

Comments on ISO 19155 (Place Identifier) by Eizi Toyoda

I had a chance to see latest draft of ISO 19155, standard of place identifier (PI), which is recently approved for publication. I think it is relevant for us. Observing stations or city (in city forecast) are PI's.

Outline:

- ISO 19155 tries to establish standard handling of PI
- PI data consists of three components:
 - mandatory "value" which is unique identifier in some context
 - optional "rs" (for reference system) to specify the context
 - optional "validPeriod" to specify time at which the information is valid
- Only above three items are used in citing a place.
- Other information (such as bounding box or vertical extent) is stored somewhere else in a matching table, and then served as a service, according to the reference model

If the standard flies to mainstream, we will be asked to have consistent handling of PI. But it's nothing to worry.

- ISO 19155 defines three encodings for PI data: GML extension, tag URI and WKT.
- GML is normative, but the original motivation of working group seems to be using tag URI.
- Data types (xs:string, xs:string, xs:dateTime) seems to be "highest common factor" of (value, rs, validPeriod) among three encodings; at least tag URI has no extensibility on time beyond single dateTime.

In short, the standard recommends to include date in citation of place. That is natural.

For example, Volume C1 entry for BUOY report "SSWB19 RKSL" bears "22101,22102,22103,22104" as Content, which is buoy number (NOT STATION INDEX IN VOLUME A!) given at <<http://www.wmo.int/pages/prog/amp/mmop/buoy-ids.html>>. Buoys are more likely (than land station) to change or move over time, so it is prudent to write "which version of buoy table I used". Indeed there are some VolC1 entries whose buoy number is no longer traceable in current table.

Two encodings have been discussed in WIS community in order to encode station/place identification in ISO 19115 in a computer-readable manner, but both are capable to store the common subset

- when using place keyword (MD_Keyword[type = "place"])
 - value := keyword
 - rs := thesaurusName/*/title
 - validPeriod := thesaurus/*/date
- when using extent/EX_GeographicDescription
 - value := geographicIdentifier/*/code
 - rs := geographicIdentifier/*/authority/*/title
 - validPeriod := geographicIdentifier/*/authority/*/date

So it should be okay as long as we are aware about that.