



**wheatbelt**  
natural resource  
management

# Spatial Data Management

## Policies and Templates

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## 1. Introduction

The *Wheatbelt NRM Spatial Data Management - Policies and Templates* provides supporting information to Delivery Organisations to enable them to meet contractual obligations associated with spatial data management requirements during the implementation of natural resource management projects in the WNRM region.

As an Associate Member of the WA Land Information System (WALIS), Wheatbelt NRM has a responsibility to actively contribute and support WALIS policies, procedures, strategic directions and principles, and where appropriate, to incorporate them within the operation and culture of the organisation.

To facilitate this, Wheatbelt NRM has formally adopted a set of nine policies relating to spatial data management, and delivery organisations are contractually obliged to uphold these policies and procedures when implementing projects on behalf of, and funded by Wheatbelt NRM.

This document provides information on the policies and procedures, and supporting resources and associated templates. Additional support and information can be found in the *Regional Spatial Information Management Toolkit*, available from Wheatbelt NRM.

For support and assistance in meeting these requirements please do not hesitate to contact Wheatbelt NRM on 9690 2250.

## 2. Definitions

The following definitions apply to policies outlined in Section 3:

**‘Agreement’** means the project agreement between the regional group and the project manager under which the project manager agrees to undertake the project and the regional group agrees to provide funding for the project. A project agreement consists of the standard terms and conditions, the attachments containing any additional information and/or special terms and conditions, the schedules which include the project details, and in the case of the Trust or NAP funded projects, either or both of the bilateral agreements as appropriate.

**‘Delivery organisation’** is an organisation contracted to undertake a project/activity in accordance with an associated agreement.

**‘Fitness-for-purpose’** is an assessment for determining the appropriateness of a dataset for a specific use.

**‘Funding agreement’** means any agreement between the regional group and funding organisations such as the Commonwealth, state government, or private sector to undertake projects.

**‘Intellectual property’** includes all copyright and future copyright, (including rights in relation to phonograms and broadcasts), all rights in relation to inventions (including patent rights), plant varieties, registered and unregistered trademarks (including service marks), registered designs, and circuit layouts, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields as well as traditional indigenous knowledge. With regard to spatial information this relates to the base data itself as well as any derived products (maps, reports etc.).

**‘Point-of-truth’** is the authoritative location for any data or information held by the department.

**‘Project’** means an undertaking of the project manager, approved by the regional group with specific outputs and milestones that are to achieve or contribute to related management action and resource condition targets that have been identified in the regional group’s investment plan, approved by state and Commonwealth ministers.

**'Spatial data'** means any new, enhanced or derived data that can be geographically referenced. This includes data that can describe a location or any data that can be linked to a location. This can be included as part of intellectual property (see definition above).

### 3. Policies

#### ***i. Spatial data use (assessing fitness-for-purpose and point-of-truth)***

*Modified from NLWRA 2003*

Policy title	Spatial data use (assessing fitness-for-purpose and point-of-truth)
Policy statement	Any spatial information that is used as part of performing projects funded via a Wheatbelt NRM region funding agreement should be assessed to determine its appropriateness (fitness-for-purpose) and point-of-truth.
Procedure	<ol style="list-style-type: none"> <li>1. Prior to using any dataset a user will need to assess the appropriateness of the dataset or fitness-for-purpose for the intended use. This involves assessment of such criteria as scale, resolution, accuracy, classification system and integrity of the dataset (Figure 4). This information is usually provided in the metadata statement which can be requested from the data custodian. Figure 3 shows the flow of data management.</li> <li>2. Users should clarify with data custodians or through Interragator+ (or similar catalogues) that the version of the dataset that they hold is authoritative or the point-of-truth dataset. If available the data should be obtained through the use of a data service. The use of outdated or unofficial datasets can lead to major problems in analysis and could prevent any derived data being integrated with other datasets.</li> </ol>
Related resources	<p>Interragator+ – see toolkit section 2.2</p> <p>Data services – see toolkit section 2.5</p>

## ii. *Spatial data use (responsibilities of users)*

Policy title	Spatial data use (responsibilities of users)
Policy statement	Any spatial information that is used as part of performing a project funded via an Wheatbelt NRM (WNRM) region funding agreement should be used in such a way that it complies with section 8 'Responsibilities of Users' in the WALIS data custodianship policy. The WALIS policy can be downloaded at <a href="http://www.walis.wa.gov.au/policies/custodianship/">http://www.walis.wa.gov.au/policies/custodianship/</a>
Procedure	<p>Users of data have the following responsibilities to the data custodians:</p> <ul style="list-style-type: none"> <li>• using data in an appropriate manner—referring to constraints described in accompanying metadata</li> <li>• complying with terms and conditions of licence agreements and any requirements for payment for provision of the data</li> <li>• maintaining agreed standards when collecting additional data/information of a similar nature and agreeing to provide the custodial agency with a free copy of any spatial information that updates that provided by the custodian</li> <li>• advising custodians of any changing requirements for the use of their information in order to assist the custodian in collecting, maintaining and distributing their data and</li> <li>• advising the custodian of any errors or omissions in the datasets or information products they receive.</li> </ul>
Related policy	Standards for collection and maintenance of spatial data
Related resources	Data collection standards – see toolkit section 3

### iii. **Standards for collection and maintenance of spatial data**

It is important that spatial data is collected and managed according to agreed industry standards. The benefits of doing this include (modified from NLWRA 2003):

- improved data consistency
- higher quality data
- greater opportunity for data integration and aggregation
- increased opportunities for sharing data
- improved documentation and understanding of data and information resources
- improved control over data updating
- improved data security

Policy title	Standards for collection and maintenance of spatial data
Policy statement	All spatial information brought into existence when performing projects funded via a Wheatbelt NRM region funding agreement should be collected in such a way as to meet any agreed national, state and regional collection standards. The maintenance of any datasets should follow WALIS data management guidelines. The WALIS data management guidelines can be downloaded at <a href="http://www.walis.wa.gov.au/policies/assets/WALIS%20Data%20Management%20Guidelines%20v01.00.pdf/view?searchterm=data%20management%20guidelines">http://www.walis.wa.gov.au/policies/assets/WALIS%20Data%20Management%20Guidelines%20v01.00.pdf/view?searchterm=data%20management%20guidelines</a>
Procedure – collection standards	The following steps should be undertaken while planning a project: <ol style="list-style-type: none"> <li>1. identify any relevant national, state or regional data collection standards</li> <li>2. adopt relevant standards as minimum standards for the project</li> <li>3. incorporate the project minimum standard into data collection methodologies and in the design of GIS and database systems that hold the data.</li> </ol>
Procedure – maintenance standards	The following should be maintained for each custodial dataset: <ol style="list-style-type: none"> <li>1. a data management plan</li> <li>2. a data dictionary</li> <li>3. a metadata statement.</li> </ol>
Related policy	Spatial data custodianship Spatial data management Metadata
Related resources	Standards for data collection – see toolkit section 3 Data management plan – see toolkit section 4.3.1 Metadata statement – see toolkit section 4.3.3 Data dictionary – see toolkit section 4.3.2

#### **iv. Spatial data ownership**

Clear identification of who owns the data is a key aspect of information management. This will help prevent data being misused, being used without payment or without proper attribution to the owner, or being neglected or lost (NLWRA 2003). Generally ownership resides with the organisation(s) who commissioned the data capture or compilation and who retains managerial and financial control over the data (NLWRA 2003).

Ownership implies the right to exploit the data and, in situations where its continued maintenance becomes unnecessary or uneconomical, the right to destroy the data (NLWRA 2003). Data owners hold the intellectual property rights over a data set (ANZLIC 2002, NLWRA 2003) and these rights can be owned at different levels. For instance, a merged or derived dataset can be owned by one organisation even though other organisations own the source or constituent data (NLWRA 2003).

The data owner may appoint another organisation, agency or group to act as a data custodian for a dataset it owns (Figure 6). The data custodian is responsible and accountable to the data owner for the management of a dataset under its care in line with defined policies.

In the WNRM region, it is important that data ownership and intellectual property rights are considered, prior to the project starting, as part of the negotiation of the project agreements with third-party deliverers or contractors. These project agreements need to comply with overarching agreements such as bilateral agreements.

The table below describes policy and procedures that can be used in the WNRM region to ensure data ownership is identified for all datasets created through WNRM projects. Also outlined are some procedures data owners should follow to ensure they are fulfilling their responsibilities when data is created.

Policy title	Spatial data ownership
Policy statement	For projects funded via a Wheatbelt NRM region funding agreement it must be clearly stated—in the terms and conditions of project agreements or contracts with third parties or contractors—who owns any spatial data that is brought into existence as part of the performance of the project and who has rights over its associated intellectual property.
Procedure – identification of data owner for data created by the ACC region	<ol style="list-style-type: none"> <li>1. Identify any overarching agreements, such as with the Commonwealth or state that define the rights, roles and responsibilities of the region in regard to data ownership, intellectual property and copyright.</li> <li>2. Clearly state in project agreements with third-party deliverers who will own any project data, including intellectual property, created by the project. Clearly state what rights both parties will have to use, reproduce, adapt and exploit the data and intellectual property.</li> </ol>
Procedure – fulfilling data owner's responsibilities once data is created.	<ol style="list-style-type: none"> <li>1. Assess if a data custodian should be assigned to the dataset using the amended WALIS criteria stated in the data custodianship policy in 1.4.3.</li> <li>2. For those datasets that require a custodian to be assigned, use the amended WALIS criteria, stated in the data custodian policy in 1.4.3, to assign a data custodian.</li> <li>3. Ensure information on access constraints is documented in the data management plan and metadata statement.</li> <li>4. Ensure that data custodians are complying with all of the WNRM region's policies in regard to data management and distribution (outlined in section 1.4), including: <ol style="list-style-type: none"> <li>a. ensuring disclosure of restricted or private information is considered prior to releasing data to external clients</li> <li>b. ensuring a licence agreement is arranged and signed before the data is released to external clients.</li> </ol> </li> </ol>
Related policy	<p>Standards for collection and maintenance of spatial data</p> <p>Spatial data custodianship</p> <p>Spatial data management</p> <p>Metadata</p> <p>Spatial data distribution and licensing</p>
Related resources	Standard clause/s for contracts and project agreements – see toolkit section 5.1.

## **v. *Spatial data custodianship***

A data custodian is the organisation with specific data collection and management roles and responsibilities over a dataset (NLWRA 2003; ANZLIC 1998). Their role is to manage and maintain geographic data in an effective and efficient manner (WALIS 2006). In some instances a scientific custodian is also assigned where it is deemed necessary, for the long-term maintenance of the dataset, to have someone overseeing the dataset who has specialist knowledge of how and what data has been captured.

The WALIS data custodianship policy (2006) provides an effective overarching policy framework for data custodianship in the WNRM region. The Policy Statement in the table below includes some amendments/additional procedures to ensure its effective application in the WNRM region.

Policy title	Spatial data custodianship
Policy statement	The WALIS data custodianship (DC) policy, including amendments and additional procedures identified below, should be applied to all those spatial datasets collected or derived by projects funded via an WNRM region funding agreement. The WALIS policy can be downloaded at <a href="http://www.walis.wa.gov.au/policies/custodianship/">http://www.walis.wa.gov.au/policies/custodianship/</a>
Additional and amended procedures specific to the WNRM region	<p>WALIS DC policy section 2. Scope – includes data held not just by state government agencies but those held by the WNRM region and non-government third-party delivery organisations.</p> <p>WALIS DC policy section 5. Criteria for spatial data requiring custodianship – formal custodianship is required for spatial datasets and information products:</p> <ul style="list-style-type: none"> <li>• for which the WNRM region has a strategic need</li> <li>• are used by the WNRM region for critical business/operational and monitoring and evaluation requirements.</li> </ul> <p>The project manager and ACC region program coordinator will determine those datasets for which formal custodianship is required.</p> <p>WALIS DC policy section 6. Criteria for selecting a custodian – the criteria for assigning custodianship in the ACC region are that the custodian:</p> <ul style="list-style-type: none"> <li>• has the greatest operational need for the dataset/information product</li> <li>• is the most competent to capture and/or maintain the dataset/information product</li> <li>• is the custodian of similar datasets thereby providing opportunities to incorporate the ACC region dataset into a larger/state agency corporate dataset. This will make the management of the data more efficient and provide greater opportunities to make the data more widely available</li> <li>• requires the highest integrity of the dataset/information product</li> <li>• best understands stakeholder needs</li> <li>• has a reasonable prospect to obtain adequate funds to collect and maintain the data into the future.</li> </ul> <p>Information in WALIS DC policy sections 7 through to 12 represents best practice and are not necessarily binding requirements.</p>
Related policy	<p>Spatial data custodianship</p> <p>Spatial data management</p> <p>Metadata</p> <p>Spatial data distribution and licensing</p>
Related resources	Standard clause/s for contracts and project agreements – see toolkit section 5.1.

## vi. *Spatial data management*

A data management plan will assist data custodians to manage datasets over their entire life cycle in an efficient and coordinated manner.

Policy title	Spatial data management
Policy statement	The Wheatbelt NRM region requires data custodians to develop a data management plan for all custodial spatial datasets collected or derived by projects funded via an ACC region funding agreement. Any access restrictions relating to confidentiality and use of the data that apply to the dataset should be listed in the data management plan.
Procedure	A data management plan template is provided in section 4.3.1. A more detailed data management plan is listed in Appendix A of the WALIS data management guidelines which can be downloaded at <a href="http://www.walis.wa.gov.au/policies/assets/WALIS%20Data%20Management%20Guidelines%20v01.00.pdf">http://www.walis.wa.gov.au/policies/assets/WALIS%20Data%20Management%20Guidelines%20v01.00.pdf</a>
Related policy	Standards for collection and maintenance of spatial data Spatial data custodianship
Related resources	Data management plan (including template) – see toolkit section 4.3.1

## vii. Metadata

Metadata describes the content, quality, currency and availability of data.

Metadata needs to be collected at different levels to enable users to:

- search for and discover data
- assess and determine fitness for use
- locate and access the data
- utilise the data appropriately
- understand constraints of transferring data to others
- manage data from others appropriately.

The ANZLIC metadata guidelines are widely adopted across Australia; these define a small number of minimum or 'core' metadata elements, required for data discovery purposes.

It is also standard practice for metadata of key custodial datasets to be included on spatial data catalogues, such as Interragator+ or the Australian Spatial Data Directory, in order to provide wide access (WALIS 2007).

Policy title	Metadata
Policy statement	The Wheatbelt NRM region requires data custodians to develop metadata for all custodial spatial datasets collected or derived by projects funded via a Wheatbelt NRM region funding agreement. The metadata should comply with WALIS metadata policy which can be downloaded at <a href="http://www.walis.wa.gov.au/policies/assets/metadata.pdf">http://www.walis.wa.gov.au/policies/assets/metadata.pdf</a>
Procedure (capture, discovery, transfer)	<ol style="list-style-type: none"> <li>1. Both the ANZLIC core and mandatory elements should be captured, other elements may be captured to improve usability (<a href="http://www.anzlic.org.au/policies.html">http://www.anzlic.org.au/policies.html</a>)</li> <li>2. The metadata should be lodged on the online catalogue Interragator+. Where a third-party delivery organisation has no means of doing this the ACC region or WALIS will assist.</li> <li>3. When data is physically transferred a copy of the metadata should accompany it.</li> </ol>
Related resources	<p>Writing a metadata statement – see toolkit section 4.3.3</p> <p>How to find and access spatial data and information – see toolkit section 2.2</p>

### **viii. Spatial data access and pricing**

Ensuring that the community, government or private sector can easily access spatial data created by ACC projects is essential to maximise the benefits of investing in data collection. Listed below are some principles that should be followed (modified from ANZLIC, date unknown & Government of WA 2006).

- all sectors of the community should have easy, efficient and equitable access to fundamental spatial data
- fundamental spatial data should be made available online through customer focused portals, as one of a number of ways to meet community needs for equity access
- pricing model used to determine price for data should be transparent and readily available.

The policy below refers to the WALIS pricing and land transfer policies. These are currently being reviewed. The procedures below will need to be reviewed regularly.

Policy title	Spatial data access and pricing
Policy statement	<p>All spatial data brought into existence by projects funded via a Wheatbelt NRM funding agreement will be classed as ‘community access’ unless confidentiality or use provisions apply and then they will be classed as ‘restricted access’.</p> <p>Data custodians should apply WALIS pricing and land transfer policies for land and geographic information when making spatial data available to external clients and when determining the price of transfer of spatial datasets. A copy of this WALIS policy can be downloaded at <a href="http://www.walis.wa.gov.au/policies/pricing/Pricingandtransferpolicy.pdf/view">http://www.walis.wa.gov.au/policies/pricing/Pricingandtransferpolicy.pdf/view</a></p>
Procedure	<ol style="list-style-type: none"> <li>1. The following aspects of data transfer and pricing are covered by WALIS policies:             <ol style="list-style-type: none"> <li>a. improving access to spatial data (general)</li> <li>b. privacy and confidentiality</li> <li>c. copyright</li> <li>d. licence to use</li> <li>e. pricing for commercial use</li> <li>f. pricing for non-commercial use.</li> </ol> </li> <li>2. Data custodians should seek opportunities to make ‘community access’ data accessible through an appropriate online map viewer or data service.</li> </ol>
Related policy	Spatial data management Spatial data distribution and licensing
Related resources	Map viewers and their limitations – see toolkit section 2.3 Data services – see toolkit section 2.5

## ix. ***Spatial data distribution and licensing***

A significant amount of data being created by WNRM region projects will be a valuable resource for projects being undertaken by government agencies and other NRM organisations. These projects may require access to data so it can be used on a desktop GIS. Therefore it is imperative that data custodians have in place distribution and licensing arrangements that are simple and which recognise liability, intellectual property rights, data currency and confidentiality (Government of WA 2006).

*Modified from ANZLIC 2002 and DAFWA procedures*

Policy title	Spatial data distribution and licensing
Policy statement	Data custodians must list instructions, in the data management plan, about the distribution of spatial datasets. Data licence agreements should be used to cover the supply of the custodial spatial datasets to external clients.
Procedure	<ol style="list-style-type: none"> <li>1. Obtain from the external client a request in writing that includes:           <ul style="list-style-type: none"> <li>• dataset name</li> <li>• geographic extent of data required</li> <li>• preferred data format and transfer medium</li> <li>• contact details</li> <li>• what the data will be used for.</li> </ul> </li> <li>2. For spatial data that are classed as ‘restricted access’, specify conditions in the licence agreement to ensure confidentiality will be protected or use restrictions will be complied with by the external client.</li> <li>3. Select the appropriate licence agreement (commercial or non-commercial) and complete details.</li> <li>4. Send licence to client for them to complete, sign and return.</li> <li>5. Organise a signature on behalf of the custodian.</li> <li>6. Organise the transfer of the data and any invoicing.</li> <li>7. Supply the client with a copy of the completed licence and keep a copy on record.</li> <li>8. Update the data distribution record sheet for the dataset.</li> </ol>
Related policy	Spatial data management Spatial data access and pricing
Related resources	Data licence agreements – commercial and non-commercial licensing – see toolkit section 4.3.4 Data distribution record – see toolkit section 4.3.5 Requesting data – see toolkit section 4.3.5

## **Appendices**

***Data Management Plan***

***Metadata Statement***

***Data Dictionary***

## Data Management Plan

<b>Date:</b>	
<b>Version:</b>	
<b>Completed by:</b>	

<b>Project Name:</b>	
<b>Project ID:</b>	
<b>Dataset Name:</b>	
<b>Other names dataset is known by:</b>	
<b>NRM Region and/or sub region</b>	Wheatbelt Natural Resource Management
<b>Wheatbelt NRM Project Manager:</b> <i>(data owner)</i>	
<b>Delivery Organisation (DO):</b>	
<b>DO Project Manager:</b> <i>(dataset custodian, creator, e.g. NRM GIS Officer or delivery organisation)</i>	

<b>Dataset Description:</b> <i>Including format, e.g. shape file of focus ecosystem locations, spreadsheet of coordinates of oil mallee plantings</i>	
<b>Indicator or Measure</b> <i>e.g. Change in Wind Erosion, Seedling Survival, Soil Acidity etc</i>	
<b>Access Restrictions:</b> <i>If any – most data should be available subject to a SLIP license agreement</i>	

<b>Data collection methodology:</b> <i>e.g. digitised area from a map</i>	
<b>Data source:</b> <i>e.g. research paper "Title and date"</i>	

<b>Data storage and archiving:</b> <i>Describe where the data will be stored during and on completion of the project.</i>	<b>During Project</b>	<b>On Completion of Project</b>
<b>Data maintenance:</b> <i>Will updates / maintenance be required? If so, who will be responsible?</i>		
<b>Data quality:</b> <i>Describe what has been done to ensure the data is as accurate as possible.</i>		
<b>Metadata:</b> <i>What is the name and location of the metadata statement?</i>	<b>Name</b>	<b>Location</b>

## Metadata Statement

<b>Date:</b>	
<b>Version:</b>	
<b>Completed by:</b>	

<b>Project Name:</b>	
<b>Project ID:</b>	

Category	Element	Comments
<b>Dataset</b>	<b>Title:</b>	The ordinary name of the dataset.
	<b>Custodian:</b>	The organisation responsible for the dataset.
	<b>Jurisdiction:</b>	The state or country of the Custodian.
<b>Description</b>	<b>Abstract:</b>	A short description of the contents of the dataset.
	<b>Search Word(s):</b>	Words likely to be used by a non expert to look for the dataset.
	<b>Geographic Extent Name(s): OR</b>	A pick list of pre defined geographic extents such as map sheets, local government areas, catchments, that reasonably indicate the spatial coverage of the dataset.
	<b>Geographic Extent Polygon(s):</b>	An alternate way of describing geographic extent if no pre-defined area is satisfactory.
<b>Date Currency</b>	<b>Beginning date:</b>	Earliest date of data in the dataset.
	<b>Ending date:</b>	Last date of information in the dataset.
<b>Dataset Status</b>	<b>Progress:</b>	The status of the process of creation of the dataset.
	<b>Maintenance and Update Frequency:</b>	Frequency of changes or additions made to the dataset
<b>Access</b>	<b>Stored Data Format:</b>	The format or formats in which the dataset is stored by the custodian.
	<b>Available Format Type:</b>	The formats in which the dataset is available, showing at least, whether the dataset is available in digital or non digital form.
	<b>Access Constraint:</b>	Any restrictions or legal prerequisites applying to the use of the dataset, e.g. licence.
<b>Data Quality</b>	<b>Lineage</b>	A brief history of the source and processing steps used to produce the dataset.
	<b>Positional Accuracy</b>	A brief assessment of the closeness of the location of spatial objects in the dataset in relation to their true position on the Earth.

Category	Element	Comments
	<b>Attribute Accuracy</b>	A brief assessment of the reliability of features in the dataset in relation to their real world values.
	<b>Logical Consistency</b>	A brief assessment of the logical relationships between items in the dataset.
	<b>Completeness</b>	A brief assessment of the completeness of coverage, classification and verification.
<b>Contact Information</b>	<b>Contact Organisation</b>	Ordinary name of the organisation from which the dataset may be obtained.
	<b>Contact Position</b>	The relevant position in the Contact Organisation.
	<b>Mail Address 1</b>	Postal address of the Contact Position.
	<b>Mail Address 2</b>	Aust and NZ: Optional extension of Mail Address 1.
	<b>Suburb or Place or Locality 1</b>	Suburb of the Mail Address.
	<b>State or Locality 2</b>	Aust: State of Mail Address. NZ: Optional extension for Locality.
	<b>Country</b>	Country of the Mail Address.
	<b>Postcode</b>	Aust: Postcode of the Mail Address. NZ: Optional postcode for mail sorting.
	<b>Telephone</b>	Telephone of the Contact Position.
	<b>Facsimile</b>	Facsimile of the Contact Position.
	<b>Electronic Mail Address</b>	Electronic Mail Address of the Contact Position.
<b>Metadata Date</b>		Date that the metadata record for the dataset was created.
<b>Additional Metadata</b>		Reference to other directories or systems containing further information about the dataset.
<b>WALIS Additional Metadata Elements for Data Transfer Purposes</b>		
Category	Element:	Explanation
<b>Projection</b>	<b>Horizontal Co-ordinate System:</b>	Geographical, map projection or grid coordinate system used (e.g. geographic, Albers Conical Equal Area, AMG).
	<b>Horizontal Co-ordinate Parameters:</b>	Description of parameters used in map projection (AMG zone, false easting, false northing, standard parallels, longitude of central meridian, etc), geographic reference (latitude and longitude resolution, geographic coordinate units).

Category	Element	Comments
	<b>Geodetic Model:</b>	Parameters for the shape of the Earth (horizontal datum name, ellipsoid name, semi major axis, denominator of flattening ratio).
	<b>Vertical Co-ordinate System:</b>	The reference frame or system from which vertical distances (altitudes or depths) are measured (datum name, resolution and distance units).
<b>Raster</b>	<b>Raster Type:</b>	Description of raster data format (Continuous/non-continuous, number of rows and columns, pixel size, origin coordinates, data type, process date, process details).
<b>Entity and Attributes</b>	<b>Entity Description:</b>	Name and description of entities.
	<b>Attribute Details:</b>	Name of attribute, description, attribute value details (ranges, code sets, measurement units and resolution).

