

MIWP-8: Metadata - Task #2307

MIWP-8 (J) Metadata for SDS Coordinate reference system

08 Jan 2015 12:03 pm - Ine de Visser

Status:	Submitted	Start date:	17 Sep 2014
Priority:	Normal	Due date:	
Assignee:	Peter Kochmann	% Done:	0%
Category:		Estimated time:	0.00 hour
Proposed change or action:			

Description

Coordinate reference system (TG SDS 4.6.1)

Where applicable, a spatial data service shall include [ISO 19115] metadata about the coordinate reference system(s) the spatial data service is able to support. A metadata element shall be provided to contain the list of Coordinate Reference Systems identifiers supported by the spatial data service.

there are 2 encoding example, one using the classic "gco:CharacterString" element, the other using "gmx:Anchor" element.

It is recommended to use the "gmx:Anchor" element in order to improve the machine readability of the this element.

Coordinate reference system parameters and identifiers shall be managed in one or several common registers for coordinate reference systems. Only identifiers contained in a common register shall be used for referring to the coordinate reference systems listed in this section

Actions:

1. Check definitions of Coordinate reference system in IR SDSS, and TG SDS, DS are they in line with each other?
2. Update TG MD X.Y.Z Coordinate reference system (use table 4 TG SDS)
3. Give examples, explain ...

Related issues:

Copied from MIWP-8: Metadata - Task # 2306: MIWP-8 (J) Metadata for SDS Speci...	Submitted	17 Sep 2014
Copied to MIWP-8: Metadata - Task # 2308: MIWP-8 (J) Metadata for SDS Quality...	Submitted	17 Sep 2014

History

#1 - 21 Jan 2015 02:41 pm - Ine de Visser

- Assignee set to Peter Kochmann

COMMISSION REGULATION (EU) No 1312/2014 of 10 December 2014 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services

"Coordinate Reference System Identifier Where appropriate, this is the list of coordinate reference systems supported by the spatial data service. Each supported coordinate reference system shall be expressed using an identifier."

Can this be integrated with the metadata for interoperability elements?

#2 - 22 Jan 2015 11:33 am - Peter Kochmann

I think so. This ist the designated element for such information!

The question ist how to flag it within TG. We will have an own chapter that lists all elements required by metadata for interoperability. This will apply to dataset and series only when fulfilling IR Interoperability article 13!

How do we handle a mix-up with SDS without causing confusion?

Maybe we can have an own chapter in TG that clearly flags SDS (also because you will need extensions to ISO, if I understood right) and of course use the given element of ISO here as well where no extension is needed.

#3 - 30 Jan 2015 02:34 pm - Marc Leobet

Dear all,

please find how the FR TG recommends to fill CRS (both for interoperability and SDS).

(I begin to be a bit confuse after some hours on Metadata topics as we have a lot of tickets everywhere. Hope I am not outside the scope of this page).

Comments :

The reference system is the one accessible by the user data.

It is recommended to set a reference system available independent of any particular software.

In the case of indirectly georeferenced data (statistics), we can not fulfill this reference system. This is the reference system associated geometric data that will populate this field.

National recommendations :

- | |
|--|
| <ol style="list-style-type: none">1.2.3. <p>The identifier of the reference system must be provided. This identifier must have a code and a namespace. The codes used are EPSG codes. To facilitate understanding of the user, it is recommended to also provide descriptive label of the coordinate reference system (eg ETRS89).</p> |
|--|

Comments :

Three important information must be provided: the code, the namespace (or codespace) and the wording of the coordinate reference system (For example: " ETRS89 system is coded 4258 in the EPSG register": ETRS89 is the wording, the code is 4258 , EPSG is the namespace) .

A URL can also be provided to allow the user to access to the code description in the EPSG register (eg <http://www.opengis.net/def/crs/EPG/0/4258>).

Two solutions are proposed to provide the information listed below. The first is the simplest. It is intended to be understood by the majority of users, but the disadvantage of not being directly usable by a machine. The second proposed solution is more complex, but most respectful of the spirit of the

standard and allow better interoperability. The choice between these two alternatives is to be done by each organization, according to its public and metadata editor tools at its disposal.

Solution 1 : Provide in the code field the following character string: "text" ("namespace": "Code")

Examples : ETRS89 (EPSG:4258); RGF93 / Lambert 93 (EPSG:2154); RGF93 / CC48 (EPSG:3948)

Cons-examples : Lambert93; 3948

#4 - 05 Feb 2015 09:23 am - Michael Östling

Peter Kochmann wrote:

I think so. This is the designated element for such information! The question is how to flag it within TG. We will have an own chapter that lists all elements required by metadata for interoperability. This will apply to dataset and series only when fulfilling IR Interoperability article 13! How do we handle a mix-up with SDS without causing confusion? Maybe we can have an own chapter in TG that clearly flags SDS (also because you will need extensions to ISO, if I understood right) and of course use the given element of ISO here as well where no extension is needed.

Yes I think a good idea is to keep information together related to legislation so that all SDS are kept together. Maybe with a note that referencingsystems for datasets and datasetseries are handled at

#5 - 05 Feb 2015 09:37 am - Michael Östling

Marc Leobet wrote:

Dear all, please find how the FR TG recommends to fill CRS (both for interoperability and SDS). (I begin to be a bit confuse after some hours on Metadata topics as we have a lot of tickets everywhere. Hope I am not outside the scope of this page). Comments : The reference system is the one accessible by the user data. It is recommended to set a reference system available independent of any particular software. In the case of indirectly georeferenced data (statistics), we can not fulfill this reference system. This is the reference system associated geometric data that will populate this field. National recommendations : The identifier of the reference system must be provided. This identifier must have a code and a namespace. The codes used are EPSG codes. To facilitate understanding of the user, it is recommended to also provide descriptive label of the coordinate reference system (eg ETRS89). Comments : Three important information must be provided: the code, the namespace (or codespace) and the wording of the coordinate reference system (For example: " ETRS89 system is coded 4258 in the EPSG register": ETRS89 is the wording, the code is 4258 , EPSG is the namespace) . A URL can also be provided to allow the user to access to the code description in the EPSG register (eg <http://www.opengis.net/def/crs/EPG/0/4258>). Two solutions are proposed to provide the information listed below. The first is the simplest. It is intended to be understood by the majority of users, but the disadvantage of not being directly usable by a machine. The second proposed solution is more complex, but most respectful of the spirit of the standard and allow better interoperability. The choice between these two alternatives is to be done by each organization, according to its public and metadata editor tools at its disposal. Solution 1 : Provide in the code field the following character string: "text" ("namespace": "Code") Examples : ETRS89 (EPSG:4258), RGF93 / Lambert 93 (EPSG:2154), RGF93 / CC48 (EPSG:3948) Cons-examples : Lambert93, 3948

We have implemented like you specify in our tools like " text' (namespace:code) but we only store namespace:code in metadata.

When it comes to the code we say it can either be handled as text or Anchor in code element.

But should we mandate that the code should be a referenceable identifier like specified in SDS TG 3.1

<http://www.opengis.net/def/crs/EPG/0/28992>

and not only the epsg-code ?

In SDS TG 3.1 it is referred to link below for above definition of a referencsystem-code:

Common document collection provided for all INSPIRE Data Specifications

<http://inspire.jrc.ec.europa.eu/index.cfm/pageid/2>

I can't find the actual document that specifies that a URL should be used as code.

#6 - 05 Feb 2015 02:21 pm - Marc Leobet

I guess I miss the Solution 2:

The code field is implemented as an Anchor element for storing the access URL to the coordinate system in the EPSG register (<http://www.opengis.net/def/crs/EPSSG/0/4258>), a label in the xlink: title (ETRS89) and the code itself (4258). The namespace (EPSSG) is provided in the codespace field.

Example :

URL : <http://www.opengis.net/def/crs/EPSSG/0/4258>

Text: ETRS89

Code : 4258

CodeSpace : EPSSG

Technical reference

Xpath ISO 19115	
referenceSystemInfo/*/referenceSystemIdentifier/*/code	referenceSystemInfo/*/referenceSystemIdentifier/*/codeSpace
XML example	
"http://www.opengis.net/def/crs/EPSSG/0/4258" xlink:title="ETRS89">4258	
EPSSG	

