

Rules for extending S-100 Metadata

These rules are an adaptation of the Metadata extension rules provided in Annex C of ISO 19115-1:2014. These rules are meant to be used as a common rule set for how to extend S-100 metadata, and aims to create a common process that gives predictability for implementers.

Types of extensions

The following types of extensions shall be allowed:

- 1) adding a new metadata package;
- 2) creating a new metadata codelist to replace the domain of an existing metadata element that has “free text” listed as its domain value;
- 3) creating new metadata codelist elements (expanding a codelist);
- 4) adding a new metadata element;
- 5) adding a new metadata class;
- 6) imposing a more stringent obligation on an existing metadata element;
- 7) imposing a more restrictive domain on an existing metadata element.

When creating an extension

Prior to the creation of extended metadata a careful review of the existing metadata within ISO 19115-1 must be performed to confirm that suitable metadata does not already exist. If suitable metadata exist within ISO 19115-1, then it must be used. For each extended metadata package, class, and/or element, the name, definition, obligation, condition, maximum occurrence, data type, and domain values shall be defined. Relationships shall be defined so that a structure and schema can be determined. The relationships should be defined well enough that it is clear how extended metadata relates to the various components of S-100, including existing metadata, used to create the product where the extended metadata is used.

Rules for creating an extension

- 1) Extended metadata elements shall not be used to change the name, definition or data type of an existing element.
- 2) Extended metadata may be defined as classes and may include extended and existing metadata elements as components.
- 3) An extension is permitted to impose more stringent obligations on existing metadata elements than the standard requires. (Metadata elements that are optional in the standard may be mandatory in an extension.)
- 4) An extension is permitted to contain metadata elements with domains that are more restrictive than the standard. (Metadata elements whose domains have free text in the standard may have a closed list of appropriate values in the profile.)
- 5) An extension is permitted to restrict the use of domain values allowed by the standard. (If the standard contains five values in the domain of an existing metadata element, the extension may specify that its domain consists of three domain values. The extension shall require that the user select a value from the three domain values.)
- 6) An extension is permitted to expand the number of values in codelists or enumerated lists. Extending codelists or enumerated lists are discouraged, even in profiles. When they must

be extended care should be taken to minimize the number of additional entries. Also, the extended codelist or enumerated list should be published or otherwise made available.

- 7) An extension shall not permit anything not allowed by S-100.