# Guideline for CITS Geospatial, Appendix 3

Mapping of INSPIRE metadata descriptions to archival descriptive metadata standards

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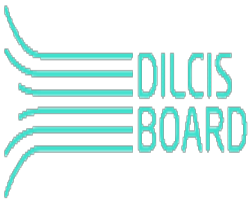






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# Appendix 3: Mapping of INSPIRE metadata descriptions to archival descriptive metadata standards

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|---|---|
| **Name** | Mapping of INSPIRE metadata descriptions to archival descriptive metadata standards |
| **Category** | Mapping |
| **Maturity level** | Published |
| **Version** | 1.1.0 |
| **Status** | Serves as the mapping of INSPIRE metadata descriptions to archival descriptive metadata standards in the CITS Geospatial Guideline |
| **Approval date** | Not applicable |
| **Issue date** | 2024-12-13 |
| **Replaces** | None |
| **Prerequisite** | None |
| **Attachments** | No sample Information Package illustrates the use of this mapping yet |
| **Languages** | English |
| **Publisher / distributor** | DILCIS Board, https://dilcis.eu/ |

## Summary

This document specifies the of INSPIRE metadata descriptions to archival descriptive metadata standards**.** It is a normative description of a standard for the long-term preservation of geospatial raster data.

The specification is based on standards, including the INSPIRE directive and ISAD-G.

The aim of employing internationally recognised standards is to ensure the long-term preservation of, and access to, the widely used geospatial raster data and the easy exchange of raster data independent of proprietary raster formats.

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## 1.1 Proposed translation schema between INSPIRE metadata and ISAD(G)

The following table displays the identified counterparts of the required INSPIRE metadata elements used in the ISAD(G) structure. Initial elements are based on the INSPIRE Metadata Implementing Rules.: Technical Guidelines, based on EN ISO 19115 version 1.3. and INSPIRE Metadata Implementation Rules at:

http://inspire.jrc.ec.europa.eu/documents/Metadata/MD_IR_and_ISO_20131029.pdf.

Further information on ISAD-G elements can be found at:
https://www.ica.org/en/isadg-general-international-standard-archival-description-second-edition

**Table 1 -Proposed translation schema of the INSPIRE metadata descriptions for geospatial resources in ISAD(G)**

| INSPIRE el. Nr. | INSPIRE el. Name | Explanation | Metadata data type | Proposed Cardinality | ISDG code | Comments |
|---|---|---|---|---|---|---|
| **2.2.1** | Resource title | Name by which the cited resource is known | text | 1..1 | 3.1.2 Title | |
| **2.2.2** | Resource abstract | Brief narrative summary of the content of the resource(s) | text | 0..1 | 3.3.1 Scope and content | |
| **2.2.3** | Resource type | Scope to which metadata applies | CodeList | 0..1 | 3.1.5 Extent and medium of the unit of description | CodeList (see annex B.5.25 of ISO 19115) |
| **2.2.5** | Unique resource identifier | Value uniquely identifying an object within a namespace | text | 0..1 | 3.1.1 Reference code | |
| **2.2.6** | Coupled resource | Provides information about the datasets that the service operates on | URI | 0..n | 3.5.3 Related units of description | |
| **2.2.7** | Resource language | Language(s) used within the datasets | CodeList | 0..n | 3.4.3 Language/scripts of material | LanguageCode (ISO/TS 19139) |
| **2.3.1** | Topic category (INSPIRE specific) | Main theme(s) of the dataset | CodeList | 1..1 | No ISAD-G element exists | List of values. See Part D 2 of the INSPIRE Metadata Regulation 1205/2008/EC) ISO19115:B.5.27 MD_TopicCategoryCode |

| INSPIRE el. Nr. | INSPIRE el. Name | Explanation | Metadata data type | Proposed Cardinality | ISDG code | Comments |
|---|---|---|---|---|---|---|
| **2.3.2** | Spatial data service type | A service type name from a registry of services | CodeList | 0..1 | No ISAD-G element exists | List of values. See section 1.3.1 in INSPIRE Metadata Implementing Rules |
| **2.4.1** | Keyword value | Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject | text | 0..n | No ISAD-G element exists | Descriptors |
| **2.6.1** | Temporal extent | Time period covered by the content of the dataset | Date | 1..n | 3.1.3 Date(s) | |
| **2.6.2** | Date of publication | Reference date for the cited resource – publication | Date | 0..1 | 3.1.3 Date(s) | |
| **2.6.3** | Date of last revision | Reference date for the cited resource – revision | Date | 0..1 | 3.1.3 Date(s) | |
| **2.6.4** | Date of creation | Reference date for the cited resource – creation | Date | 0..1 | 3.1.3 Date(s) | |
| **2.7.1** | Lineage | General explanation of the data producer's knowledge about the lineage of a dataset | text | 0..1 | / | This element is Geodata specific, so we propose that searching using this criterion is done by using Geospatial metadata catalogues and not Archival catalogues or that data is added into "Scope and content" element (3.3.1. ISAD(G)) |
| **2.7.2** | Spatial resolution | • Equivalent scale: level of detail expressed as the scale denominator of a comparable hardcopy map or chart<br>• Distance: ground sample distance | text | 0..1 | / | Same as with Lineage |
| **2.9.1** | Limitations on public access [and use] | Access constraints are applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource | CodeList | 1..1 | 3.4.1 Conditions governing access | |
| **2.9.2** | Conditions applying to access and use | Restrictions on the access and use of a resource or metadata | text | 1..1 | **3.4.1 Conditions governing access;** 3.4.2 Conditions governing reproduction; 3.4.4 Physical characteristics and technical requirements | |

## 1.2 Proposed translation schema between INSPIRE metadata and EAD3

The following table displays the identified counterparts of the mandatory INSPIRE metadata elements used in the EAD3 structure. Initial elements are based on the INSPIRE Metadata Implementing Rules.: Technical Guidelines, based on EN ISO 19115 version 1.3. and INSPIRE Metadata Implementation Rules at: http://inspire.jrc.ec.europa.eu/documents/Metadata/MD_IR_and_ISO_20131029.pdf.

Further information on EAD elements can be found in the Tag Library for EAD available at: https://www.loc.gov/ead/EAD3taglib/EAD3.html

**Table 2 - Proposed translation schema of INSPIRE metadata descriptions in EAD3**

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.2.1** | Resource title | Name by which the cited resource is known | 1..1 | <unittitle> | **<unittitle>** is for recording the title statement, either formal or supplied, of the described materials. The title statement may consist of a word or phrase. <unittitle> is used at both the highest unit or <archdesc> level (e.g., collection, record group, or fonds) and at all the subordinate <c> levels (e.g., subseries, files, items, or other intervening stages within a hierarchical description). | |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.2.2** | Resource abstract | Brief narrative summary of the content of the resource(s) | 0..1 | <scopecontent> | **<scopecontent>** contains a narrative statement that summarises the range and topical coverage of the materials. It provides the researcher with the information necessary to evaluate the potential relevance of the materials being described. <scopecontent> may include information about the form and arrangement of the materials; dates covered by the materials; significant organisations, individuals, events, places, and subjects represented in the materials; and functions and activities that generated the materials being described. It may also identify strengths or gaps in the materials. | |
| **2.2.3** | Resource type | Scope to which metadata applies.<br>This is the type of resource being described by the metadata, and it is filled in with a value from a classification of the resource based on its scope. The choice of Resource Type will be probably the first decision made by the user, and it will define the metadata elements that should be filled.<br>(Example: dataset) | 0..1 | <physdesc> | **<physdesc>** is a wrapper element for bundling information about the appearance or construction of the described materials, such as their dimensions, a count of their quantity or statement about the space they occupy, and terms describing their genre, form, or function, as well as any other aspects of their appearance, such as colour, substance, style, and technique or method of creation. The information may be presented as plain text, or it may be divided into the <dimension>, <extent>, <genreform>, and <physfacet> sub-elements. | **CodeList (see annex B.5.25 of ISO 19115)** |
| **2.2.5** | Unique resource identifier | Value uniquely identifying an object within a namespace | 0..1 | <originalsloc> | **<originalsloc>** may be used to provide information about the location, availability, and/or destruction of originals. | If applicable |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.2.6** | Coupled resource | Provides information about the datasets that the service operates on | 0..n | <relatedmaterial>;<br><br><arrangement> | **<relatedmaterial>** is used to identify associated materials in the same repository or elsewhere. These materials may be related by sphere of activity, or subject matter;<br>Use **<arrangement>** to record the logical or physical groupings within a hierarchical structure and their relationships. This includes how the described materials have been subdivided into smaller units, e.g., record groups into series. May also indicate the filing sequence of the described materials, for example, chronological or alphabetical arrangement. | |
| **2.2.7** | Resource language | Language(s) used within the datasets | 0..n | <langmaterial> | **<langmaterial>** records information about languages and scripts represented in the materials being described. <langmaterial> must contain one or more <language> or <languageset> elements, but cannot contain text. | LanguageCode (ISO/TS 19139) |
| **2.3.1** | Topic category (Specific to INSPIRE) | Main theme(s) of the dataset | 1..1 | <controlaccess><br><subject><br><part> | **<controlaccess>** An element that binds together elements containing access headings for the described materials.<br>**<subject>** An element for encoding topics represented in the materials described.<br>**<part>** A required and repeatable child of controlled access elements used to encode one or more parts of an access term. | A separate descriptor.<br>List of values. See Part D 2 of the<br>INSPIRE Metadata Regulation 1205/2008/EC)<br>ISO19115:B.5.27<br>MD_TopicCategoryCode |
| **2.3.2** | Spatial data service type | A service type name from a registry of services | 0..1 | <controlaccess><br><subject><br><part> | **<controlaccess>** An element that binds together elements containing access headings for the described materials.<br>**<subject>** An element for encoding topics represented in the materials being described. | A separate descriptor<br>List of values. See section 1.3.1 in INSPIRE Metadata Implementing Rules |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| | | | | | **<part>** A required and repeatable child of controlled access elements used to encode one or more parts of an access term. | |
| **2.4.1** | Keyword value | Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject | 0..n | <controlaccess><br><subject><br><part> | **<controlaccess>** An element that binds together elements containing access headings for the described materials.<br>**<subject>** An element for encoding topics represented in the materials being described.<br>**<part>** A required and repeatable child of controlled access elements used to encode one or more parts of an access term. | Each keyword is given in its own <part> element. |
| **2.5.1** | Geographic bounding box | Western-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east). Eastern-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east) Northern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north) Southern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north). | 0..n | <geographiccoordinates> | Use **<geographiccoordinates>** to express a set of geographic coordinates such as latitude, longitude, and altitude representing a point, line, or area on the surface of the earth. | |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.6.1** | Temporal extent | Time period covered by the content of the dataset | 1..n | <unitdate>; <unitdatestructured> | **<unitdate>** is for indicating the date or dates the described materials were created, issued, copyrighted, broadcast, etc. <unitdate> may be in the form of text or numbers and may consist of a single date, a date range, or a combination of single dates and date ranges; **<unitdatestructured>** provides a machine-processable statement of the date or dates the materials described were created, issued, copyrighted, broadcast, etc. <unitdatestructured> must contain one of the following child elements: <datesingle>, <daterange>, or <dateset>. <unitdatestructured> may contain only one child, therefore <dateset> must be used in situations where complex date information needs to be conveyed and requires at least two child elements. A date set may combine two or more <datesingle> and <daterange> elements. | Use the relevant subelements |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.6.2** | Date of publication | Reference date for the cited resource - publication | 0..1 | <unitdate>, <unitdatestructured> | **<unitdate>** is for indicating the date or dates the described materials were created, issued, copyrighted, broadcast, etc. <unitdate> may be in the form of text or numbers and may consist of a single date, a date range, or a combination of single dates and date ranges; **<unitdatestructured>** provides a machine-processable statement of the date or dates the materials described were created, issued, copyrighted, broadcast, etc. <unitdatestructured> must contain one of the following child elements: <datesingle>, <daterange>, or <dateset>. <unitdatestructured> may contain only one child, therefore <dateset> must be used in situations where complex date information needs to be conveyed and requires at least two child elements. A date set may combine two or more <datesingle> and <daterange> elements. | Use the relevant subelements |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.6.3** | Date of last revision | Reference date for the cited resource - revision | 0..1 | <unitdate>, <unitdatestructured> | **<unitdate>** is for indicating the date or dates the described materials were created, issued, copyrighted, broadcast, etc. <unitdate> may be in the form of text or numbers and may consist of a single date, a date range, or a combination of single dates and date ranges; **<unitdatestructured>** provides a machine-processable statement of the date or dates the materials described were created, issued, copyrighted, broadcast, etc. <unitdatestructured> must contain one of the following child elements: <datesingle>, <daterange>, or <dateset>. <unitdatestructured> may contain only one child, therefore <dateset> must be used in situations where complex date information needs to be conveyed and requires at least two child elements. A date set may combine two or more <datesingle> and <daterange> elements. | Use the relevant subelements |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.6.4** | Date of creation | Reference date for the cited resource - creation | 0..1 | <unitdate>, <unitdatestructured> | **<unitdate>** is for indicating the date or dates the described materials were created, issued, copyrighted, broadcast, etc. <unitdate> may be in the form of text or numbers, and may consist of a single date, a date range, or a combination of single dates and date ranges; **<unitdatestructured>** provides a machine-processable statement of the date or dates the materials described were created, issued, copyrighted, broadcast, etc. <unitdatestructured> must contain one of the following child elements: <datesingle>, <daterange>, or <dateset>. <unitdatestructured> may contain only one child, therefore <dateset> must be used in situations where complex date information needs to be conveyed and requires at least two child elements. A date set may combine two or more <datesingle> and <daterange> elements. | Use the relevant subelements |
| **2.7.1** | Lineage | General explanation of the data producer's knowledge about the lineage of a dataset, covering the history of data creation and methodologies used during the process | 0..1 | <scopecontent> | It is a separate element in INSPIRE, however, it would best fit as an addition of the **<scopecontent>**. So we recommend appending it to this element. | |
| **2.7.2** | Spatial resolution | • Equivalent scale: level of detail expressed as the scale denominator of a comparable hardcopy map or chart<br>• Distance: ground sample distance | 0..1 | <controlaccess><br><head><br><p> | It is a separate element that is often used as a search criterion within Geospatial Metadata repositories. Therefore we suggest adding it as a search term through a **<controlaccess>**.element with a **<head>** stating it is the spatial resolution and a **<p>** which gives the resolution value. | |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.9.1** | Limitations on public access [and use] | Access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource<br>Limitations on public access:<br>Access constraints - Example: otherRestrictions (limitation not listed).<br>Other constraints - Example: No limitations<br>Classification - Example: unclassified | 1..1 | <accessrestrict>, <legalstatus> | Record in **<accessrestrict>** information about the availability of the described materials, whether due to the nature of the information in the materials being described, the physical condition of the materials, or the location of the materials. Examples include restrictions imposed by the donor, legal statute, repository, or other agency, as well as the need to make an appointment with repository staff. May also indicate that the materials are not restricted;<br>Use **<legalstatus>** to identify the status of the material being described as defined by law, for example, the Public Records Act of 1958 in the United Kingdom. | This element has three separate elements that need to be described:<br>• General set of limitations (ISO 19115 B.5.24)<br>• Description of the limitation<br>Level of confidentiality (ISO 19115 B.5.11) |

| INSPIRE el. Nr. | INSPIRE element name | Explanation | Proposed Cardinality | EAD3 mapping | EAD description | Comments |
|---|---|---|---|---|---|---|
| **2.9.2** | Conditions applying to access and use | Restrictions on the access and use of a resource or metadata | 1..1 | <accessrestrict>; <userestrict> | Record in **<accessrestrict>** information about the availability of the described materials, whether due to the nature of the information in the materials being described, the physical condition of the materials, or the location of the materials. Examples include restrictions imposed by the donor, legal statute, repository, or other agency, as well as the need to make an appointment with repository staff. May also indicate that the materials are not restricted;<br>Use **<userestrict>** for information about any limitations, regulations, or special procedures imposed by a repository, donor, legal statute, or other agency. These conditions may be related to reproduction, publication, or quotation of the described materials after access to the materials has been granted. <userestrict> may also be used to indicate the absence of restrictions, such as when intellectual property rights have been dedicated to the public. | |