Title: Element changes caused by the update of ISO 19115

S-100 Maintenance - Change Proposal Form

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Change Proposal Type *Select only one option*
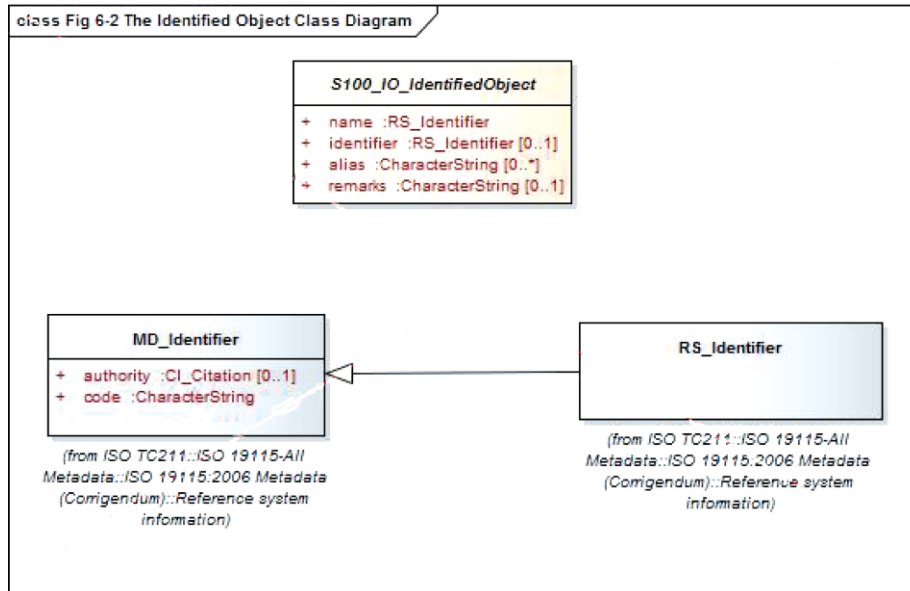
1.Clarification	2.Revision	3.New Edition
	X	

Location *Identify all change proposal locations*

S-100 Version No.	Part No.	Section No.	Proposal Summary
5.2.0	**6**	**6-4.1** **Appendix 6-A**	**RS_Identifier has been deleted in ISO 19115-1:2014 and replaced by MD_Identifier. Relevant content needs to be modified**
	4a	**4a-5.6** **Table 4a-4**	
		4a-5.8 **Table 4a-7**	

RS_Identifier has been replaced by MD_Identifier

Page 3, subclause 6-4.1

Figure 6-2

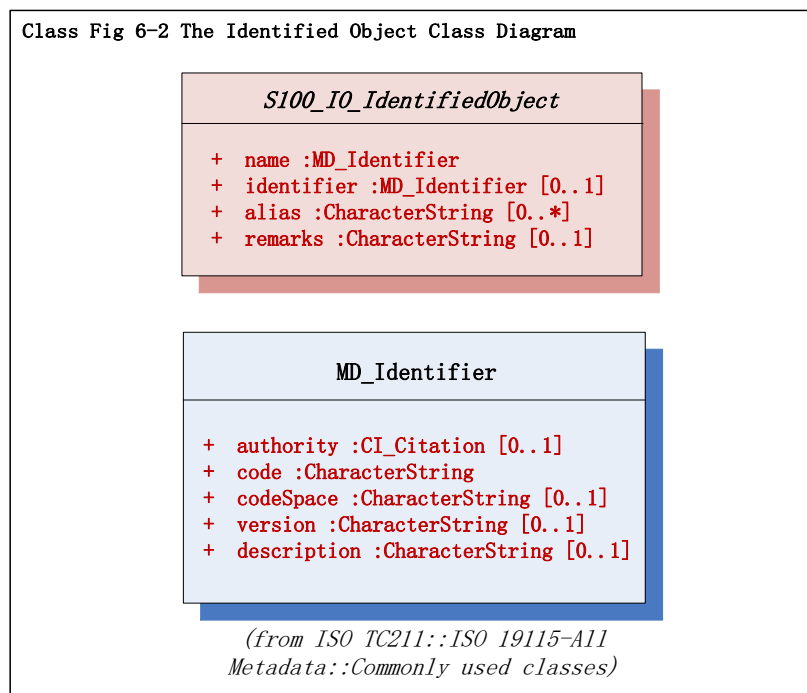Replace Figure 6-2 with the following:

Figure 6-2 — The Identified Object class diagram

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 that references the (external) definition of the object
alias	**GenericName**	**0..***	An alternative name of the object
remarks	**CharacterString**	**0..1**	Comments on or information about the object

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]

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.

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	O

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	O

Change Proposal Justification

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 206-207and 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 Annex G, G.2 Revision detail, Table G.7-Reference system information:

Table G.7 — Reference system information

ISO 19115:2003 data dictionary number	Deleted element	New	Comment
186	MD_ReferenceSystem/ referenceSystemIdentifier: RS_Identifier	MD_ReferenceSystem/reference SystemIdentifier: MD_Identifier	Changed to MD_Identifier to remove circular dependency with ISO 19111
		MD_ReferenceSystem/reference SystemType: MD_ReferenceSys-temTypeCode	This new element was added in order to allow the specification of a type for the reference system
195	RS_ReferenceSystem		
196	RS_ReferenceSystem/name	Deleted Deleted	No longer needed replaced by MD_ReferenceSys-tem/referenceSystemType
197	RS_ReferenceSystem/domain OfValidity		
208		RS_Identifier	Removed to remove circular dependency with ISO 19111. MD_Identifier class moved to Metadata information package

MD_ReferenceSystem/referenceSystemIdentifier:RS_Identifier had been replaced by MD_ReferenceSystem/referenceSystemIdentifer:MD_Identifier, as a conclusion. RS_Identifier element had been removed to remove circular dependency with ISO 19111, and MD_Identifier class moved to Metadata information package.

(Note: There is a typographical error in ISO 19115 Table G.7 208; RS_Identifier should be listed under "Deleted element" rather than "New".)

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	O	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	O	1	CharacterString	No specified domain
435.	version	version identifier for the namespace	O	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.	O	1	CharacterString	Free text

NOTE: The UML model for this table is shown in Figure 22.

As a conclusion, for S-100 Part 4a and Part 6, it is recommended to refer to the ISO 19115-1:2014 standard, updating all tables, figures and related descriptions replacing RS_Identifier with MD_Identifier. Since MD_Identifier is a superset of RS_Identifier, there should be no backward compatibility issues.

(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.)

Please send completed forms and supporting documentation to the IHO Secretariat (addt@iho.int).