure consistent application of the AGLS Metadata Standard. Ultimately, this will help to ensure that Australian Government services and information can be quickly, easily and consistently located across the World Wide Web.

This manual is primarily intended for staff responsible for coordinating agency policy and practice for the provision of web-based information and services. It will continue to evolve as our knowledge and experience in applying AGLS grows. Comments and suggestions from practitioners are welcomed and should be directed to:

The Director Government Recordkeeping Support National Archives of Australia PO Box 7425 Canberra Business Centre ACT 2610

Email: agls@naa.gov.au

1.7 AGLS checklist

What follows is a basic checklist that government agencies can use to create compliant AGLS metadata. The checklist assumes that the agency has accepted the need for metadata creation and has allocated sufficient resources to enable the work to be completed. Where appropriate, each step in the checklist is referenced to the relevant sections of this manual.

- Step 1 Prepare an Online Action Plan as required by the Government Online Strategy, and identify those online and offline resources that need to be described with AGLS metadata. (Sections 1.3, 3.2)
- **Step 2** Decide who will create the metadata. Will metadata creation be centralised or decentralised within the agency? (Section 2.2)
- Step 3 Make sure everyone who will be creating the metadata understands the definition and application of each element. (Section 4)
- **Step 4** If a distributed approach to metadata creation is to be adopted (ie document authors will create the metadata), ensure that appropriate training is available to authors and that quality assurance checks are in place. (Section 2.2)
- **Step 5** Decide how the metadata is to be stored. (Section 2.4)

- **Step 6** Select a metadata creation tool that best meets the agency's needs. Become familiar with the selected tool/s. (Appendix 4)
- Step 7 Decide which elements and qualifiers in addition to the mandatory and required set (if any) will be used to describe the agency's resources and how these should be applied. (Sections 3, 4, 5)
- **Step 8** Enter the mandatory and required AGLS metadata elements for each resource. This will provide the minimum information necessary.
- **Step 9** Add any optional AGLS metadata elements the agency has decided to apply to each resource. The more information provided, the better the description and the greater the likelihood of the resource being found.
- **Step 10** Export the AGLS metadata into the syntax chosen by the agency. This manual recommends HTML 4.0 syntax. (Section 3.3)
- Step 11 If metadata is to be stored within the HTML code on each web page, export it into the relevant web pages. If web pages are generated dynamically, the system must be able to write the AGLS metadata into the HTML as the pages are served.

2. BUSINESS ISSUES RAISED BY AGLS IMPLEMENTATION

2.1 AGLS and business processes

Creating and maintaining simple, good quality AGLS metadata is a significant organisational commitment, but should not be a major burden on organisational resources or business processes. Agencies that comply with the implementation requirements outlined in this manual should find that AGLS creation and maintenance becomes a seamless and painless component in the process of maintaining an organisational presence on the World Wide Web.

Metadata records should be quick and easy to create, functional and productive for retrieval purposes, and consistently applied across similar sectors. The AGLS Metadata Standard is based on the Dublin Core (DC) standard because one of the major objectives of Dublin Core is the fast and efficient creation of metadata, either by document authors or automated systems.

In most cases it will be sufficient for agencies to create and maintain relatively simple and unstructured AGLS metadata records. The AGLS Metadata Standard supports the creation of a minimum set of simple, unqualified metadata. Agencies are, however, encouraged to create more detailed and structured metadata. With the addition of qualifiers, descriptions become more highly structured and more semantically correct, resulting in better quality metadata. AGLS allows agencies to create highly structured and precise, high quality metadata to ensure efficient online retrieval of Australian Government resources. In order to create the best quality metadata, most agencies will need to employ trained information management professionals such as librarians.

2.2 Allocating organisational roles and responsibilities

The National Archives recommends that government agencies adopt a policy of decentralised metadata authoring with centralised metadata management, quality control and value-adding.

Centralised management and quality control

Agencies need to allocate responsibility for managing the organisation's metadata. While the technical side of managing the storage of the metadata will fall to information technology staff or the website manager, someone else needs to have responsibility for quality control and value adding. Ideally, this responsibility should sit with the information management section and be exercised by a staff member with professional information management qualifications.

If agencies create only a small amount of metadata (for example, less than 200 records), this staff member should check the quality of all AGLS records. If the organisation creates and maintains a large quantity of AGLS records, quality control could be exercised more selectively, perhaps on a random 'spot-check' basis or by targeting the more important records.

Since AGLS metadata can be amended or added to at different points in the business process, action officers can begin the metadata authoring process and the metadata manager can add data values for selected AGLS elements, including optional elements or additional qualifiers.

The AGLS metadata manager must ensure that the metadata is kept up to date. When resources change, the metadata must also be changed and continue to be an accurate description of the resource. If the website is restructured the existing metadata must be reassessed to ensure it remains accurate and complete.

Decentralised metadata authoring

Decentralised metadata authoring means that the authors of documents to be published on the web should create the metadata for those documents as part of the writing process. Similarly, officers responsible for particular services should create the AGLS metadata to describe those services. The rationale for this approach is that document authors and service providers know most about specific resources. Consequently, they should be able to produce the most accurate and authoritative metadata to describe the resources.

Resource description should be an integral part of information creation and service provision. Resource description is increasingly becoming an essential skill for today's public servants. If document authors have access to a user-friendly automated metadata authoring tool on their computers, the process of metadata authoring should be quick and easy – at most an additional 10 or 15 minutes work per metadata record.

Although the National Archives recommends that agencies adopt a policy of decentralised metadata authoring, there may be sound business reasons for a centralised approach. Whichever strategy is adopted, it is essential to develop proper procedures for implementing AGLS metadata. The decision on whether to create metadata through centralised or decentralised authoring, needs to take into account the processes and quality assurance mechanisms of the respective models and the amount of metadata required. Additional factors will included the agency's management philosophy and corporate culture. Either way, someone in the organisation needs to have overall responsibility for metadata management and quality assurance.

Training

While it is not particularly difficult to create good quality AGLS metadata, it is very easy to create bad AGLS metadata. Bad metadata can be worse than no metadata at all, because it can provide misleading information about the resource in question. Agency staff should therefore receive basic training in creating AGLS metadata.

Training, supplemented by written guidelines (possibly on the agency's intranet), should minimise the amount of quality control work for the AGLS metadata manager and largely eliminate bottlenecks at the quality assurance stage in the AGLS work process. Ideally, AGLS metadata managers will coordinate the delivery of this training to action officers.

For information on AGLS training for agency staff, please email the National Archives AGLS Maintenance Agency at agls@naa.gov.au.

Change management

The successful introduction of AGLS metadata to an agency website requires a process of change management. The information management section, with the active cooperation of senior management, should drive this process.

Adequate resources need to be allocated for suitable technical infrastructure such as a metadata authoring tool and an AGLS-enabled search engine. Adequate staff resources for

centralised AGLS management and coordination need to be available within the agency's information management section. More importantly, staff and supervisors across the organisation need to be made aware of, and embrace, their responsibility for decentralised metadata authoring.

To this end appropriate means of staff communication, such as staff meetings and newsletters, should be used to get the AGLS message across. As with any process of cultural and work-process change, some resistance from staff is to be expected. Nevertheless, a combination of open communication, adequate training and a clear policy-based set of rules should eventually produce the desired result.

2.3 Choosing a metadata authoring tool

The use of a suitable automated metadata-authoring tool not only helps to ensure consistency, it can also greatly speed up metadata creation. Ideally, such tools will be accessible from the desktops of all officers who are expected to create metadata.

Such tools generally take the form of a template into which data values can be either automatically or manually entered, or 'dragged and dropped' from a linked scheme. Once all the required data values are entered into the template, the authoring tool automatically generates a metadata record with suitable syntax.

A number of such tools have already been developed for use in creating AGLS-compliant metadata. Links to more information about these tools are in Appendix 4.

2.4 Metadata storage and access

Meta tags and spiders

Several options are available to a metadata manager for storing AGLS metadata: meta tags can be embedded in individual web pages or embedded in 'pointer' HTML pages. The decision on which option to use will be based on business needs, with the benefits of improved access to information balanced against administrative costs and the imposition on authors. There are also a number of technical factors which will need to be considered. These include size of the website, whether or not the website includes non-HTML resources and whether or not the metadata will be 'harvested'.

For websites that are small (200 pages or less) and comprise HTML documents only, the lowest-cost solution for moving to metadata-based information access tools is to embed metadata as 'meta tags' in the head of key HTML documents. For small or simple websites, this may be all that is ever required.

Agencies that distribute non-HTML material through their websites (such as PDF files or compressed word-processed documents) will also need to consider how to provide metadata for these resources. One option is to create separate HTML files that contain the metadata about those resources and act as 'pointers' to them.

Within the confines of an agency, any solution that works, is sustainable and extensible, and makes appropriate use of existing infrastructure is a good one.

AGLS-compliant search engines

It is important that the metadata on an agency's website can be exploited by both external search engines (such as those operated by government key service points such as the Australian Government Entry Point) and by the agency's own website search engine. Unfortunately, a large number of commercial search engines do not have the capacity to exploit AGLS or Dublin Core metadata.

When purchasing a search engine for an agency website, ensure that it has the capacity (or can be configured) to understand, interrogate and retrieve AGLS metadata.

2.5 AGLS and agency recordkeeping systems

A significant proportion of the resources that agencies make available over their websites will be in or from agency recordkeeping systems. All electronic recordkeeping systems generate, capture and manage metadata. It makes sense, therefore, for recordkeeping metadata to be as similar as possible to, or identical with, metadata for web-based resource discovery. It would be pointless to create totally different metadata using unrelated business processes for what are essentially the same objects accessed through different interfaces.

With this in mind, the National Archives has issued a *Recordkeeping Metadata Standard for Commonwealth Agencies* that is based upon and dovetails with the AGLS standard. The current Recordkeeping Metadata Standard is available at http://www.naa.gov.au/recordkeeping/control/rkms/summary.htm. The intention is to have a unified regime for metadata within the Australian Government. Under such a regime, metadata should be created once, but used many times for different purposes, including records management and web-based information dissemination.

While recordkeeping metadata is necessarily more detailed and extensive than online resource discovery metadata, the two types of metadata have much in common. Both types of metadata need to enable users to locate information resources within electronic systems. The elements of the Recordkeeping Metadata Standard that relate to information description and discovery have identical labels and semantics to the corresponding AGLS elements.

It is envisaged that once agencies start to implement electronic recordkeeping systems that comply with the Recordkeeping Metadata Standard, much of the required AGLS metadata could be captured (in many cases automatically) within the recordkeeping system.

When resources from recordkeeping systems are made available or described over the web, the relevant AGLS metadata should be automatically extracted from the recordkeeping system for transfer to a web environment. At that time automated or manual changes could be made to generate AGLS metadata not present in the recordkeeping system (eg *Subject* or *Availability* elements).

In order to derive AGLS metadata from an electronic recordkeeping system, agencies will need to implement and integrate certain technological and work-process innovations. This should be a minor issue, providing agencies comply with the two metadata standards developed by the National Archives, the Recordkeeping Metadata Standard and the AGLS Metadata Standard.

2.6 Keeping AGLS metadata up to date

One of the most important aspects of AGLS quality assurance is ensuring that an agency's AGLS metadata is kept up to date. Providing out-of-date metadata is worse than providing no metadata at all. The agency's AGLS metadata manager's role is to monitor the currency of metadata. This involves either updating metadata centrally or, preferably, reminding relevant action officers and document authors of the need to update their own metadata.

One of the features of AGLS metadata is that it is dynamic. Metadata for any given resource can be created, revised, added to and improved as often as necessary. AGLS metadata is not just created once and forgotten. It needs to be actively managed for as long as the resource it describes is available to the public. As resources evolve or change their role or significance, the metadata should reflect the changing nature of the resource it describes.

3. AGLS IMPLEMENTATION REQUIREMENTS

3.1 Which AGLS elements to use

Australian Government obligation status

Although the Australian Standard AS 5044 only requires the use of six mandatory elements to create a compliant AGLS metadata record, the Australian Government's implementation of the standard mandates the use of additional elements. These additional elements are required to support the portals framework and any future initiatives that may require well-formed metadata for the description of Australian Government services. In all cases, however, agencies are strongly encouraged to use as many metadata elements as necessary to enhance resource description and maximise discovery.

The full set of 19 AGLS metadata elements is described in detail in section 4. The obligation status of each element for Australian Government agencies is set out in Table 1. Five of the elements – *Creator*, *Date*, *Description*, *Title*, *Type* – are mandatory for all records. Eight of the elements are conditional – that is, they are mandatory under specific conditions (see Table 1). The remaining six elements have an optional obligation status.

The obligation status of the *Function* and *Subject* elements is interdependent (see Table 1). The difference between these elements is discussed more fully in section 3.4. The obligation status of the *Availability* and *Identifier* elements depends on whether the resource is available online, offline, or both. The *Availability* element enables online description of offline resources. When describing an offline resource, the *Availability* element must be used. When describing an online resource, the *Identifier* element must be used. A resource that is available both online and offline must include both the *Identifier* and *Availability* elements.

Assigning element values

It is important to note that the *Identifier* element will only work if the online resource being described has a stable Uniform Resource Locator (URL) or Universal Resource Identifier (URI). Web systems that generate resources with dynamic URLs or URIs each time a page is served do not support the deployment of AGLS metadata and should not be used by Australian Government agencies.

Automated creation of content for as many elements as possible is desirable, and agencies should consider purchasing a metadata tool that has this capability (see section 2.3 and Appendix 4). Metadata creation can be automated for elements with values that remain constant across records (eg *Creator* and *Publisher*) and elements with values drawn from operating systems or other software applications (eg *Title, Identifier* and *Date*).

It is important that metadata creators always remember to check default and automatically generated values to ensure they are appropriate. Values for elements such as *Subject*, *Function* and *Description* are best created by document authors or those familiar with the content of the resource being described. In some instances, the *Title* element will also be created by the document author. Some elements, such as *Relation* and *Type*, will have values that are specific to each resource and are more complex to use. It may not be appropriate for document authors to create values for these elements.

Table 1 Australian Government obligation status of the 19 AGLS metadata elements

| AGLS element | Australian Government agency obligations |
|--------------|--|
| Creator | Mandatory |
| Date | Mandatory |
| Description | Mandatory |
| Title | Mandatory |
| Туре | Mandatory |
| Function | Mandatory for collection-level resources Mandatory for service description Mandatory (if no Subject element) |
| Subject | Mandatory (if no Function element) |
| Availability | Mandatory for descriptions of offline resources (ie no <i>Identifier</i> element) |
| Identifier | Mandatory for descriptions of online resources (ie no <i>Availability</i> element) |
| Publisher | Conditional Mandatory except for service descriptions |
| Audience | Conditional Mandatory when the target audience of the resource is not 'All' |
| Coverage | Conditional Mandatory when the spatial coverage of the resource content is not the whole of Australia |
| Language | Conditional Mandatory when the resource is in a language other than English |
| Contributor | Optional |
| Format | Optional |
| Mandate | Optional |
| Relation | Optional |
| Rights | Optional |
| Source | Optional |

3.2 Which resources to describe

It is not necessary to describe every single page on a website. The amount of human effort required to apply meaningful metadata to every page on a website would not be justified by any corresponding improvement in search results. The list below contains the minimum set of online resources that the Government Online Strategy requires to be described using AGLS metadata.

It is also important for agencies to describe their offline services and information using AGLS metadata (eg a customer relations service, a call centre facility or other service that can only be obtained by telephoning or attending a shopfront).

The description of resources which fall outside the categories discussed in this section is a matter for individual agencies to decide.

Minimum set of resources that require AGLS metadata

The list below comprise the minimum set of resources to be described with AGLS metadata in order to comply with the online information service obligations endorsed by Cabinet as a component of the Government Online Strategy. The following categories of resources should receive priority in AGLS metadata creation:

- a) home pages (defined as the major entry point to an organisation or those distinct business units where there is likely to be a public perception that they stand alone);
- b) topics/services in high demand by the community that the organisation serves (this can be based on usage statistics but may also include topical or publicised resources with potential public interest);
- c) information required by agency clientele to understand their entitlements to government assistance or obligations;
- d) pages that provide an actual online service to the public (such as payment forms, application forms etc);
- e) pages required to meet a prescribed community/legal/service obligation by the organisation;
- f) entry points to specific online services and indexes (eg an entry point to a legal database);
- g) major formal publications (eg annual reports, corporate strategic plans, public policy and accountability documents, etc);
- h) media releases (this means every media release on a site, however, if an agency has a large number of media releases it is sufficient to describe the most recent ones, say the previous three months, and every new media release as it is added to the website.);
- major entry points or indexes and menus to a range of closely related topics, programs or policies;
- j) information about agency powers affecting the public, and manuals and other documents used in decision-making affecting the public; and
- k) substantial descriptive or marketing information about agencies, their services, activities and collections.

(From the Government Online Strategy)

3.3 Syntax for expressing AGLS metadata

For metadata to be read and understood by search engines it needs to be written in a standardised syntax. In other words, the individual metadata values need to be signposted

by standard symbols that indicate their role and meaning. Correct syntax also enables search engines to identify particular metadata elements in isolation from what would otherwise be a mass of indistinguishable data.

AGLS relies on two forms of accepted syntax, HyperText Markup Language (HTML) and eXtensible Markup Language (XML) using the Resource Description Framework (RDF). In time, XML is expected to overtake HTML as the preferred web-based syntax because of its greater syntactic power and flexibility.

For the moment, however, HTML is the most commonly supported. For this reason, it is recommended that Australian Government agencies use HTML 4.0 syntax to express their AGLS metadata. Examples of the use of HTML syntax in conjunction with AGLS can be found in Appendix 1 of this manual and in the *AGLS Metadata Element Set*, *Part 2: Usage Guide* (Version 1.3).

It is good practice to refer to the version of the metadata schema used to create metadata elements within HTML, and the National Archives recommends that agencies follow this practice. Using the LINK REL HTML tag as the first tag in the metadata record does this. The LINK REL tag for current AGLS Metadata Standard (1.3) metadata will look like this:

```
<link rel="AGLS_Metadata_Element_Set_v1-3"
href="http://www.agls.gov.au/AGLS_Metadata_Element_Set_v1-3.html">
```

When creating multiple data values for the same metadata element in HTML, values should be separated by a semi-colon (;) followed by a space, as long as any qualifiers used are the same for each value. If you are using different element refinements for different values (eg DC.Type.aggregationLevel and DC.Type.category), or different schemes for different values, then you must repeat the element.

3.4 Analysing resources

Time and workloads do not permit a long and careful reading of every word in a resource (and studies suggest that such exhaustive perusal does not result in a more accurate judgement of subject content). Metadata creators should focus on the parts of the resource likely to be the most informative, or merely scan the text. As a general guide, it should take about five minutes to analyse the content of a resource.

Agencies are encouraged to consider the use of functions-based and subject classification to enrich their metadata. There is often confusion about the difference between function-based and subject-based classification. The easiest way to appreciate the difference is to think of functions-based classification as describing why a resource exists, while subject classification describes what the resource is about. Users do not need to understand this difference to conduct a successful online search. It is, however, essential that AGLS metadata creators understand the difference between the two concepts.

When selecting terms from hierarchically constructed thesauruses such as the *Australian Governments' Interactive Function' Thesaurus* (AGIFT) for *Function* and the *Australian Public Affairs Information Service* (APAIS) thesaurus for *Subject*, metadata creators should select the

most specific term that most accurately reflects the purpose or content of the resource being described.

Function

In most cases the source of data values for *Function* will be either AGIFT, which is available online from the National Archives' website (see the online version of AGIFT at http://www.naa.gov.au/recordkeeping/thesaurus/index.htm), or an agency-specific functions thesaurus developed in accordance with National Archives' guidelines (see http://www.naa.gov.au/recordkeeping/control/functions_thesaur/intro.html). The use of Function terms allows a much higher degree of consistency in classifying government resources because there are a finite number of functions that governments perform. The number of subject areas in which governments may have an interest is much wider. The use of the <code>Function</code> element is mandatory for descriptions of agency home pages and collection-level records, and when describing services.

The AGIFT thesaurus is a comprehensive high-level thesaurus of functions performed in the Australian Government and should be used to ensure consistency in functions terms. Agency-specific functions thesauruses that comply with National Archives guidelines sit within, and are consistent with, the high-level functions-based classification framework provided by AGIFT.

Function is the business function of the agency to which the resource or service relates. For services, the nature of this relationship is principally that services are lower-level instances of higher-level functions. This relationship should, therefore, be reflected in the metadata description of a service. For example, at the highest level, almost all Sydney Water business functions would be described by the AGIFT term 'Water usage management'. The use of such high-level terms provides context for resource discovery. A *business activity* forming part of this function would be described by the agency's own functions thesaurus (eg 'Dam maintenance').

Subject

Subject description is intended to describe what a resource is about, to help users determine whether a resource is of relevance to them.

A high-level whole-of-government subject thesaurus has been developed by the Australian Government Information Management Office (AGIMO). This thesaurus, *Thesaurus of Australian Government Subjects* (TAGS), is available from http://www.agimo.gov.au/services/tags. It is the recommended tool for assigning subject keywords to resource descriptions within the AGLS *Subject* element. Agencies can apply any additional terms that they consider relevant from their own subject thesauruses by repeating the *Subject* element and applying the relevant scheme.

The first step is to analyse the resource being described, using the content and category of the displayed resource, the *Title*, and any descriptive information on the page or in the source, to determine the overall subject of the resource. Any secondary aspects that merit indexing should also be identified. A more detailed explanation of this procedure is in the International Standard Organization (ISO) Standard 5963:1985 *Documentation – Methods for Examining Documents, Determining Their Subjects and Selecting Indexing Terms* (http://www.nlc-bnc.ca/iso/tc46sc9/standard/5963e.htm).

The Thesaurus of Australian Government Subjects (TAGS) should be used together with an approved thesaurus or an agency's controlled list. For agencies that previously used the Australian Public Affairs Information Service (APAIS) thesaurus, TAGS includes all APAIS terms that are within its scope. Agencies should choose the most significant and unique words as subject keywords, avoiding those too general to describe a particular item. Provide sufficient terms to allow discovery, but do not repeat variations of terms, synonyms, case or tense variations, or alternate spellings. If your agency has developed an in-house thesaurus as the source of terms for the *Subject* element, it is essential that the thesaurus is publicly available for anyone to search or browse. The National Archives maintains a register of all thesauruses in use by Australian Government agencies so please advise which one you are using by email (agls@naa.gov.au), with a description and details of where it can be accessed.

Having assigned the terms to record the subject of the resource as a whole, then decide whether further subject information is required to refine this description or to describe a part of the resource in more detail. These terms can be included in DC.Description if they are not in an established schema.

Tips for analysing resources

How many terms?

Identify the major points or subjects of the resource and list the most important concept(s) first. Use other terms as required to improve the accessibility of the resource. Remember that harvesters have limits on the number of characters they will index.

Specificity

Use the most specific term available. A resource on 'Child welfare' should not also be indexed under 'Social welfare', unless social welfare is discussed more generally. General headings are used for general concepts. It is equally important to ensure that the terms chosen appropriately represent all the important themes in a resource. For example, a paper which describes the relationship between foreign relations and defence planning should be allocated terms to encompass both aspects.

If no subject heading exists for a concept, choose the heading that most closely represents it. The practice of looking for a 'like' article and checking its indexing is very common when choosing correct headings.

Index for search efficiency

Remember that the aim is to help people locate the resources relevant to their search topic. Do not use terms that represent only very minor points – it will not be useful for the user. Do not index concepts that are mentioned rather than discussed, for example, in general do not use the term 'History' for pages that include a small amount of introductory history to the main subject under discussion.

Persons and organisations

If the subject of the item is a person or an organisation, use the same form of the name as you would if the person or organisation were a *Creator*, but do not repeat the name in the *Creator* element.

Groups of people

Do not assign such general terms as 'Children', 'Ethnic groups', 'Women', 'Aborigines', 'Migrants' etc to resources about or for these particular groups, where there is a more specific heading (eg 'Women and employment' and 'Child welfare'). If a resource is for one of these groups this should be indicated in the *Audience* element.

4. AGLS ELEMENT DESCRIPTIONS AND USAGE EXAMPLES

The following pages provide detailed descriptions of how the individual AGLS elements should be used in the Australian Government context and rules for describing resources. The element descriptions set out below are intended to be used in conjunction with the AGLS Metadata Element Set (Parts 1 and 2) published at http://www.naa.gov.au/recordkeeping/gov_online/agls/metadata_element_set.html

The element descriptions outlined in section 4 follow the same order as in Table 1. Each element description includes a table with the HTML name of the element, the definition, Australian Government obligation, encoding scheme(s), and default value followed by a longer description of how the element should be applied to resource descriptions. Each element description concludes with a set of examples showing how the element should be written using HTML 4.0 syntax.

The element descriptions also indicate the encoding schemes that should be used in specifying certain element values. Efficient online retrieval of information is dependent on metadata that is as consistent as possible in structure, classification and description. While consistency in structure is achieved through standards such as AGLS, consistency in classification and description relies on encoding schemes for particular elements. A number of commonly used encoding schemes (including thesauruses and controlled vocabularies) for individual elements are included in this section. A register of these and other schemes used in AGLS metadata is available at http://www.naa.gov.au/recordkeeping/gov_online/agls/register_schemes.html.

When creating resource descriptions in metadata, it is important to bear in mind that optional AGLS elements should be used only when the extra information provided will aid resource discovery. All AGLS elements may be repeated as often as necessary.

There is generally no limit to the number of words or numbers that may be entered for any element. Discretion, however, should be used as too much text in the value for a metadata element will defeat the purpose of succinct description.

Some of the element descriptions on the following pages include a default value for an element. In line with the AGLS standard, if one of these elements has a default value, ie *Audience* has 'all' as the default, and then this element (and qualifier if applicable) would normally be omitted from the metadata record. The element is only required when the default value is not appropriate (eg the appropriate value for *Audience* is 'families').

4.1 Creator

| HTML element name | DC.Creator |
|-------------------|---|
| Definition | An entity primarily responsible for the resource content |
| Comment | Typically this will be the name of an individual, a business unit, or an organisation |
| Obligation | Mandatory |
| Encoding scheme | Government OnLine Directory (GOLD); AglsAgent |
| Default value | N/A |

General

Use in accordance with the *AGLS Metadata Element Set, Part 2: Usage Guide* (Version 1.3). Agencies are encouraged to use GOLD (http://www.directories.gov.au) as the name authority for Australian Government agencies. When using the GOLD names, it is important to use the full X.500 database structure used by the Directory. This comprises 'c' for country name (ie c=AU); 'o' for the organisation (jurisdiction) name (ie o=Commonwealth of Australia); and 'ou' for all smaller organisational units, such as, department, agency, and business unit names (eg ou=Australian Government Information Management Office; ou=Service Delivery Branch).

As an alternative to GOLD, the National Archives has developed the AGLSAgent encoding scheme for structuring descriptions of agents in the Creator, Contributor and Publisher elements. Details of AglsAgent can be found at Appendix 2.

If GOLD is not used as a name authority, the jurisdiction to which a resource belongs (when this is not clear from the name) should be indicated using the jurisdiction component from the AglsAgent encoding scheme (see http://www.naa.gov.au/recordkeeping/gov_online/agls/schemes/AglsAgent1.0.html), eg corporateName=Department of Industry, Science and Resources; jurisdiction=Commonwealth of Australia.

When expressing personal names, the AGLS rule is to include the last name first followed by a comma, then the first name (eg Smith, Mary).

Describing services

Use the contact value component for providing extra details about the *Creator*, including business unit and organisational role. Identification of business unit (at least) is desirable for administration and tracking purposes (eg change of government structures).

HTML examples

<META NAME="DC.Creator" SCHEME="GOLD" CONTENT="c=AU;o=Commonwealth of
Australia;ou=Department of Communications, Information Technology and
the Arts;ou=National Archives of Australia">

<META NAME="DC.Creator" SCHEME="AglsAgent"
CONTENT="corporateName=Family Law Council; jurisdiction=Commonwealth
of Australia">

```
<META NAME="DC.Creator" SCHEME="AglsAgent"
CONTENT="corporateName=Attorney-General's Department; contact=Native
Title Division, Robert Garran Offices, National Circuit, Barton, ACT
2600, phone: 02 6250 5540">
```

4.2 Date

| HTML element name | DC.Date |
|-------------------|---|
| Definition | A date of an event in the lifecycle of the resource |
| Obligation | Mandatory |
| Encoding schemes | ISO8601; DCMIPeriod with DC.Date.valid |
| Default value | N/A |

General

Use in accordance with the *AGLS Metadata Element Set, Part 2: Usage Guide* (Version 1.3). Dates should be formatted according to ISO8601. This specifies dates in the form YYYYMMDD, and can accommodate times (eg 20010430 13:23.31 represents 30 April 2001, 1.23.31pm). Note that the AGLS and Australian Government implementation follows the World Wide Web Consortium (W3C) implementation described in that organisation's 'Date and Time Formats' note at http://www.w3.org/TR/NOTE-datetime. This implementation uses small dashes '-' to separate the date components (eg 2001-04-30).

Use the 'valid' element refinement with the DCMIPeriod encoding scheme for specifying currency dates of a service. The DCMIPeriod encoding scheme specifies the use of ISO8601 for dates, and includes components that indicate start and end dates for validity. The *Availability* element should be used for the dates of periodic or seasonal service availability.

Qualifiers

The qualifiers for use with the *Date* element are:

- created: the creation date of the resource (not the metadata record);
- modified: the date the resource was last modified;
- valid: the date the resource becomes valid or ceases to be valid, or the date range for which the resource is valid; and
- issued: the date on which the resource was made formally available.

HTML examples

```
<META NAME="DC.Date.modified" SCHEME="ISO8601" CONTENT="2001-05-01">
<META NAME="DC.Date.valid" SCHEME="DCMIPeriod" CONTENT="start=2001-
05-01; end=2001-09-30">
<META NAME="DC.Date.created" SCHEME="ISO8601" CONTENT="2001-01-01">
```

4.3 Description

| HTML element name | DC.Description |
|-------------------|---|
| Definition | An account of the content of the resource |
| Obligation | Conditional Mandatory except for service descriptions |
| Encoding scheme | N/A |
| Default value | N/A |

General

Description is used for a brief textual description of the content and/or purpose of the resource. Text entered in the *Description* element should be succinct and clearly describe the contents or attributes of the resource/s to which the metadata applies.

It is particularly useful for describing non-textual resources such as services, images and video clips, sound files etc. The information for this element needs to be based on the subject and/or purpose of the resource itself.

It is important to remember that although there is no limit conceptually on how much text the *Description* tag can contain, most harvesters impose character limits on the length of the text.

Describing services

Use of this element is strongly recommended for services. It should provide a concise description of the content and/or purpose of the service, short enough to be read out on the telephone, client-focused, identifying the problem that people inquire about, rather than the solution.

HTML examples

Customer Focused Portals initiative:

<META NAME="DC.Description" CONTENT="The customer focused portals
framework will simplify the process of finding the services and
information that a customer is looking for. The framework will build
on the existing Australian Government Entry Point, adding a related
set of websites that present collections of government information
and services in ways that are designed around customer groupings and
subject matter areas, rather than merely reflecting administrative
structures.">

[Note: this description is 399 characters.]

Child Care Access Hotline:

<META NAME="DC.Description" CONTENT="This site provides information
for parents on the location of child care services and the range of
government financial assistance available, including the
Supplementary Services Program (SUPS) and the Special Needs Subsidy
Scheme (SNSS).">

[Note: this description is 205 characters.]

4.4 Title

| HTML element name | DC.Title |
|-------------------|------------------------------|
| Definition | A name given to the resource |
| Obligation | Mandatory |
| Encoding scheme | N/A |
| Default value | N/A |

General

It is often difficult to decide the correct title for a resource. Creation of ad hoc titles for resources is not recommended. General title rules are:

- use the content of the HTML TITLE tag (if provided) as long as it clearly describes the resource;
- use the wording of the title on the resource where this conveys the correct meaning for the resource; and
- do not use the file name of the resource.

Qualifiers

The element 'alternative', is the only qualifier for *Title*. It should be used where the resource is also known under a different title, or has recently changed and is still known by its previous title. An example would be the changed title of an allowance - 'Parenting Payment' in lieu of 'Child Endowment' or 'Family Allowance'.

Describing services

Use the title that the *Creator* uses to identify the service to its clients. Use a naming convention that best identifies the service to clients. *Title* may identify an individual service or a group of services depending on the agency structure for service delivery.

Use *Title* with the 'alternative' element refinement if the service is commonly known by another name (eg Service name: Unemployment benefits, alternative: Dole payments). The content of the *Title* element is displayed as part of a search result, so it needs to convey a clear and succinct title for the resource to enable the user to determine the applicability of the resource for their use.

HTML examples

```
<META NAME="DC.Title" CONTENT="Investigation into Research and
Development Funding in Australia">
<META NAME="DC.Title.alternative" CONTENT="The Mortimer Report">

Family Assistance Office - Parenting Payment:
<META NAME="DC.Title" CONTENT="Payments - Parenting Payment">
<META NAME="DC.Title" CONTENT="Payments - Parenting Payment">
<META NAME="DC.Title.alternative" CONTENT="Child Endowment; Family Allowance">

HealthInsite Website:
<META NAME="DC.Title" CONTENT="Having a baby: your options">
```

4.5 Type

| HTML element name | DC.Type |
|--------------------|--|
| Definition | The nature or genre of the content of the resource |
| Obligation | Mandatory |
| Encoding scheme(s) | agls-document; agls-service |
| Default value | category=document; aggregationLevel=item |

General

The *Type* element is one of the more important elements to enable discovery of resources. It signals the aggregation level of a resource and specifies the resource type. At a high level resources can be of one of three types (ie category): document, service or agency. Specific document and service types can be described using the documentType and serviceType element refinements with the agls-document and agls-service controlled lists respectively.

Using the aggregationLevel element refinement allows differentiation between collections of items and individual items. Search engines may use this to preference collections in result lists.

Because category=document and aggregationLevel=item are defaults for the *Type* element, when item-level resources are being described it is only necessary to use the documentType refinement (ie DC.Type.documentType) to specify the type of document.

Qualifiers

There are a number of element refinements for *Type*:

- category: specifies the actual type of resource being described (there are only three values for this qualifier: service, document, agency);
- aggregationLevel: specifies the level of aggregation of the resource being described (there
 are only two values possible: item or collection);
- documentType: describes the form of the resource where category = document (document is used in its widest sense); and
- serviceType: describes the type of service being offered where category = service.

The element refinements of 'category' and 'documentType' or 'serviceType' are to be used by agencies to describe their resources when relevant. When a service is being described DC.Type.category must be used with the value 'service'. It is recommended that the service type is further specified using the serviceType element refinement and the agls-service list of values at Appendix 3. For collection-level documents DC.Type.aggregationLevel must be used with the value 'collection'.

Where applicable and/or appropriate portal agencies can request that the agls-service controlled list be extended. Agencies wishing to add terms to controlled lists should contact the AGLS Maintenance Agency (agls@naa.gov.au).

Describing services

Repeat the *Type* element with the 'category' element refinement and the value 'document' if the resource you are describing has significant information content. You may also wish to use the documentType qualifier values listed in Appendix 3.

The actual business processes or transactions represented by the service (eg bookings and reservations, certificates) are described using the 'serviceType' element refinement.

HTML examples

```
Web page
<META NAME="DC.Type.documentType" SCHEME="agls-document"
CONTENT="report"
Parenting Payment (Service and Information description):
<META NAME="DC.Type.category" CONTENT="service">
<META NAME="DC.Type.serviceType" SCHEME="agls-service"
CONTENT="benefits and entitlements">
Child Care Access Hotline (Service only description):
<META NAME="DC.Type.category" CONTENT="Service">
<META NAME="DC.Type.category" CONTENT="Service">
<META NAME="DC.Type.serviceType" SCHEME="agls-service"
CONTENT="enquiries">
```

4.6 Function

| HTML element name | AGLS.Function |
|-------------------|--|
| Definition | The business function of the organisation to which the resource relates |
| Obligation | Mandatory for agency home pages, collection- level resources and service descriptions Mandatory if <i>Subject</i> not used |
| Encoding scheme | Australian Governments' Interactive Functions Thesaurus (AGIFT) |
| Default value | N/A |

General

The Function element and use of the Australian Governments' Interactive Functions Thesaurus (AGIFT) to identify the business function/s of an agency to which a resource relates is mandatory, at least for agency home pages and collection-level resources and services (see http://www.naa.gov.au/recordkeeping/thesaurus/index.htm). The Function element does not relate to the function of the resource. (See section 3.4 for more information about the use of this element.)

Specific business units of an agency will generally be responsible for particular functions. As such, there will be variation in the values within the *Function* element when describing business units and their resources. Whilst it is not intended that all resources within an agency should be assigned identical functions-based descriptions, small agencies with a limited range of functions may tag all resources with the same function terms.

It is expected that many agency resources may be associated with the same or overlapping sets of functions. For example, an agency such as the Department of Families, Community Services and Indigenous Affairs that delivers community support services will have separate organisational units that deal with specific community issues (eg accommodation services, counselling, aged care support etc). The agency would identify the broad function term of 'Community services' on its home page; organisational units would identify the specific functions of the unit on the web pages relevant to the unit (eg 'accommodation services', 'aged care services', 'counselling services' etc).

Describing services

If an agency-specific functions thesaurus exists, it should be used with AGIFT in a repeated instance of the *Function* element. Agency-specific functions thesauruses should be developed in accordance with guidelines issued by the National Archives.

HTML examples

```
Education Unit Page:
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="School Education">
Community related resource:
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="Community
Services">
Child Care:
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="Childcare
services; Indigenous welfare programs">
```

4.7 Subject

| HTML element name | DC.Subject |
|---|---|
| Definition | A subject and/or topic of the content of the resource |
| Obligation Mandatory if Function not used | |
| Encoding scheme | Australian Public Affairs Information Service (APAIS); TAGS |
| Default value | N/A |

General

Use of a thesaurus or controlled vocabulary will ensure consistency in *Subject* entries across an organisation. All controlled vocabulary schemes and thesauruses used by agencies should be registered with the National Archives of Australia. In general, choose the most significant and unique subject terms, avoiding those too general to describe a particular resource. Provide adequate terms to allow resource discovery, but do not repeat variations of terms, synonyms, case or tense variations, or alternate spellings. Separate terms or phrases by a semicolon.

A high-level whole-of-government subject thesaurus has been developed by the Australian Government Information Management Office (AGIMO). This thesaurus, *Thesaurus of Australian Government Subjects* (TAGS), is available from http://www.agimo.gov.au/

services/tags, and is the recommended source of terms for the *Subject* element, if a more specific thesaurus does not exist. Agencies will be able to apply as many terms as they consider relevant from their own subject thesaurus by repeating the *Subject* element and applying the relevant scheme. Otherwise, agencies may use the Australian Public Affairs Information Service (APAIS) thesaurus (a general thesaurus of humanities and social science terms) if a more appropriate thesaurus does not exist. The APAIS thesaurus is available online from the National Library of Australia at http://www.nla.gov.au/apais/thesaurus/.

A number of subject thesauruses are available that have been established for particular customer groups (see http://www.naa.gov.au/recordkeeping/gov_online/agls/register_schemes.html). Agencies should assess their resources to determine which thesaurus best suits their needs. Agencies should determine the *Subject* content from the title and nature of the resource, and any other available descriptive information. If the subject of an item is an individual or an organisation, use the same form of the name as you would if the person or organisation were creator, but do not repeat the name in the *Creator* element.

HTML examples

```
<META NAME="DC.Subject" SCHEME="Health Thesaurus"
CONTENT="complications; diabetes mellitus; prevention and control;
retinal diseases; therapy; vision impairments">
```

Children's Services:

<META NAME="DC.Subject" SCHEME="APAIS" CONTENT=" Adoption; Child
development; Child health; Child psychology; Child sexual abuse;
Child welfare">

Family Health:

<META NAME="DC.Subject" SCHEME="TAGS" CONTENT="Drug abuse; Family
planning">

4.8 Availability

| HTML element name | AGLS.Availability |
|--|---|
| Definition | How the resource can be obtained, or contact information for obtaining the resource |
| Australian Government obligation | Mandatory for descriptions of offline resources |
| Encoding scheme | AglsAvail |
| Default value | N/A |

General

The *Availability* element is primarily used for non-electronic resources to provide information on how consumers may obtain physical access to a resource. The content structure of the element can include value components listed below, or a free-text description of how to obtain the resource. It is used for resources that are not available online. AGLS metadata records can be created for each service, such as a telephone service or a specific form or service that can only be completed by physically attending a shopfront or office location.

The National Archives has developed the AglsAvail encoding scheme for structuring availability information in the Availability element. Details of AglsAvail can be found at Appendix 2.

Describing services

Qualifiers or structure used depends on client needs and the service itself. If a resource is a service, specific requirements are given. Full details of how the service can be obtained or contact information is preferred. It is important that metadata provided in this element supports both direct and mediated searching (eg call centre operator). Repeat the *Availability* element to show multiple access points (eg combined bill paying through SydneyWater and Australia Post). Fees or pricing may be included at the agency's discretion, but may be inappropriate if a complex schedule of pricing exists.

If a resource is available both as an online and offline service, the DC.Identifier element will be used to reference the online resource. The *Availability* element is used to identify where a user may be able to access or obtain the relevant service offline.

HTML examples

Registration of a baby:

<META NAME="AGLS.Availability" CONTENT="corporateName=Registry of
Births, Deaths and Marriages; jurisdiction=Queensland; address=501
Ann Street, Brisbane;postcode=4000;address=PO Box 188, Brisbane
Albert Street, Qld, 4002;contact=Phone (07) 3247 9203; contact=Fax
(07) 3247 5803; hours=Monday to Friday, 9:00am-4:30pm (excluding public holidays); cost=No">

Health Assistance Hotline service:

<META NAME="AGLS.Availability" CONTENT="Medical assistance is
available by contacting the medical hotline on 1800 123456">

Centrelink Community Officers:

<META NAME="AGLS.Availability" CONTENT="Contact your local Centrelink
office for details of Community Officers in your area.">

4.9 Identifier

| HTML element name | DC.Identifier |
|-------------------|---|
| Definition | An unambiguous reference to the resource within a given context |
| Obligation | Mandatory |
| Encoding scheme | Uniform Resource Identifier (URI), ISBN, ISSN |
| Default value | N/A |

General

Recommended best practice is to identify the resource by means of a string or number conforming to a formal identification system. Examples of formal identification systems include the Universal Resource Identifier (URI) which includes the Uniform Resource

Locator (URL), the Digital Object Identifier (DOI), International Standard Book Number (ISBN) and International Standard Serial Number (ISSN). For online resources, use the URL of the resource.

It is important to note that the *Identifier* element will only work if the online resource being described has a stable URL or URI. Web systems that dynamically generate resources with a different URL or URI each time cannot support the deployment of AGLS metadata and thus should not be used by Australian Government agencies.

For online resources like formal publications which bear an International Standard Book Number (ISBN) or International Standard Serial Number (ISSN), the element may be repeated to provide this information if required.

HTML examples

```
<META NAME="DC.Identifier" SCHEME="URI"
CONTENT="http://www.naa.gov.au/recordkeeping/gov_online/agls/user_man
ual/intro.html">
<META NAME="DC.Identifier" SCHEME="ISBN" CONTENT="0 642 42242 7">
```

4.10 Publisher

| HTML element name | DC.Publisher |
|-------------------|---|
| Definition | An entity responsible for making the resource available |
| Obligation | Conditional Mandatory except for service descriptions |
| Encoding scheme | Government OnLine Directory (GOLD); AglsAgent |
| Default value | N/A |

General

This element is used for providing information about ownership of the resource. It will usually be the same as the *Creator*, where this is an agency name, but may be the parent department of an agency or a higher-level agency of a sub-unit, where these smaller units are listed as the *Creator*.

As an alternative to GOLD (http://www.directories.gov.au), the National Archives has developed the AGLSAgent encoding scheme for structuring descriptions of agents in the Creator, Contributor and Publisher elements. Details of AglsAgent can be found at Appendix 2.

Describing services

For service descriptions, this can be used to provide details of the agency that controls or publishes the resource, or provides access to the service.

HTML examples

```
<META NAME="DC.Publisher" SCHEME="GOLD" CONTENT="c=AU;o=Commonwealth
of Australia;ou=Department of Transport and Regional Services">

<META NAME="DC.Publisher" SCHEME="AglsAgent"
CONTENT="corporateName=High Court;jurisdiction=Commonwealth of
Australia">
```

4.11 Audience

| HTML element name | AGLS.Audience |
|-------------------|--|
| Definition | A target audience of the resource |
| Obligation | Conditional Mandatory when target group is not 'all' |
| Encoding scheme | agls-audience |
| Default value | All |

General

Use of the *Audience* element supports direct targeting of specific community sectors such as families, youth, rural and seniors, at which the resource is targeted. Providing this level of granularity allows the extent of resources being returned from a search process to be restricted to the area of relevance, or a particular portal. It also allows increased specificity of resources for the user.

Within the AGLS Metadata Standard, the default value is 'all' which means that if the element is not included in the metadata record, the search engine will assume that the resource is relevant to all audience groups. The element must be used when the target audience is not 'all'.

For example, use of the value 'rural' in *Audience* in a resource indicates that this resource or service is particularly applicable to rural or regional Australia. A resource relevant to rural families would have both 'families' and 'rural' in the *AGLS.Audience* element.

There are a number of schemes available that list preferred audience terms and these are cited in the *AGLS Metadata Element Set, Part 2: Usage Guide* (Version 1.3). The preferred audience controlled list for Australian Government agencies is the agls-audience scheme which is at Appendix 3. Other audience schemes such as Australian New Zealand Standard Industrial Classification (ANZSIC), Education Network Australia (EdNA), Business Entry Point (BEP), age group, equal employment opportunity (EEO) and the Australian Standard Classification of Occupations (ASCO) are also available for use with certain resources. Note that when a numbered index such as ANZSIC or ASCO is used, it is recommended that a common use term also be used so a client can search on either the code or the term.

Describing services

Use for the potential target group and actual users of the service, which may be defined as socio-economic or demographic. This allows consumers to decide if the service is worth accessing or retrieving, based on a knowledge of the audience to whom the service is

addressed. If a service is provided for a particular group, such as Youth, indicate this by using *Audience=*'Youth' rather than using *Subject* terms.

HTML examples

```
Children's resource:

<META NAME="AGLS.Audience" SCHEME="agls-audience" CONTENT="Children">
Educational resource:

<META NAME="AGLS.Audience" SCHEME="EdNA" CONTENT="Upper Primary">
```

4.12 Coverage

| HTML element name | DC.Coverage |
|--|---|
| Definition | The extent or scope of the content of the resource |
| Australian Government obligation | Conditional Mandatory when the spatial coverage of the resource content is not the whole of Australia |
| Encoding scheme | ISO8601 [for temporal qualifier]; AglsJuri (for jurisdiction names) |
| Default value | Commonwealth of Australia |

General

The *Coverage* element is used to describe the geographic or time related aspects of a resource. It allows a search to be restricted to resources about a certain place or time.

Qualifiers

Four element refinements may be applied to the *Coverage* element to provide greater clarity in the description of the resource. These are:

- jurisdiction: the territory over which a government exercises its authority;
- spatial: refers to locations or areas covered in the content of the resource;
- temporal: the time periods covered in the resource; and
- postcode: relevant to the geographical coverage of the resource.

Where programs and services are being delivered on a state level, the full name of each state where these are being delivered should be included. If the programs or services are being delivered to specific areas of a state, then the local government area names should be used.

When describing:

1. general material on the legislative and political affairs of a specific legally defined geographic area, use the jurisdiction qualifier;

- 2. general geographic, economic, social or cultural affairs having a strong focus on place, to allow for a consistent retrieval within a specified geographic context, use the spatial qualifier;
- 3. time-related characteristics of the resource, use the temporal qualifier.

The National Archives has developed a controlled list that Australian Government agencies should use for the jurisdiction qualifier. The agls-juri scheme is at Appendix 3.

Describing services

Use this element to describe the geographic area covered by the service. The 'jurisdiction' element refinement is used to refer to the jurisdiction covered by the service (eg Commonwealth of Australia, Australian Capital Territory, New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria, Western Australia, local council name) with the relevant name spelled out in full (note: you can use 'Australia' instead of 'Commonwealth of Australia', but 'Commonwealth' on its own is not specific and must not be used).

For information pages, this element may refer to locations or areas covered in the content of the resource. Coverage with the 'spatial' element refinement applies to the scope of the service (eg camping permit for Fraser Island, mining permit for Kakadu). If used, each such service (place) would need to be described separately.

Alternatively, if permits are generic across a jurisdiction, it is best to describe them once (in a single metadata record) and leave Coverage.spatial at the highest level, such as Queensland, or empty, possibly alluding to coverage in the description or title field (eg DC.Title="Camping permit for Queensland National Parks").

HTML examples

```
First Home Owner Grant Scheme:

<META NAME="DC.Coverage.jurisdiction" SCHEME="AglsJuri"

CONTENT="Commonwealth of Australia">

<META NAME="DC.Coverage.spatial" CONTENT="New South Wales">

Regional resource - 'Iron Triangle' Program:

<META NAME="DC.Coverage.jurisdiction" CONTENT="Port Augusta City Council; Port Pirie Regional Council; Whyalla City Council">
```

4.13 Language

| HTML element name | DC.Language |
|-------------------|---|
| Definition | A language of the intellectual content of the resource |
| Obligation | Conditional Mandatory when the language of the resource content is <i>not</i> English |
| Encoding scheme | RFC3066 |
| Default value | en[-AU] |

General

Use this element to describe the language of the content of the resource. The default value is English ('en') or Australian English ('en-AU') so resources in any other language must be described using this element. Values should be constructed according to the World Wide Web language description standard, RFC 3066 (http://www.ietf.org/rfc/rfc3066.txt), which uses a combination of two ISO standards (ISO639 for language codes and ISO 3166 for country codes). RFC 3066 allows the use of ISO639-2/T three-letter codes for languages that are not described with a two-letter code in ISO639-1. A list of the two- and three-letter codes is available from http://lcweb.loc.gov/standards/iso639-2/englangn.html.

Describing services

Use this element to describe all the languages in which a service is available.

HTML examples

```
Resources in Pahlavi:

<META NAME="DC.Language" SCHEME="RFC3066" CONTENT="pal">

Specifying Canadian French:

<META NAME="DC.Language" SCHEME="RFC3066" CONTENT="fr-CA">
```

| 4.14 | Con | trib | utor |
|------|-----|------|------|
|------|-----|------|------|

| HTML element name | DC.Contributor |
|--|--|
| Definition | An entity responsible for making a contribution to the content of the resource |
| Australian Government obligation | Optional |
| Encoding scheme | Government OnLine Directory (GOLD); AglsAgent |
| Default value | N/A |

General

Use for providing the name of a person or organisation with an important contributory role in the creation of the resource content. The role of the *Contributor* can be specified as an element refinement (eg DC.Contributor.illustrator). It is not useful for service descriptions.

As an alternative to GOLD (http://www.directories.gov.au), the National Archives has developed the AglsAgent encoding scheme for structuring descriptions of agents in the Creator, Contributor and Publisher elements. Details of AglsAgent can be found at Appendix 2.

HTML examples

```
<META NAME="DC.Contributor" SCHEME="AglsAgent"
CONTENT="corporateName=Australian Government Information Management
Office (AGIMO);email=help@AGIMO.gov.au">
<META NAME="DC.Contributor.editor" CONTENT="Web Management Unit">
<META NAME="DC.Contributor.graphics" SCHEME="AglsAgent"
CONTENT="corporateName=WebDesign;email=webdesign@hereweare.com.au">
```

4.15 Format

| HTML element name | DC.Format |
|-------------------|---|
| Definition | The physical or digital manifestation of the resource |
| Obligation | Optional |
| Encoding scheme | IMT; Physical (for offline resources) |
| Default value | N/A |

General

The *Format* element allows the description of the format in which the resource is manifested (ie physical or virtual characteristics of the medium). Values for electronic resources should be selected from the Internet Media Types (IMT) list of terms. This element allows searchers to decide if the resource is worth accessing or retrieving based on their capacity to cope with the format.

Physical (offline) resources can be described using 'physical' as the encoding scheme. Dimensions and weight can be given.

Qualifiers

Two qualifiers can be used within the *Format* element:

- extent: the size or duration of the resource
- medium: the material or physical carrier of the resource.

Services

The *Format* element describes the nature of a resource, or the communications channel (or channels) through which a service is delivered.

- For services that are not accessible online use 'Physical'. This could be further refined with the terms 'Call Centre' or 'Shopfront'.
- Values can be selected for electronic resources from the Internet Media Types (IMT) list of terms (refer to Appendix J of the AGLS Metadata Element Set, Part 2: Usage Guide (Version 1.3)).

HTML examples

```
Describing a painting:

<META NAME="DC.Format" SCHEME="physical" CONTENT="350mm wide by 1250mm high by 12mm deep, 2.5 kilograms weight">

A PDF file:

<META NAME="DC.Format" SCHEME="IMT" CONTENT="application/pdf">

<META NAME="DC.Format.extent" CONTENT="1.5 megabytes">

An audio CD ROM

<META NAME="DC.Format.medium" CONTENT="CDROM"

<META NAME="DC.Format.extent" CONTENT="650 megabytes; 72 minutes">
```

4.16 Mandate

| HTML element name | AGLS.Mandate |
|-------------------|--|
| Definition | A specific warrant which requires a resource to be created or provided |
| Obligation | Optional |
| Encoding scheme | URI |
| Default value | N/A |

General

The *Mandate* element may be used to describe any legislative or other mandate that requires the creation or provision of the resource. The value of the element may be a reference to a specific mandate, but can also be a URL pointing to a specific legal instrument.

Qualifiers

Three qualifiers may be used with the *Mandate* element:

- act: specific State or Federal Act which requires creation or provision of the resource;
- regulation: specific regulation which requires creation or provision of the resource; and
- case: reference to a case which requires creation or provision of the resource.

HTML examples

```
<META NAME="AGLS.Mandate.act" SCHEME="URI"
CONTENT=http://www.austlii.edu.au/au/legis/cth/num_act/laa1989192/>
<META NAME="AGLS.Mandate.case" CONTENT="England v Van Donk Matter No
CA 40433/97">
```

4.17 Relation

| HTML element name | DC.Relation |
|-------------------|-----------------------------------|
| Definition | A reference to a related resource |
| Obligation | Optional |
| Encoding scheme | URI |
| Default value | N/A |

General

The *Relation* element identifies a relationship that exists between the resource being described and another resource, and also specifies the type of relationship between the two resources. This relationship is expressed as an element refinement (eg DC.Relation.hasVersion). Typically, the value for this element is a formal identifier (eg a URI).

Qualifiers

There are seven element refinement pairs which can be used with this element. Only one side of the pair is used as the element refinement. The pairs are:

- isPartOf/hasPart: one resource is a physical or logical part of another.
- isVersionOf/hasVersion: one resource is an historical state or edition of another resource by the same creator.
- isFormatOf/hasFormat: one resource has been derived from another by a reproduction or reformatting technique which is not fundamentally an interpretation but intended to be a representation.
- references/isReferencedBy: one resource cites, acknowledges, disputes or otherwise refers to another resource.
- isBasedOn/isBasisFor: one resource is a performance, production, derivation, translation, adaptation or interpretation of another resource.

- isRequiredBy/requires: one resource requires another resource for its functioning, delivery, or content and cannot be used without the related resource being present.
- isReplacedBy/replaces: one resource supplants, displaces, or supersedes another resource.

Describing services

Use to link to another service that is related to the current service to support linking or integration of a number of services.

Possibly only of value where a relationship, which is not obvious and would not be identified by a search engine, exists between services or resources (eg 'marriage' and 'wills' to support linking for life event applications). Values for this element could be built based on experience of counter or call centre staff. Search tools should pick up functionally related and subject-related services.

HTML examples

```
A glossary that explains terms in the resource being described:

<META NAME="DC.Relationship.requires"

CONTENT=http://www.example.gov.au/examplefile.html>

A publication cited in an online resource:

<META NAME="DC.Relation.references" CONTENT="Standards Australia, Records Management (AS 4390), Homebush, 1996">
```

4.18 Rights

| HTML element name | DC.Rights |
|-------------------|--|
| Definition | Information about rights held in and over the resource |
| Obligation | Optional |
| Encoding scheme | URI |
| Default Value | Copyright Commonwealth of Australia [current year] |

General

Typically used for copyright statements about information resources, and can be text or a URL pointing to a copyright statement. May also be used to describe access terms and conditions applying to the resource being described. The element is highly recommended for use when describing Australian Government resources.

HTML examples

```
<META NAME="DC.Rights" CONTENT="Copyright Commonwealth of Australia
2001">
<META NAME="DC.Rights" SCHEME="URI"
CONTENT="http://www.naa.gov.au/About_this_Site/about_this_site.html#c
opyright">
```

4.19 Source

| HTML name | DC.Source |
|------------------|--|
| Definition | A reference to a resource from which the present resource is derived |
| Obligation | Optional |
| Encoding schemes | URI, ISBN, ISSN |
| Default Value | N/A |

General

Used for providing a pointer to the original from which the resource being described was derived. Not generally needed unless its use increases the discoverability of the resource being described. For example, it could be useful when describing a scanned version of an original resource, such as a painting, so that a person searching for the original can discover the scanned version. Although the value of this element can be a text string, recommended best practice is to refer to the source by its formal identification (eg an ISBN number, a catalogue number, a URL etc).

Describing services

This element is inappropriate for descriptions of services.

HTML examples

```
<META NAME="DC.Source" CONTENT="Salinger, J.D., Catcher in the Rye,
New York, 1968">
<META NAME="DC.Source" CONTENT="ISBN 0 55555 0000">
<META NAME="DC.Source" CONTENT="http://www.aaa.gov.au/file01.htm">
```

5. WHICH QUALIFIERS SHOULD BE USED?

There is no mandatory requirement to use qualifiers in the AGLS standard and AGLS metadata is perfectly valid without their use. The Australian Government implementation of the standard does, however, require that certain qualifiers be used. This section provides some background information about the concept of qualifiers in the AGLS Metadata Standard.

As a general rule, qualifiers should only be used where it is important to provide better understanding of the resources being described or to improve search precision.

There are two kinds of AGLS qualifiers: element refinements and encoding schemes.

- 1. **Element refinements** can be thought of almost as 'sub-elements' in that they define precise, semantic sub-categories of the element. For example, *Relation* has a number of qualifiers that define particular categories of relationship that can be identified (isPartOf/hasPart; isVersionOf/hasVersion etc).
- 2. **Encoding schemes** indicate how a given data value is to be interpreted by referring to externally controlled vocabularies (thesauruses) from which the value has been sourced, or rules for constructing or encoding values. Encoding schemes are indicated using the *Scheme* or *Language* attributes.

Table 2 summarises the mandatory qualifiers associated with particular AGLS elements.

Table 2: AGLS elements with mandatory qualifiers

| Element | Qualifier type | Qualifier |
|-------------------|--|---|
| Creator/Publisher | encoding scheme | X.500/GOLD OR AglsAgent |
| Identifier | encoding scheme | URI |
| Date | element refinement AND encoding scheme | created or modified AND ISO8601 |
| Function | encoding scheme | AGIFT |
| Subject | encoding scheme | APAIS (but only if there is not a more appropriate thesaurus for your agency) |
| Language | encoding scheme | RFC 3066 |
| Туре | element refinement | aggregationLevel (only if you are describing a collection-level resource) |
| | element refinement | category (if the resource is a service or an agency) |
| | WITH encoding scheme | documentType or serviceType WITH agls-document or agls- service |
| Coverage | element refinement | jurisdiction and/or spatial and/or temporal and/or postcode |

6. POST-IMPLEMENTATION ISSUES

6.1 AGLS compliance and the AGLS logo

The National Archives of Australia, as national lead agency for implementation and development of the AGLS standard, designed the AGLS logo. The logo has been registered as a trademark with IP Australia.

During the first two years of implementing the Government Online Strategy, the National Archives provided a service to check agency AGLS metadata for compliance with the Australian Government implementation requirements. Agencies whose AGLS metadata was compliant with the requirements were able to display the AGLS logo to indicate this.

Once the 2001 implementation deadlines set out in the Strategy had passed, the Archives had achieved its objectives regarding the provision of the AGLS compliance checking service. The Archives ceased compliance checking in October 2002. Agencies may display the AGLS logo to indicate that their site contains AGLS metadata, but the logo itself will not designate compliance with the Online Strategy requirements for AGLS metadata.

The criteria an agency can use to determine whether its website complies with the AGLS Metadata Standard are:

- all mandatory AGLS elements and required elements as appropriate exist in each metadata record;
- values are consistent with the schemes used (eg dates conform to ISO 8601; terms used in the *Function* element come from AGIFT etc);
- elements have been used properly (ie the values for each element are appropriate);
- functions terms are appropriate for the resource (agencies often use all applicable terms
 for the agency in every resource description functions terms should be specific to the
 resource being described);
- *Subject, Title* and *Description* elements contain good quality metadata (ie titles not repeated across the website, subject terms minimal and *Subject* element not full of inappropriate terms, and description appropriate for the resource being described);
- optional elements are used appropriately; and
- metadata obligations in Annex B of the Government Online Strategy have been met.

6.2 AGLS versions and administrative metadata

It is expected that the AGLS standard will continue to evolve as we learn more about the processes of creating, managing and exploiting AGLS metadata.

It is intended that any future revisions to the AGLS standard will be backwardly compatible with earlier versions of the standard. This means that AGLS metadata created with a previous version of the standard should remain valid under subsequent versions. Therefore, for as long as AGLS is in use, changes to the standard will take the form of minor refinements and additions rather than major alterations whenever possible.

The Australian Standard AS 5044 incorporates a significant number of improvements and alterations as a result of pilot testing of earlier versions developed by the National Archives.

Having now successfully 'road-tested' the AGLS Metadata Standard, we are confident that agencies can implement the current version without having to worry that future revisions will require wholesale revision or replacement of metadata.

Nevertheless, because AGLS is an evolving standard, it is desirable for agencies to record which version of the standard (and indeed which other related standard or metadata extension set) their metadata complies with.

In HTML, this can be achieved by adding the following header at the start of an AGLS metadata record:

```
<link rel="AGLS_Metadata_Element_Set_v1-3"
href="http://www.agls.gov.au/AGLS_Metadata_Element_Set_v1-3.html">
```

Metadata version referencing should also be possible through the application of 'administrative metadata' which records information about the metadata, such as when it was created and updated, who created it, who has altered it etc.

Efficient management of metadata requires the creation and maintenance of administrative support metadata. Administrative metadata records *inter alia* when and by whom a given metadata record was created and altered. Such metadata about metadata is usually only created and maintained for internal agency use and therefore does not necessarily need to be in a standardised format. Nevertheless, within the Dublin Core Metadata Initiative there have been efforts to standardised this administrative metadata under the label of 'Admin Core'. A detailed Internet Engineering Task Force (IETF) proposal by Renato Iannella and Debbie Campbell on how to structure Admin Core records can be found at: http://metadata.net/admin/draft-iannella-admin-01.txt. Further information on Admin Core can be found at http://metadata.net/admin/draft-iannella-admin-01.txt. Further information on Admin

6.3 Relationship between AGLS and AGLS extension sets

Just as AGLS is an extension of the Dublin Core Standard, so particular communities of interest or online resource discovery initiatives within government can extend AGLS.

Extension involves the addition of new elements or qualifiers to those stipulated in the *AGLS Metadata Element Set, Part 1: General.* Section 1.5 of the *AGLS Metadata Element Set, Part 2: Usage Guide,* sets out the rules for extending AGLS. These rules must be observed for the extension set to comply with basic AGLS.

The basic rule is that any metadata record created in accordance with an AGLS extension set should also constitute a fully compliant AGLS record. In other words, agencies should not have to create separate metadata records for the same resource in order to comply with both AGLS and the extension set – the same record should satisfy both sets of requirements.

Extension sets must not alter the basic semantics of any of the 19 AGLS elements that they use. For example, a data value qualified by an extension set qualifier should still make sense as an AGLS element even without the qualifier. Additional qualifiers should not conflict with, although they may enrich or refine, the semantics of the AGLS parent element.

Some AGLS extension sets have already emerged. The most notable of these from the perspective of Australian Government agencies is the HealthInsite (refer to http://www.healthinsite.gov.au/content/internal/page.cfm?ObjID=00017B95-F7E3-1DEF-9E6983032BFA006D) metadata specifications. Agencies that wish to make their resources accessible through this Government Online initiative should look at the website for further guidance and information.

Other AGLS-related metadata sets that are in use in Australian Government agencies include Education Network Australia (EdNA) and the Environmental Resources Information Network (ERIN). EdNA and ERIN are Dublin Core-based metadata extension sets that predate, but are compatible with, the AGLS standard.

APPENDIX 1 EXAMPLES OF AGLS RECORDS

The examples given below for specific resource types are all in HTML 4.0 syntax. Note that the examples here represent best practice in AGLS metadata creation and might contain more than the minimum number of elements required.

1 Agency home page

```
<link rel="AGLS Metadata Element Set v1-3"</pre>
href="http://www.agls.gov.au/AGLS_Metadata_Element_Set_v1-3.html">
<META NAME="DC.Identifier" SCHEME="URI"</pre>
CONTENT="http://www.naa.gov.au/">
<META NAME="DC.Title" CONTENT="National Archives of Australia</pre>
Website">
<META NAME="DC.Creator" SCHEME="GOLD" CONTENT="c=AU; co=Commonwealth</pre>
of Australia; ou=National Archives of Australia">
<META NAME="DC.Subject" SCHEME="APAIS" CONTENT="Archives; Australia -</pre>
History">
<META NAME="DC.Description" CONTENT="Provides access to information</pre>
about the activities, services and holdings of the National Archives
of Australia">
<META NAME="DC.Publisher" CONTENT="corporateName=National Archives of</pre>
Australia (NAA)">
<META NAME="DC.Date.valid" SCHEME="DCMIPeriod" CONTENT="start=2000-</pre>
01-19">
<META NAME="DC.Type.aggregationLevel" CONTENT="collection">
<META NAME="DC.Type.documentType" SCHEME="agls-document"</pre>
CONTENT="homepage">
<META NAME="DC.Format" SCHEME="IMT" CONTENT="text/html">
<META NAME="DC.Language" SCHEME="RFC3066" CONTENT="en">
<META NAME="DC.Coverage.jurisdiction" SCHEME="AglsJuri"</pre>
CONTENT="Commonwealth of Australia">
<META NAME="DC.Rights" CONTENT="Copyright Commonwealth of Australia</pre>
2000">
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="Recordkeeping</pre>
standards; Cultural affairs">
```

2 Collection-level resource (an entry point to a collection of pages on the same topic)

```
<link rel="AGLS_Metadata_Element_Set_v1-3"</pre>
href="http://www.agls.gov.au/AGLS_Metadata_Element_Set_v1-3.html">
<META NAME="DC.Identifier" SCHEME="URI"</pre>
CONTENT="http://www.naa.gov.au/recordkeeping/gov_online/agls/summary.
html">
<META NAME="DC.Title CONTENT="Australian Government Locator Service</pre>
(AGLS)">
<META NAME="DC.Creator" SCHEME="GOLD" CONTENT="c=AU; co=Commonwealth</pre>
of Australia; ou=National Archives of Australia">
<META NAME="DC.Subject" SCHEME="APAIS" CONTENT="Archives; Information</pre>
management; information retrieval">
<META NAME="DC.Description" CONTENT="Provides access to information</pre>
and resources about the Australian Government Locator Service (AGLS)
metadata standard, and how to implement it.">
<META NAME="DC.Publisher" SCHEME="AglsAgent"</pre>
CONTENT="corporateName=National Archives of Australia (NAA)">
<META NAME="DC.Date.created" SCHEME="ISO8601" CONTENT="2000-03-31">
```

```
<META NAME="DC.Type.aggregationLevel" CONTENT="collection">
<META NAME="DC.Type.documentType" SCHEME="agls-document"
CONTENT="promotional">
<META NAME="DC.Format" SCHEME="IMT" CONTENT="text/html">
<META NAME="DC.Language" SCHEME="RFC3066" CONTENT="en">
<META NAME="DC.Coverage.jurisdiction" CONTENT="Commonwealth of Australia">
<META NAME="DC.Rights" CONTENT="Copyright Commonwealth of Australia 2000">
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="Recordkeeping standards">
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="Recordkeeping standards">
<META NAME="DC.Relation.references" SCHEME="URI"
CONTENT="http://www.dcita.gov.au/ogo/imsc/imscrept.htm">
<META NAME="AGLS.Availability" SCHEME="AglsAvail"
CONTENT="email=agls@naa.gov.au">
```

3 Individual media release

```
<link rel="AGLS Metadata Element Set v1-3"</pre>
href="http://www.aqls.gov.au/AGLS Metadata Element Set v1-3.html">
<META NAME="DC.Identifier" SCHEME="URI"</pre>
CONTENT="http://www.naa.gov.au/Media Releases/census data.html">
<META NAME="DC.Title" CONTENT="Australians choose to have census data</pre>
released in 100 years">
<META NAME="DC.Creator" SCHEME="AglsAgent"</pre>
CONTENT="jurisdiction=Commonwealth of Australia;
corporateName=National Archives of Australia (NAA)">
<META NAME="DC.Subject" SCHEME="APAIS" CONTENT="Archives; Census">
<META NAME="DC.Description" CONTENT="The 2001 Population Census will</pre>
offer the Australian people a choice of having their names, addresses
and Census form information retained by the National Archives of
Australia and released for research purposes after 99 years">
<META NAME="DC.Publisher" SCHEME="AglsAgent"</pre>
CONTENT="corporateName=National Archives of Australia (NAA)">
<META NAME="DC.Date.issued" SCHEME="ISO8601" CONTENT="1999-12-17">
<META NAME="DC.Type.documentType" CONTENT="Media release">
<META NAME="DC.Format" SCHEME="IMT" CONTENT="text/html">
<META NAME="DC.Language" SCHEME="RFC3066" CONTENT="en">
<META NAME="DC.Relation.references" SCHEME="URI"</pre>
CONTENT="http://www.abs.gov.au/">
<META NAME="DC.Coverage.jurisdiction" CONTENT="Commonwealth of</pre>
Australia">
<META NAME="DC.Rights" CONTENT="Copyright Commonwealth of Australia</pre>
2000">
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="Recordkeeping</pre>
standards; Census collection">
```

4 Service offered both online and offline

```
<link rel="AGLS_Metadata_Element_Set_v1-3"
href="http://www.agls.gov.au/AGLS_Metadata_Element_Set_v1-3.html">
<META NAME="DC.Identifier" SCHEME="URI"
CONTENT="http://www.naa.gov.au/Publications/order/order.htm">
<META NAME="DC.Title" CONTENT="National Archives of Australia
Publication Order Form">
```

```
<META NAME="DC.Creator" SCHEME="AglsAgent"</pre>
CONTENT="jurisdiction=Commonwealth of Australia;
corporateName=National Archives of Australia (NAA)">
<META NAME="DC.Subject" SCHEME="APAIS" CONTENT="Archives; Information</pre>
management">
<META NAME="DC.Description" CONTENT="Facility for ordering printed</pre>
National Archives publications on a range of historical and archives-
related topics. The form may be submitted electronically or printed
and mailed to the National Archives.">
<META NAME="DC.Publisher" SCHEME="AglsAgent"</pre>
CONTENT="corporateName=National Archives of Australia (NAA)">
<META NAME="DC.Date.created" SCHEME="ISO8601" CONTENT="2000-01-19">
<META NAME="DC.Type.category" CONTENT="service">
<META NAME="DC.Type.serviceType" SCHEME="agls-service"</pre>
CONTENT="orders and purchases">
<META NAME="DC.Format" SCHEME="IMT" CONTENT="multipart/mixed">
<META NAME="DC.Language" SCHEME="RFC3066" CONTENT="en">
<META NAME="DC.Coverage.jurisdiction" CONTENT="Commonwealth of</pre>
Australia">
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="collection access;</pre>
collection promotion">
<META NAME="AGLS.Availability" SCHEME="AglsAvail"</pre>
CONTENT="corporateName=National Archives of Australia (NAA);
address=PO Box 7425 Canberra Mail Centre ACT 2610;
contact=Publication Sales, 02 6212 3609; email=naasales@naa.gov.au">
<META NAME=DC.Rights" CONTENT="Copyright Commonwealth of Australia</pre>
2000">
```

5 Offline service

```
<link rel="AGLS_Metadata_Element_Set_v1-3"</pre>
href="http://www.agls.gov.au/AGLS_Metadata_Element_Set_v1-3.html">
<META NAME="DC.Title" CONTENT="World War 1 Dossier Request Service">
<META NAME="DC.Creator" SCHEME="AglsAgent"</pre>
CONTENT="jurisdiction=Commonwealth of Australia;
corporateName=National Archives of Australia (NAA)">
<META NAME="DC.Subject" SCHEME="APAIS" CONTENT="Armed forces; World</pre>
War 1">
<META NAME="DC.Description" CONTENT="Facility for ordering copies of</pre>
World War 1 service personnel dossiers for members of the Australian
armed forces">
<META NAME="DC.Publisher" SCHEME="AglsAgent"</pre>
CONTENT="corporateName=National Archives of Australia (NAA)">
<META NAME="DC.Date.valid" SCHEME="DCMIPeriod" CONTENT="start=2000-</pre>
<META NAME="DC.Type.category" CONTENT="service">
<META NAME="DC.Type.serviceType" SCHEME="agls-service"</pre>
CONTENT="orders and purchases">
<META NAME="DC.Language" SCHEME="RFC3066" CONTENT="en">
<META NAME="DC.Relation.isReferencedBy" SCHEME="URI"</pre>
CONTENT="http://www.naa.gov.au/The_Collection/Defence/Conflicts/wwl/w
wldossier/wwldossier.html">
<META NAME="DC.Coverage.jurisdiction" CONTENT="Commonwealth of</pre>
Australia">
<META NAME="DC.Coverage.temporal" SCHEME="ISO8601"</pre>
CONTENT="1914/1918">
```

```
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="Collection
access">
<META NAME="AGLS.Audience" CONTENT="Genealogists">
<META NAME="AGLS.Availability" SCHEME="AglsAvail"
CONTENT="corporateName=National Archives of Australia (NAA);
address=PO Box 7425 Canberra Mail Centre ACT 2610; contact=WW1
Personnel Records Service, 02 6212 3439; email=wwlprs@naa.gov.au;
cost=$AU16.20 from within Australia, $AU14.70 for orders from outside
Australia">
```

6 Regional grants program

```
<link rel="AGLS_Metadata_Element_Set_v1-3"</pre>
href="http://www.agls.gov.au/AGLS_Metadata_Element_Set_v1-3.html">
<META NAME="DC.Creator" SCHEME="AglsAgent"</pre>
CONTENT="corporateName=Regional Services, Development and Local
Government; jurisdiction=Commonwealth of Australia">
<META NAME="DC.Publisher" SCHEME="AglsAgent"</pre>
CONTENT="corporateName=Department of Transport and Regional Services;
jurisdiction=Commonwealth of Australia">
<META NAME="DC.Rights" CONTENT="Copyright Commonwealth of Australia
2001">
<META NAME="DC.Title" CONTENT="Rural Solutions Programme">
<META NAME="DC.Subject" SCHEME="DOTRS" CONTENT="community development;</pre>
community involvement; regional communities; subsidies">
<META NAME="DC.Description" CONTENT="The Regional Solutions Programme</pre>
main page provides access to guidelines and information for applicants
interested in applying for funding. The Programme provides funding for
rural and regional communities facing economic challenges, a declining
population due to industry restructuring, a lack of development
opportunities, or high levels of unemployment and social disadvantage.
Funding is available for non-profit groups with strong support from
their community or region - local government bodies are also eligible
to apply. The Programme commenced in June 2000 and will run over 4
years with some $90 million being available. Grants range from $1,000
for small-scale projects (such as developing community plans) through
to $500,000 for large-scale projects (such as community infrastructure
projects).">
<META NAME="DC.Date" SCHEME="ISO8601" CONTENT="2001-05-03">
<META NAME="DC.Type.documentType" CONTENT="guidelines">
<META NAME="AGLS.Availability" SCHEME="AglsAvail"</pre>
CONTENT="corporateName=Countrylink Australia; address=GPO Box 594
Canberra ACT 2601; contact=1800 026 222 (freecall);
email=countrylink@dotrs.gov.au; hours=9:00am-6:00pm Monday to Friday
AEST for freecall telephone number">
<META NAME="DC.Identifier" SCHEME="URI"</pre>
CONTENT="http://www.dotrs.gov.au/regional/solutions/index.htm">
<META NAME="DC.Coverage.jurisdiction" SCHEME="AglsJuri"</pre>
CONTENT="Commonwealth of Australia">
<META NAME="AGLS.Function" SCHEME="AGIFT" CONTENT="financial</pre>
assistance">
<META NAME="AGLS.Audience" SCHEME="agls-audience" CONTENT="rural">
```

7 Child and Youth Support Service record supporting several portals

```
<link rel="AGLS_Metadata_Element_Set_v1-3"</pre>
href="http://www.agls.gov.au/AGLS_Metadata_Element_Set_v1-3.html">
<META NAME="DC.Creator" SCHEME="AglsAgent"</pre>
CONTENT="corporateName=Commonwealth Department of Health and Aged
Care">
<META NAME="DC.Publisher" SCHEME="AglsAgent" CONTENT="</pre>
corporateName=Commonwealth Department of Health and Aged Care">
<META NAME="DC.Rights" CONTENT="Copyright Commonwealth of Australia</pre>
2001">
<META NAME="DC.Title" CONTENT="Child and Youth Support Services">
<META NAME="DC.Subject" SCHEME="Health Thesaurus" CONTENT="children;</pre>
community services; counselling; enquiry services; social support;
youth">
<META NAME="DC.Subject" SCHEME="TAGS" CONTENT="Child Support">
<META NAME="DC.Description" CONTENT="HealthInsite topic page linking</pre>
to resources which cover a range of support services, counselling and
contacts specifically for children and young people. ">
<META NAME="DC.Language" SCHEME="RFC3066" CONTENT="en">
<META NAME="DC.Date.modified" SCHEME="ISO8601" CONTENT="2000">
<META NAME="DC.Type.aggregationLevel" CONTENT="collection">
<META NAME="DC.Type.category" CONTENT="document">
<META NAME="DC.Type.documentType" SCHEME="agls-document"</pre>
CONTENT="guidelines">
<META NAME="DC.Type" SCHEME="HI type" CONTENT="document">
<META NAME="DC.Type" SCHEME="HI category" CONTENT="navigation">
<META NAME="DC.Format" SCHEME="IMT" CONTENT="text/html">
<META NAME="DC.Identifier" SCHEME="URI" CONTENT="</pre>
http://www.healthinsite.gov.au/T.cfm?PID=799">
<META NAME="AGLS.Audience" SCHEME="HI age" CONTENT="adult">
<META NAME="AGLS.Audience" SCHEME="agls-audience" CONTENT="families;</pre>
adult; children">
<META NAME="HI.Complexity" CONTENT="easy">
<META NAME="HI.Status" CONTENT="approved">
<META NAME="Keywords" CONTENT="children, community services,</pre>
counselling, enquiry services, social support, youth">
<META NAME="Description" CONTENT="HealthInsite topic page linking to</pre>
resources which cover a range of support services, counselling and
contacts specifically for children and young people.">
```

APPENDIX 2 ENCODING SCHEMES

For more detailed information on AGLS encoding schemes, refer to the National Archives' website at http://www.naa.gov.au/recordkeeping/gov_online/agls/encoding_schemes.html

AgIsAgent encoding scheme

AglsAgent is an encoding scheme developed by the National Archives for structuring descriptions of agents in the *Creator*, *Contributor* and *Publisher* elements.

| Component | Definition |
|---------------|--|
| personalName | The name of a person |
| corporateName | The name of an organisation |
| jurisdiction | The legal jurisdiction of the agent NB values for this component must be drawn from the AGLS Jurisdiction controlled list (see Appendix 3) |
| contact | Contact details for the agent. Can include an official title. Typically includes a phone number |
| address | Street or postal address for the agent |
| email | Email address for the agent |
| sector | Indicates whether the creator is from the government or non-government sector: 'government' and 'non-government' are the only allowable values NB The default value is 'government' |

AgIsAvail encoding scheme

AglsAvail is an encoding scheme developed by the National Archives for structuring availability information for the *Availability* element.

| Component | Definition |
|---------------|--|
| personalName | The name of a person making the resource available |
| corporateName | The name of an organisation making the resource available |
| jurisdiction | The legal jurisdiction of the agent making the resource available NB values for this component must be drawn from the AGLS Jurisdiction controlled list (see Appendix 3) |
| contact | Contact details for the agent making the resource available. Can include an official title. Typically includes a phone number. |
| address | Street or postal address for the agent making the resource available |
| email | Email address for the agent making the resource available |
| hours | Hours during which service can be accessed at the locations identified in address components |
| cost | Cost of obtaining the resource |
| postcode | Australian postcode(s) where the resource is available. Typically used in describing availability of services. |

APPENDIX 3 CONTROLLED LISTS

For more detailed information on AGLS controlled lists, refer to the National Archives' website at http://www.naa.gov.au/recordkeeping/gov_online/agls/encoding_schemes.html

Audience element controlled list

A controlled list of values for use with the *Audience* element appears below. This list, developed by the National Archives, is the recommended set of terms for Australian Government agencies.

| Scheme name | Values |
|---------------|--|
| agls-audience | Aboriginal and Torres Strait islanders all (all is the default value and may be omitted) business (can be further refined by using the bep.industry list) carers children community groups employees employers gay and lesbian government jobseekers low income earners men migrants parents |
| | people with disabilities primary industry rural (includes regional Australia) seniors students teachers tourists women youth |

Document controlled list

A controlled list of values for use with the *Type* element and the documentType refinement. This list is a recommended basic set of terms for use by Australian Government agencies.

| Scheme name | Values |
|---------------|---|
| agls-document | agenda checklist contract dataset form government gazette guidelines (includes advisory) homepage image index instructional (includes manual, quiz, tutorial) media release meeting minutes minute (correspondence form) policy statement physical object promotional (includes announcement) report (includes presentation) software sound |
| | video |

Services controlled list

A controlled list of values for use with the *Type* element and the serviceType refinement. This list is a recommended basic set of terms for use by Australian Government agencies.

| Scheme name | Values |
|--------------|---------------------------|
| agls-service | applications |
| | benefits and entitlements |
| | bills, rates and levies |
| | bonds |
| | bookings and reservations |
| | business advisory |
| | certificates |
| | claims |
| | communications forum |
| | complaints and appeals |
| | data exchange |
| | enquiries |
| | enrolments |
| | financial |
| | grants |
| | infringements and fines |
| | legal advisory |
| | licenses and permits |
| | lodgements |
| | orders and purchases |
| | refunds |
| | registrations |
| | renewals |
| | subscription |
| | technical |
| | tenders |
| | testing |
| | training |
| | transactions |

Jurisdiction controlled list

A controlled list of values for use with the jurisdiction component of AglsAgent and AglsAvail, and with the jurisdiction refinement of the *Coverage* element.

| Scheme name: Agls Juri | | | |
|------------------------------------|-----|--|--|
| Jurisdiction & abbreviate | ion | Definition | |
| [Commonwealth of] Australia | AU | Commonwealth of Australia Constitution Act 1900 (UK) | |
| Australian Antarctic Territory | AAT | The Australian Antarctic Territory plus the subantarctic territories of Heard and McDonald Islands | |
| Australian Capital Territory (ACT) | ACT | Seat of Government Surrender Act 1909 (NSW) Seat Of Government Surrender Act 1915 (NSW) | |
| Indian Ocean Territories | IOT | Cocos (Keeling) Islands and Christmas Island | |
| New South Wales | NSW | Constitution Act 1902 (NSW) | |
| Norfolk Island | NI | Norfolk Island Act 1979 (Cth) | |
| Northern Territory | NT | Northern Territory Acceptance Act 1910 (Cth) | |
| Queensland | QLD | Letters Patent erecting the Colony of Queensland 1859 (UK) | |
| | | Letters Patent altering the western boundary of Queensland 1862 (UK) | |
| | | Queensland Coast Islands Act 1879 (Qld) | |
| South Australia | SA | South Australian Act (Foundation Act) 1834 (UK) | |
| | | Letters Patent establishing the Province of South Australia 19 February 1836 (UK) | |
| Tasmania | TAS | Order In Council Separating Van Diemen's Land From New South Wales 1825 (UK) | |
| Victoria | VIC | General Instructions to the Superintendent of Port Phillip, 1839 | |
| Western Australia | WA | Letters Patent re Constitution 25 August 1890 (UK) | |
| Other | | Any other jurisdiction not named here | |

APPENDIX 4 AGLS-BASED TOOLS

Information on a number of Dublin Core and AGLS metadata authoring tools is available from http://www.naa.gov.au/recordkeeping/gov_online/agls/tools.html.

For further information, or to have a product evaluated for its ability to produce AGLS-compliant metadata should contact the AGLS Maintenance Agency at agls@naa.gov.au.