13 Registration

13.1 Overview

This clause specifies the rules and guidelines that have been used in the specification of the concepts in this document and shall be followed in preparing registration proposals. Registration proposals include required information for new SRM registered items, as well as accompanying administrative information (see Annex H). The guidelines in 13.2 shall apply to all SRM registered items. Additional guidelines applicable to specific SRM concepts are specified in 13.3.

ISO/IEC 9973 allows for previously registered items to be added to this document, when amended. When previously registered SRM concept instances are added to this document, all abbreviated terms used (in labels, description text, etc.) in those instances that are not already included in Table 3.3 and/or Table F.1 shall be added, as appropriate. Additionally, all associated references (see 13.2.5) not already included in Clause 2 or the Bibliography shall be added, as appropriate.

13.2 Specification elements for SRM registered items

13.2.1 Overview

The specification of each SRM *registered item* shall include the following elements:

a) label: a unique, compact, character string that is used to denote the registered item,

b) code: a unique integer[30] that is assigned by the maintenance agency to denote the registered item, and

c) other concept-dependent information that may include the following elements:

   1) a description, and

   2) references.

In specifying an SRF set, assigning labels to the set members is optional (see 8.7.1).

13.2.2 Label

The *label* element of an SRM registered item specification shall be a compact and human-readable designator that is used to denote that registered item. Labels in this document may include the name or names for the registered item.

Each label in this document shall:

a) uniquely denote a specific instance within the set of instances of a given SRM concept,

b) be a succinct expression of the concept instance that it denotes,

c) be represented as a character string, and

d) be human readable.

For presentation purposes only, a long label may be displayed on more than one line by using a hyphen (-) to separate the label before an underscore (_) character.

[30] Uniqueness is only within the set of instances of each SRM concept, for example: RDs or ORMs.

EXAMPLE 1 The label LOCOCENTRIC_SURFACE_EUCLIDEAN may be displayed for presentation purposes as:
LOCOCENTRIC_SURFACE -
_EUCLIDEAN.

If two concept instances differ only in the dimension of an associated position-space or the dimension of an associated object-space, then the characters “_1D”, “_2D”, or “_3D”, as appropriate, shall be appended to the label as a means of differentiating such concept instances.

Labels shall be presented, in this document or in other documents, such that it is clear which SRM concept is represented. This is achieved by preceding the label with the concept abbreviated form, which identifies the concept context.

EXAMPLE 2 The label TRANSVERSE_MERCATOR is used as both an SRFT and a CS label. Each of these shall be presented as shown below.

SRFT TRANSVERSE_MERCATOR
CS TRANSVERSE_MERCATOR

The labels of standardized SRM concept instances in this document were created by applying the following guidelines. Labels for proposed SRM items shall be created according to these guidelines:

a) A label shall be provided for each registered SRM concept instance.

b) Labels shall be character strings.

c) Labels shall contain only uppercase characters (A-Z) and digits (0-9) with the exception of the radix delimiter symbol "r" and the underscore character (_).

d) Labels shall begin with an uppercase alphabetic character (A-Z).

e) Labels shall not contain spaces.

f) Labels may be a single word or abbreviated form (see 3.2 and Annex F), or may be composed of a series of components, each of which is a word or an abbreviated form.

g) The underscore (_) character shall be used to concatenate the components of a label.

h) Labels should be as short as possible while capturing a common use descriptive word or phrase representative of the registered SRM concept instance.

i) The length of a label shall not exceed sixty-three (63) characters and should be unique within the first thirty-one (31) characters.

The components of a registered SRM concept instance label shall be chosen according to the following guidelines:

a) Components of labels shall not be used with a different meaning from how that component is used in this document or in previously registered SRM concept instances.

b) When abbreviating, if a word or phrase to be abbreviated appears in Annex F or Table 3.3, the given abbreviated form for that word or phrase shall be used.

c) When abbreviating, if a word or phrase to be abbreviated does not appear in Annex F or Table 3.3, the proposed abbreviated form should, if possible, be consistent with those specified in Annex F and Table 3.3.

Recognized abbreviated forms for words or phrases may be used as components of a label based on the following guidelines:

a) Each abbreviated form shall uniquely represent a single word or phrase.

b) If a word or phrase is abbreviated in one label, it is not required to be abbreviated in other labels.

c) Jargon shall not be used.

d) An abbreviated form in a label shall not be, by itself, a word with a different meaning than that of the word/phrase that it replaces.

EXAMPLE 3 The abbreviated form DATUM should not be used for the phrase "Dartmouth Arc Transit Universal Meridian" as this would violate guideline (d).

13.2.3 Code

The *code* element of an SRM registered item specification shall be a compact designator that is used to uniquely identify that registered item. Codes are assigned by the maintenance agency for this document when a registration proposal is accepted. Therefore, codes are not included in registration proposals.

Each code in this document shall:

a) uniquely denote a specific instance within the set of instances of a given SRM concept,

b) be represented as an integer, and

c) be assigned sequentially in increasing order within the set of instances of a given SRM concept, beginning at 1.

There is a one-to-one relationship between labels and codes in the same set of SRM concept instances. Therefore, a label and a code may be used interchangeably to denote the same concept instance. The set of members of a single SRF set shall be considered as a separate and distinct set from the set of members of a different SRF set.

Application program interfaces and exchange formats often utilize codes. Applications using such codes shall be capable of distinguishing 2^{31}-1 different codes. Negative codes are not permitted in this document, but they may be used in a non-conforming implementation for experimentation. The code value zero is reserved for use in the API (see 11.2.7.1).

All codes for SRM standardized concept instances that are not assigned in this document are reserved for future standardization or for registration. Codes shall be assigned by the maintence agency for this document according to these rules:

a) Nothing shall be assumed about the relationship among standardized or registered SRM concept instances from the numerical relationships of their corresponding codes. In particular, the numerical sequencing of codes does not impose any sequential ordering to the standardized or registered SRM concept instances denoted by those codes.

b) Integers are used to represent codes even though only positive integer values shall ever be assigned in either this document or through registration. This allows negative integer values to be used experimentally in applications, even though such use of negative integer values is not in conformance to this document.

c) The maintenance agency for this document shall assign codes in increasing order beginning at the first available integer value, and skipping no integer values, within the set of codes for each SRM concept.

d) The maintenance agency for this document shall coordinate the assignment of codes with future revisions of this document to ensure that no code shall be assigned more than once in the same scope by either standardization or registration.

13.2.4 Description

The contents of the *description* element of an SRM registered item specification shall be a precise statement of the nature, properties, scope, and/or essential qualities of the concept instance.

The descriptions of standardized SRM concept instances in this document were created by applying the following guidelines. Descriptions for proposed SRM items shall be created according to these guidelines:

a) A description shall be provided for each SRM concept instance. This description shall contain at least one word, number, expression, or formula.