



19th Meeting of the Data Quality Working Group

Discussion on the review of S-100 Part4a metadata invited by S-100WG

Agenda Item 5.6A

DQWG-19, VTC Event, 25- 26 March 2024



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BACKGROUND

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- In TSM10, China submitted a paper to the meeting for consideration. This paper is about element changes caused by the update of ISO 19115 as follow:
- RS_Identifier has been deleted in ISO 19115-1:2014 and replaced by MD_Identifier.
- Relevant content in S-100 Part 4a and Part 6 needs to be modified.

Geographic information —
Metadata
Part 1: Fundamentals (ISO 19115-1:2014)



In ISO 19115:2003, the definitions of MD_Identifier and RS_Identifier are found in Table B.2.7.3 as follows:

B.2.7.3 Identifier information

	Name / Role Name	Short Name	Definition	Obligation / Condition	Maximum occurrence	Data type	Domain
205.	MD_Identifier	MdIdent	value uniquely identifying an object within a namespace	Use obligation/condition from referencing object	Use maximum occurrence from referencing object	Class	Lines 206-207
206.	authority	identAuth	person or party responsible for maintenance of the namespace	O	1	Class	CI_Citation <<DataType>> (B.3.2)
207.	code	identCode	alphanumeric value identifying an instance in the namespace	M	1	CharacterString	Free text
208.	RS_Identifier	RsIdent	identifier used for reference systems	Use obligation/condition from referencing object	Use maximum occurrence from referencing object	Specified Class (MD_Identifier)	Lines 206-207 and 208.1-208.2
208.1	codeSpace	identCodeSpace	name or identifier of the person or organization responsible for namespace	O	1	CharacterString	Free text
208.2	version	identVrsn	version identifier for the namespace	O	1	CharacterString	Free text



In ISO 19115-1:2014, the definition of MD_Identifier is provided in Table B.17.2 as follows:

Table B.17.2 — Identifier information

	Name / Role name	Definition	Obligation / Condition	Maximum occurrence	Data type	Domain
431.	<<DataType>> MD_Identifier	value uniquely identifying an object within a namespace	Use obligation/condition from referencing object	Use maximum occurrence from referencing object	Class	Lines 432-436
432.	authority	the person or party responsible for maintenance of that namespace	0	1	Class	CI_Citation (Table B.16)
433.	code	alphanumeric value identifying an instance in the namespace NOTE Avoid characters that are not legal in URLs. EXAMPLE EPSG::4326	M	1	CharacterString	No specified domain
434.	codeSpace	identifier or namespace in which the code is valid	0	1	CharacterString	No specified domain
435.	version	version identifier for the namespace	0	1	CharacterString	No specified domain
436.	description	natural language description of the meaning of the code value EXAMPLE For codeSpace = EPSG, code = 4326, description = WGS-84.	0	1	CharacterString	Free text

NOTE: The UML model for this table is shown in [Figure 22](#).



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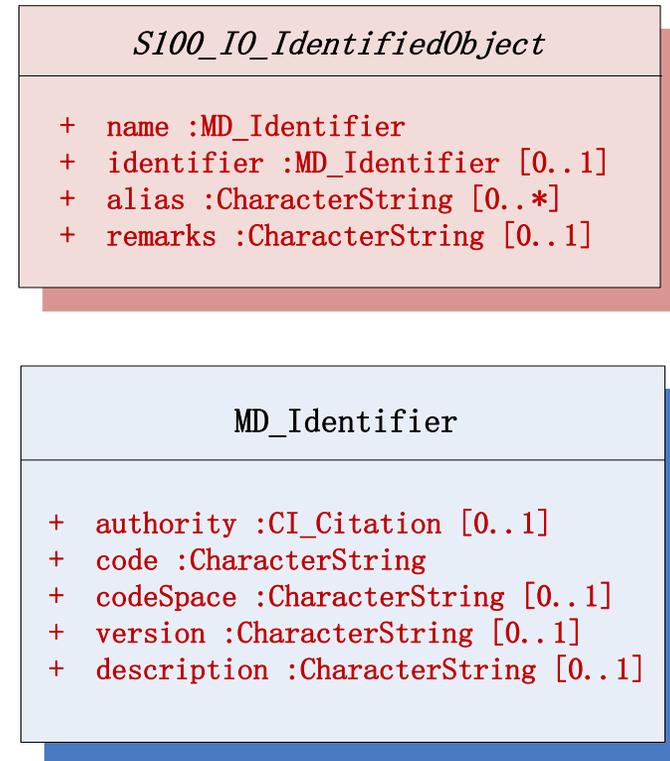
It is recommended to:

a) Page 3, subclause 6-4.1

Replace Figure 6-2

with the following:

Class Fig 6-2 The Identified Object Class Diagram



*(from ISO TC211::ISO 19115-All
Metadata::Commonly used classes)*

Figure 6-2 — The Identified Object class diagram



a) Page 3, subclause 6-4.1

Replace Table 6-2 and paragraph below with the following:

Table 6-2 — Properties of the class IO_IdentifiedObject

Name	Type	Card.	Description
name	RS_Identifier MD_Identifier	1	The primary name by which the object can be identified
identifier	RS_Identifier MD_Identifier	0..1	An identifier the definition of the
alias	GenericName	0..*	An alternative
remarks	CharacterString	0..1	Comments on object

There is a typographical error in 6-4.1.2 clause: missing line break before "version:", which makes **four** parts become **three** parts of properties in RS_Identifier. Although it can be corrected simultaneously by replacing RS_Identifier with MD_Identifier.

- The type RS_Identifier (from ISO 19115) has ~~three~~ five parts :
- 1) authority: CI_Citation [0..1]
 - 2) code: CharacterString
 - 3) codeSpace: CharacterString [0..1] ~~version: CharacterString [0..1]~~
 - 4) **version: CharacterString [0..1]**
 - 5) **description: CharacterString [0..1]**

**b) Page 15 to page 21, subclause Appendix 6-A Examples**

In all examples, XML code like `<RS_Identifier:name>` should have all case of `RS_Identifier` replaced with `MD_Identifier`.

Use example1
as example:

```
<SC_CRS:example1>
  <RS_Identifier MD_Identifier:name>
    <code>WGS 84</code>
  </RS_Identifier MD_Identifier:name>
  <RS_Identifier MD_Identifier:identifier>
    <CI_Citation:authority>
      <title>EPSG Geodetic Parameter Data Set</title>
      <edition>6.5</edition>
      <CI_Date:date>
        <date>20040113</date>
        <dateType>revision</dateType>
      </CI_Date:date>
    </CI_Citation:authority>
    <code>4326</code>
  </RS_Identifier MD_Identifier:identifier>
  <scope>
    Horizontal component of the 3D geodetic CRS used by the GPS satellite system.
  </scope>
</SC_CRS:example1>
```



c) Page 13, subclause 4a-5.6

Replace row 23 in table 4a-4 with the followings:

Reference system	MD_Metadata.referenceSystemInfo > MD_ReferenceSystem.referenceSystemIdentifier > RS_Identifier MD_Identifier	0
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d) Page 17, subclause 4a-5.8

Replace row 23 in table 4a-7 with the followings:

Reference system	MD_Metadata.referenceSystemInfo > MD_ReferenceSystem.referenceSystemIdentifier > RS_Identifier MD_Identifier	0
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- TSM10 reviewed this proposal and made an action as follow:

4.4	Element changes caused by ISO update	<p>TSM10 noted that this proposal is not corrections for Ed.5.2.0 of S-100. Consequently, it was requested that the proposal be submitted to S-100WG for consideration in Ed.6.0.0 of S-100.</p> <p>[Action 10/xx] S-100WG Chair to contact DQWG Chair to solicit inputs and/or comments on Part4a metadata of S-100 including Agenda 4.4. Furthermore, it is recommended to submit any change proposals deemed appropriate to Ed.6.0.0 of S-100.</p>	2024
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ACTION

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The DQWG is requested to:

- a. Note** the information provided;
- b. Discussion** on this issue;