

Steve Foreman

From: Hedley, Mark
Sent: Friday, May 06, 2016 13:17
To: Steve Foreman; Tandy, Jeremy
Cc: Jeremy at gmail Tandy
Subject: RE: Draft doc for IPET-MDRD-4

Hello Steve

Unfortunately I am unable to attend the meeting next week, in person or remotely. Please accept my apologies and share them with the team.

I very much support the principal that we should be cross referencing between concepts and using entries in the places where they are appropriate. The promotion of reuse of common terms is a goal I am fully signed up to.

With that said, I have been very focused on maintaining a one:one relationship between entries in the Manual on Codes and entities in the Registry. As well as being driven by semi-automated processes, I have felt it is crucial that the IPET-DRMM are able to exactly map from an entry in a table static document to a URI.

"A1: Principles... 1.

Do not create a new code if there is an existing code"

I agree with this, for new code lists. The WIGOS metadata work is an ideal opportunity to work through this work flow. For reproducing the BUFR and GRIB tables, I think we may have to live with some duplication.

WMO experts have a great opportunity to add value to the published code tables by providing explicit links between entries. My colleague and I are working on the contributor documentation to describe this work flow for experts right now:

<https://github.com/wmo-registers/codes-wmo-deploy/issues/19>

"A1: Principles... 2., 3., 5., 6."

Absolutely signed up to these, this is core information management, it's excellent to have these as definitive statements.

I am currently working with Martin Schultz and Jorg Klausen amongst other on the Atmospheric Chemistry Vocabulary (TT-ACV) and how this interacts with the WIGOS metadata. I expect this to lead to some key information design decisions which IPET-MDRD need to own.

One is the naming of registers. Particularly pertinent given the information management points: "A1: Principles... 2., 3., 5., 6."

in your paper, you reference:

<http://codes.wmo.int/wigosmd>

this is fine, but it does not exist yet.

From within <http://codes.wmo.int/wigosmd> there will be cross references into the atmospheric chemistry vocabulary, we are working on how these references are made. Thus we need a home for ACV as well.

I don't think the atmospheric chemistry is part of WIGOS, I think it is more general than that. So, where may it live, is it <http://codes.wmo.int/common>

?

http://codes.wmo.int/atmospheric_chemistry

?

elsewhere?

A useful pattern in my mind is that the URI gives a hint to who is responsible for the content, there are other patterns we could follow as well.

There is quite a bit of activity to take place in this space over the next year or two.

I hope to continue to be involved and to provide technical assistance in the use and management of vocabularies and the platform which provides our publishing.

I can facilitate the decisions of expert teams and help people to add structural and piece wise content.

In all of this, I am looking to carry out implementations agreed upon within the WMO and the relevant expert teams and task teams.

My particular focus at the moment is providing a documented work flow enabling many domain experts to propose suggestions for inclusion, some domain experts to review and agree on proposals and a small group of administrators to implement agreed changes into the published register.

We want to make this work flow as open and accessible as possible, whilst maintaining the rigor of decision making with the relevant WMO teams.

I hope this is useful information for yourselves and your meetings.

I look forward to assisting with the next steps

Mark Hedley
IT Analyst
Met Office

From: Steve Foreman [sforeman@wmo.int]

Sent: 29 April 2016 16:09

To: Tandy, Jeremy

Cc: Hedley, Mark; Jeremy at gmail Tandy

Subject: Re: Draft doc for IPET-MDRD-4

Thanks Jeremy

I'll modify the document and post it nearly next week.

Have a good weekend.

Steve

On 29 April 2016 at 16:55, Tandy, Jeremy <jeremy.tandy@metoffice.gov.uk> wrote:

[Steve- I've copied Mark Hedley, as he is spending proportion of his time working on maintenance of code lists using the Linked Data Registry s/w that underpins code.wmo.int ... he's also maintaining codes.wmo.int]

[Mark & Steve- I would like to present (on behalf of Mark; he's out of office w/c 9 May) on two items relating to the WMO Codes Registry; please can we add them to the agenda under item 4 ... (i) Developments to the WMO Codes Registry, (ii) Governance model and maintenance procedure for WMO Codes Registry ... Mark, I think you have this information to hand (more or less); can you provide me with some slides that I can talk through?]

The illustrative example that you've used (para. 5) makes sense to me. I see a set of terminology that has been authoritatively defined (by OGC) for WaterML2 being reused in other code-lists. This is consistent with the 'nil values' codelist we already have at: <http://codes.wmo.int/common/nil> ...

From my perspective, the code list (in this case <http://codes.wmo.int/common/nil>) binds a set of definitions (e.g. <http://www.opengis.net/def/nil/OGC/0/missing>) that may be used in a specific context. Crucially, the definitions are reusable in many different context – by binding them to new code-lists ... which is what you have shown with <http://codes.wmo.int/bufr4/codeflag/0-33-020> and <http://codes.wmo.int/wigosmd/codeflag/8-03/>. A term is bound to a register via a register-item. In the case of the term <http://www.opengis.net/def/nil/OGC/0/missing>, the register-item is: http://codes.wmo.int/common/nil/_missing (nb. the underscore '_' syntax is an implementation choice in the Registry software. It is the register-item that carries the metadata about how the term might be used in the context intended by the Register; e.g. that status of the term; stable, deprecated etc.

I think that this makes sense when we're establishing *_new_* codelists. However, things get a little more murky when we're publishing existing codelists (such as those for use with BUFR) in codes.wmo.int ...

To populate codes.wmo.int, Mark has tried to automate the creation of the registers and definitions based on the CSV output of the code tables (from Atsushi). It is not (always) possible to determine the 'proper' definition that should be used for a given term in a BUFR code table. So Mark has found it expedient to create new terms when creating the BUFR code tables; e.g. for <http://codes.wmo.int/bufr4/codeflag/0-20-040> "Evolution of drift of snow", term 2 ("No change") has URI <http://codes.wmo.int/bufr4/codeflag/0-20-040/2> ...

Related points:

- (i) We *_really_* need to get some help in writing useful definitions for these terms ... where did the idea to develop the International Meteorological Vocabulary go?
- (ii) We *_really_* need some help to create the translations to the official WMO languages too ...

So- if we create new definitions for BUFR terms (and other existing code tables) how do we relate these to the preferred definitions?

We can use the [SKOS vocabulary](#) to state 'exact match', broader, narrower etc. ... And to leverage that information, we need to provide a mechanism for people (& software agents) to traverse those relationships. The [SISSVOC API](#) provides one such example;

SISSVoc is a Linked Data API for accessing published vocabularies. SISSVoc provides a RESTful interface via a set of URI patterns that are aligned with SKOS. These provide a standard web interface for any vocabulary which uses SKOS classes and properties.

SISSVoc provides web pages for human-readable views, and machine-readable resources for client applications (in RDF, JSON, and XML). SISSVoc is implemented using a Linked Data API façade over a SPARQL endpoint. This approach streamlines the configuration of content negotiation, styling, query construction and dispatching.

You can read more about the SISSVOC API here: <http://www.semantic-web-journal.net/system/files/swj880.pdf>

We've had some discussions with Simon Cox et al. who own this API. It seems reasonably easy to lay this on top of the Linked Data Registry ... but we (Met Office) have not done it yet (and could promise to do so in the current funding environment).

I would like to discuss at MDRD-4 how we might add such capability to codes.wmo.int ...

So looking at your Annex 1 in terms of the principles:

#1 – yes

#2 – yes ... URLs (rather than URI) might be more appropriate- because they need to resolve!

#3 – yes

#4 – yes ... although I think we can clarify the principle during MDRD-4; it boils down to “you *should* reuse existing terms if they match the concept of your term”. Reuse of a term means referencing it by its URL. Crucially, we've separated the management of the definition of a given term from the usage of a term in one or more code lists.

#4a ... I would add a principle about trying to capture the relationship between terms using the SKOS vocabulary; for example 'exact match', 'broader', 'narrower'. (note to self: how might we expose SKOS Concept Schemes alongside the SKOS Collections that LDR already uses?)

#5 – yes

#6 – yes ... and reinforce that if you create two new narrower terms, you mustn't remove the original term (as per #5)

#7 – yes

Thank you for preparing this paper. If you're unable to incorporate my feedback before publishing this doc to the meeting page, then I am happy to raise these points during the meeting.

Best regards, Jeremy ... & bon weekend.

From: Steve Foreman [mailto:sforeman@wmo.int]
Sent: 27 April 2016 10:57
To: Tandy, Jeremy; Jeremy Tandy
Subject: Draft doc for IPET-MDRD-4

Hi Jeremy

before I put this up on the meeting page, does it make sense? I think that it is what you have been trying to do.

If you agree we should take it at IPET-MDRD-4, we probably need to share it with IPET-DRMM as well.

Let me know what you think so I can post it (or not!)

Regards

Steve

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Dr Steve Foreman
Chief, Data Representation, Metadata and Monitoring
World Meteorological Organization

Tel: [+41 22 730 8171](tel:+41227308171)
Email: sforeman@wmo.int

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Dr Steve Foreman
Chief, Data Representation, Metadata and Monitoring
World Meteorological Organization

Tel: +41 22 730 8171
Email: sforeman@wmo.int

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