

# GeoDCAT Application Profile for Data Portals in Europe WORKING GROUP VIRTUAL MEETING 3

2015-04-29

Meeting Minutes

Date: 04/05/2015

GeoDCAT Application Profile – Working Group Virtual Meeting 2				
Venue	Virtual Meeting	Meeting date	2015-04-29	
Author	AFS	Meeting time	14:00 - 16:00	
Reviewed by	SG, AP	Issue date	2015-05-04	
Status	for review	Version	0.03	

# **DOCUMENTATION**

http://joinup.ec.europa.eu/site/dcat application profile/GeoDCAT-AP/GeoDCAT-AP 2015-04-29 3rd WG Virtual Meeting/

Meeting page: <a href="https://joinup.ec.europa.eu/node/140207">https://joinup.ec.europa.eu/node/140207</a>

#### **ATTENDEES**

Name	Abbrevia tion	Countr y	Organisation
Ana Fernández de Soria	AFS	EU	PwC EU Services
Anders Friis-Christensen	AF	EU	EC DG Joint Research Centre
Angelos Tzotsos	AT	GR	IMIS Athena Research Centre
Andrea Perego	AP	EU	EC DG Joint Research Centre
Antonio Rotundo	AR	EU	Agenzia per l'Italia Digitale
Athanasios Karalopoulos	AK	EU	European Commission
Hannes Reuter	HR	EU	GISCO Team at Eurostat
Hans Overbeek	НО	NL	KOOP
Lorena Hernandez Quiroz	LHQ	EU	EC DG Joint Research Centre
Stijn Goedertier	SG	BE	PwC EU Services
Susanne Wigard	SW	EU	European Commission
Udo Einspanier	UE	DE	Conterra
Willem van Gemert	WvG	EU	Publications Office EU

04/05/2015 Page 1 of 2

# AGENDA

Item	Subject
1.	Welcome, practical matters, approval of the <u>minutes</u> of the <u>previous meeting</u> .
2.	Planning the next WG calls and public review.
3.	Prioritisation of metadata elements to be discussed.
4.	Outstanding issues on GeoDCAT-AP Core syntax bindings.  Resolution to the following outstanding issues is to be discussed:  • 142437 - GeoDCAT-AP - how to encode services in GeoDCAT-AP Core  • 142481 - How to encode resource locator?  • 138909 - PR14 - Add new property to express lineage  • 141755 - How to encode or represent a geographic bounding box or geometry  • 141757 - How to express the different responsible party roles supported in ISO 19115 / INSPIRE  • 142480 - How to encode maintenance information
5.	<ul> <li>Discuss the bindings for GeoDCAT-AP Extended</li> <li>142452 - How to encode spatial resolution, coordinate reference system, and temporal reference system in RDF</li> <li>142482 - How to encode representation type</li> <li>141756 - How to express the different conformity degrees supported in ISO 19115 / INSPIRE</li> <li>142454 - How to encode metadata elements on data quality</li> </ul>
6.	AOB     139986 - GeoDCAT-AP: Clarify why the scope is set to ISO19115:2003 and not to ISO19115:2014     140223- GeoDCAT-AP - Decide when testing of the proposed specification should take place
7.	Closing and next steps

04/05/2015 Page 2 of 2

#### **DISCUSSION AND DECISIONS**

# 1. Welcome, practical matters, approval of the <u>minutes</u> of the <u>previous</u> meeting

The participants were welcomed and a round table of introductions followed.

No comments were made by the WG Members on the <u>minutes of the previous</u> <u>meeting</u>. The minutes are considered to be approved.

AP explained that the main objective of the meeting was to discuss and agree on the proposed bindings for the *GeoDCAT-AP Core* and *GeoDCAT-AP Extended* and the current issues on them. The GeoDCAT-AP Core includes bindings for metadata elements of the INSPIRE Metadata Regulation and metadata elements in the ISO 19115:2003 core for which DCAT-AP provides an RDF syntax binding – those for which DCAT-AP does not provide an RDF syntax binding are in *GeoDCAT-AP Extended*.

#### 2. Planning the next WG calls and public review

AP explained that an extension of three weeks and two additional WG meetings would be needed to finalise the work before the public review, and to align the GeoDCAT-AP specification with the DCAT-AP, that is supposed to be released around mid-May. AP asked the participants whether they were fine with the revised timeplan.

• AK answered that there is no problem for the ISA Programme.

AP explained that the public review period will last one month. The following should be devoted to prioritise the issues and build consensus on the proposed syntax bindings.

Based on the progress made during the next weeks, the WG will decide whether additional time is needed to consolidate and release the draft for public review.

The editors will create a Doodle Poll to allow the Working Group voting the next call day.

#### 3. Prioritisation of metadata elements to be discussed

AP explained that the specification has two levels GeoDCAT-AP Core and GeoDCAT-AP Extended, but the Core profile has priority. The metadata elements in the Extended profile need to be prioritised, as there are many opened issues to be discussed. He invited the WG members to send their priority list of metadata elements to be discussed.

- 4. Outstanding issues on GeoDCAT-AP Core syntax bindings
- 5. Discuss the bindings for GeoDCAT-AP Extended

04/05/2015 Page 1 of 13

During the meeting the following syntax bindings were discussed, following the order in the meeting agenda. The <u>3rd WG draft specification was used as a reference</u>.

#### 1) Resource type

AP explained that the <u>open issue</u> relates to how to represent services in GeoDCAT-AP Core. The current GeoDCAT-AP proposal for modelling spatial data services is to use dcat:Catalog plus, optionally, a dct:type predicate. A summary of the proposal can be found in <u>Joinup</u>.

A possible revision to the GeoDCAT-AP proposal could be as follows:

- Use dctype:Service for all services.
- Use dcat:Catalog only for catalogue services (and possibly geoportals as well).
- In addition to the above, use, optionally dct:type with the spatial data service type URI code list to clearly specify the <u>service type</u>.

AR explained that he investigated the possibility of representing 'download' services as a dcat: Distribution but this would require adding further properties that are not in DCAT-AP anyway. Therefore, he agreed with the proposal of AP.

AP continued explaining that there are other domains which do not care so much about metadata relating to 'services'. Furthermore, a download service used to access a dataset does not match very well the meaning of dcat:Distribution anyway. This was discussed in the revision of DCAT-AP working group.

**Decision:** The following was decided by vote:

The proposed syntax bindings for GeoDCAT-AP Core and Extended for modelling spatial data services described in <u>Joinup</u> is accepted.

#### 2) Coupled resource

Relating to the way of expressing coupled resources, AP expounded that a possible solution could be to use dcat:dataset for metadata records describing catalogue services (i.e., those services modelled with dcat:Catalog) and use dct:hasPart for all the other services.

Following the comment posted by AR on <u>Joinup</u>, AP agreed that the specification should be revised in order to fix the improper use of the notion of "coupled resources" for catalogue services, where it is not present.

LHQ noted that using dcat:dataset to point to metadata records concerning services may not be appropriated. AP agreed that the specification was not explicit about this.

AP proposed the following revision to the initial proposal:

- The general solution will be to use dct:hasPart to model the relationship between a service and the resources available through it
- dcat:dataset will be used only when the service is modelled as dcat:Catalog, and when the metadata records describe datasets or dataset series.

04/05/2015 Page 2 of 13

AP also noted that dcat:dataset is defined as a sub-property of dct:hasPart, so the proposal is also in line with the semantics of these two properties.

**Decision:** The following was decided by vote:

The new proposal is accepted.

#### 3) Resource locator

AP introduced the <u>proposal</u> for the Resource Locator, describing the previous meeting decision, which is to differentiate the type of Resource Locator based on the gmd:CI\_OnLineFunctionCode value and whether or not the resource is a data, data series and service.

AP explained that there are two proposals for the function code 'offlineAccess': to use dcat:accessURL or to use dcat:LandingPage. He also proposed to use dcat:accessURL when the function code is missing.

AP proposed to use dcat:accessURL for the function code 'order'.

AP asked the working group whether the gmd:CI\_OnLineFunctionCode is mentioned in the Technical Guidelines for INSPIRE metadata (based on ISO19139). AR answered that it is, but it is not required.

AP proposed to use foaf:page for the function code 'information'.

AP proposed to use foaf:page for the function code 'search'.

**Decision:** The following was decided by vote:

The proposal to differentiate the type of Resource Locator based on the gmd:OnLineFunctionCode, issued in the last meeting, is accepted.

**Decision:** The following was decided by vote:

The proposed syntax binding for the 'download' function code using dcat:accessURL is accepted.

**Decision:** The following was decided by vote:

The proposed syntax binding for the 'missing' value for function code using dcat:landingPage is accepted.

**Decision:** The following was decided by vote:

The proposed syntax binding for the function code 'order' using dcat:accessURL is accepted.

**Decision:** The following was decided by vote:

The proposed syntax binding for the function code 'offlineAccess' to use dcat:landingPage is accepted.

**Decision:** The following was decided by vote:

The proposed syntax binding for the function code 'search' to use foaf:page is accepted.

#### 4) Lineage

04/05/2015 Page 3 of 13

AP explained that in the revision of DCAT-AP a <u>proposal was agreed</u> to add a new property to express lineage using dct:provenance allowing to add a textual description. This also suits the needs for GeoDCAT-AP.

**Decision:** The following was decided by vote:

The proposed syntax binding for Lineage is accepted by the Working Group.

#### 5) Geographic bounding box

AP introduced the proposal to represent a geographic bounding box or geometry, detailed in <u>Joinup</u>. In the previous meeting, the Working Group agreed to use locn:geometry to encode the property, but it is still open the issue concerning the recommended way to encode a geometry (for example, using WKT, GeoJSON, GML, etc.). This issue is also being discussed in the W3C Spatial Data on the Web Working Group, and they may provide a solution, but not within the timeframe of the GeoDCAT-AP WG.

AP explained that the Core Location Vocabulary's locn:geometry property supports any encoding. He also explained that literals using locn:geometry could be typed, thus allowing to unambiguously identify the relevant encoding through a query. For example, using ogc:gmlLiteral to indicate that a geometry is encoded in GML. This also is a good practice indicated in the Core Location Vocabulary.

HO enlightened that in the Netherlands, Geonovum is in favour of making a choice for a specific encoding. UE agrees with the idea of making a choice for a specific encoding. HO added that it would be preferred to recommend WGS84 as a coordinate reference system, but there is no preference for an encoding of the bounding box.

AP described that WKT has an accessible textual representation that is used in many systems. He proposed to recommend it as an encoding.

During the discussion, AP asked which encoding the GeoDCAT-AP should recommend.

The Working Group presented their opinions:

- SG and LH recommended WKT.
- UE explained that he had no preference but a choice must be made. For the pan-European data portal, the choice makes no difference.
- AT recommended to use GML, but not strongly.
- HR defended GeoJSON for a quick visualization, but he also accepted WKT.
- AR enlightened that the INSPIRE Data specification TG proposes the use of GML as the default encoding, hence he recommended GML, at least.
- HO explained that GML was no problem for Geonovum, but he could not give an opinion about other encodings.

AP explained that he have created an <u>XSLT</u> for automatic conversion of ISO19115 metadata records to GeoDCAT-AP. The XSLT already foresees multiple encodings for geometry.

AT proposed that the GeoDCAT-AP specification should have examples for all the encodings that the Working Group are supporting. Furthermore, he warned that the GeoDCAT-AP should also be careful of the **axis order**.

04/05/2015 Page 4 of 13

AP noted that this issue need further discussion and investigation, and proposed as a provisional decision what follows:

- A geometry can be provided in multiple encodings
- It is recommend that provided geometry encodings include at least in GML, WKT and/or GeoJSON.

**Decision:** The following was decided by vote:

A recommendation on using multiple alternative encodings in WKT, GML or GeoJSON would be suggested.

**Decision:** The following was decided by vote:

The proposed syntax binding for Geometry is accepted by the Working Group.

#### 6) Responsible party roles

AP introduced the discussion explaining the open <u>issue</u> to encode the different responsible party roles supported in ISO 19115 / INSPIRE.

He proposed confirmed alignments for responsible party roles metadata point of contact, owner, originator and publisher.

AP proposed using prov:qualifiedAttribution for GeoDCAT-AP Extended, in combination with a dct:type assertion pointing to the code list for ResponsiblePartyRole in the INSPIRE registry. AP explained that he contacted the PROV Ontology working group to conform the proposed syntax binding, and he received a first positive response.

WvG provided the Role authority table that they have published in the MDR.

AP proposed to use PROV-O to model responsible party roles, as per the current proposal.

**Decision:** The following was decided by vote:

The proposed alignments for responsible party roles metadata elements in GeoDCAT-AP Core are accepted by the Working Group.

**Decision:** The following was decided by vote:

The proposed syntax binding for the Responsible Party Role using prov:qualifiedAttribution in combination with a dct:type assertion pointing to the code list for ResponsiblePartyRole in the INSPIRE registry in the GeoDCAT-AP Extended is accepted.

# 7) Maintenance information

AP explained the opened <u>issue</u> for the encoding of maintenance information. The main (only mandatory) information that is in ISO19115 / INSPIRE is the update frequency.

The GeoDCAT-AP proposes to represent the maintenance information using the DCAT-AP property dct:accrualPeriodicity.

04/05/2015 Page 5 of 13

WvG added that the metadata registry of the Publications Office also has a controlled vocabulary on frequency information (<u>NAL frequencies</u>). He proposes to add the <u>link</u> to the related discussion in the DCAT-AP revision.

 AP asked whether the URIs in the metadata registry will be de-referenceable (resolvable). WvG explained that they will make them de-referenceable, but the full codelist would be included in the HTTP response (for the individual codes). HO agreed with that for the time being.

AP continued enlightening that, additionally, a mapping table was made between the codes in MD\_MaintenanceFrequencyCode to the Dublin Core Frequency Vocabulary.

HO answered that they only use 11 values from DCMI-list, including continuous and irregular.

The GeoDCAT-AP proposed to use dct:accrualPeriodicity for maintenance information (limited to update frequency).

AP explained the 19115 Metadata Maintenance information that is <u>online</u>, where there are descriptions of the elements and a diagram of maintenance information. He pointed out that ISO10115 foresee a number of optional properties for maintenance information and asked the following questions to the Working Group: Do you believe these properties need an RDF syntax binding? If yes, which syntax binding would you suggest?

AP asked the WG whether alignments for additional attributes of maintenance information were required.

**Decision:** The following was decided by vote:

The GeoDCAT-AP proposal for maintenance information is accepted by the Working Group.

**Decision:** The following was decided by vote:

Alignments concerning option elements of maintenance information are not required.

# 8) Spatial resolution, coordinate reference system and temporal reference system

AP introduced the following <u>discussion</u>, explaining that there are no candidate syntax bindings available in existing vocabularies for the following metadata elements in the GeoDCAT-AP draft specification: spatial resolution, coordinate reference system and temporal reference system.

UE detailed that they do not have plan to support these properties on the pan-European data portal. It is a generic portal and the mentioned metadata are specific to spatial data, whereas there are many other datasets on the pan-European data portal. Therefore, they will not support these properties, at least, not in the first release.

04/05/2015 Page 6 of 13

The other open issues in the agenda were not discussed due to lack of time.

# 6. AOB

This item on the agenda was not discussed due to lack of time.

# 7. Closing and next steps

The editors will send a Doodle poll to give the Working Group the option to choose the date of the following meetings. These Doodle Polls are the following:

- 4<sup>th</sup> WG virtual meeting: <a href="http://doodle.com/tw3rgyp4b7tnperd">http://doodle.com/tw3rgyp4b7tnperd</a>
- 5<sup>th</sup> WG virtual meeting: <a href="http://doodle.com/qnazwurrne9apcbp">http://doodle.com/qnazwurrne9apcbp</a>

#### **ACTIONS**

Action	Owner	Date
The Editors will send a doodle poll to give the Working Group the option to choose the date of the following meetings.	Editors	2015-05-04
Editors to produce next draft.	Editors	2015-05-13
New draft should clarify the terminology with respect to the notion of "coupled resource"	Editors	2015-05-13
Editors to add examples for all encodings.	Editors	2015-05-13

#### SUMMARY OF DECISIONS TAKEN

Decision	Owner	Date
The proposed syntax bindings for GeoDCAT-AP Core and Extended for modelling <b>spatial data services</b> described in Joinup is accepted.	WG Members	2015-04-29
The proposed syntax binding on <b>coupled resource</b> for GeoDCAT-AP Core is accepted.	WG Members	2015-04-29
The proposal to differentiate the type of <b>Resource Locator</b> based on the <b>gmd:OnLineFunctionCode</b> , issued in the last meeting, is accepted.	WG Members	2015-04-29
The proposed syntax binding for the "download" function code using dcat:accessURL is accepted.	WG Members	2015-04-29
The proposed syntax binding for the <b>missing value</b> using dcat:accessURL is accepted.	WG Members	2015-04-29
The proposed syntax binding for the function code "order" using dcat:accessURL is accepted.	WG Members	2015-04-29
The proposed syntax binding for the function code "offlineAccess" obtained three votes to use	WG Members	2015-04-29

04/05/2015 Page 7 of 13

dcat:landingPage and four votes to use the dcat:accessURL.		
The proposed syntax binding for the function code "search" is accepted.	WG Members	2015-04-29
The proposed syntax binding for <b>Lineage</b> is accepted by the Working Group.	WG Members	2015-04-29
A <b>recommendation</b> on using multiple alternative encodings in WKT, GML, or GeoJSON would be suggested.	WG Members	2015-04-29
The proposed syntax binding for <b>Geometry</b> is accepted by the Working Group.	WG Members	2015-04-29
The proposed <b>alignments</b> for <b>responsible party roles</b> metadata has been approved by the Working Group.	WG Members	2015-04-29
The proposed syntax binding for the <b>Responsible Party Role</b> in the GeoDCAT-AP Extended is accepted.	WG Members	2015-04-29
The proposal to use <b>PROV</b> to model responsible party roles, as per the current proposal is accepted by the Working Group.	WG Members	2015-04-29
The GeoDCAT-AP proposal for <b>maintenance information</b> is accepted by the Working Group.	WG Members	2015-04-29
The GeoDCAT-AP proposal about <b>additional attributes of maintenance information</b> is accepted by the Working Group.	WG Members	2015-04-29

#### CHAT TRANSCRIPT FROM GEODCAT-AP

Stijn Goedertier - PwC: Welcome everybody.

Stijn Goedertier - PwC: The agenda of today is on the meeting page:

https://joinup.ec.europa.eu/node/140207

Stijn Goedertier - PwC: <a href="http://publications.europa.eu/mdr/authority/index.html">http://publications.europa.eu/mdr/authority/index.html</a>

Stijn Goedertier - PwC: (for the minutes) Andrea started discussing point 2 on the agenda: planning the next WG calls and public review. An extension of 1-2 weeks may be needed to finalise the work before the public review.

Stijn Goedertier - PwC: (for the minutes) The public review period may last 1-2 months. The followings are needed to prioritise the issues and build consensus on the proposed syntax bindings.

Stijn Goedertier - PwC: (for the minutes) after two-three weeks internal review by the WG, the specification will be submitted for public review.

Stijn Goedertier - PwC:

http://joinup.ec.europa.eu/site/dcat\_application\_profile/GeoDCAT-AP/GeoDCAT-AP\_2015-04-15\_2nd\_WG\_Virtual\_Meeting/GeoDCAT-AP\_2015-04-

15 2nd WG\_Virtual Meeting-minutes\_v0.05.pdf

Antonio Rotundo: I have some problems to hear you well but I'm afraid due to my phone Stijn Goedertier - PwC: 3. prioritisation of metadata elements to be discussed.

Stijn Goedertier - PwC: (minutes) Andrea Perego: the specification has two levels GeoDCAT-AP Core and GeoDCAT-AP extended. The Core profile has priority. The

04/05/2015 Page 8 of 13

metadata elements in the Extended profile need to be prioritised, as there are many issues to be discussed.

Stijn Goedertier - PwC: Agenda item 4. Syntax bindings for GeoDCAT-AP Core

Stijn Goedertier - PwC: Resource type

Stijn Goedertier - PwC: (see issue: how to encode services:

https://joinup.ec.europa.eu/node/142437)

Stijn Goedertier - PwC: (minutes) Andrea: the open issue relates to how to represent services.

Stijn Goedertier - PwC: (minutes) originally, it is proposed to represent all services as dcat:Catalog.

Stijn Goedertier - PwC: <a href="https://joinup.ec.europa.eu/node/142437">https://joinup.ec.europa.eu/node/142437</a>

Andrea Perego (JRC): Summary of proposal:

Andrea Perego (JRC): Use dctype:Service for all services.

Andrea Perego (JRC): Use dcat:Catalog only for catalogue services (and possibly geoportals as well).

Hannes Reuter: +1 for andrea

Andrea Perego (JRC): In addition to the above, use, optionally dct:type with the spatial data service type URI code list to clearly specify the service type.

Stijn Goedertier - PwC: Andrea's proposal is summarised here:

 $\frac{https://joinup.ec.europa.eu/asset/dcat\_application\_profile/issue/geodcat-ap-how-encode-services-geodcat-ap-core#comment-16588$ 

Andrea Perego (JRC): In addition to the above, use, optionally dct:type with the spatial data service type URI code list to clearly specify the service type.

Andrea Perego (JRC):

http://inspire.ec.europa.eu/metadata-codelist/SpatialDataServiceType/

Antonio Rotundo 2: +1 the last proposal (use dcat:catalog only for catalogue services + service type

Stijn Goedertier - PwC: (minutes) Antonio Rotundo: I investigated the possiblity of representing 'download' services as a dcat:Distribution. This would require adding additional properties that are not in DCAT-AP anyway. So he agrees with the proposal of Andrea.

Stijn Goedertier - PwC: (minutes) Andrea Perego: other domains do not care so much about metadata about 'services'. Also, a download service used to access a dataset does not match very well the meaning of dcat:Distribution anayway. This was discussed in the revision of DCAT-AP working group.

Stijn Goedertier - PwC: VOTE: the proposed syntax bindings for GeoDCAT-AP Core and Extended described in

https://joinup.ec.europa.eu/asset/dcat\_application\_profile/issue/geodcat-ap-how-encode-services-geodcat-ap-core#comment-16588 is accepted.

Angelos Tzotsos: +1 Udo Einspanier: +1 Antonio Rotundo 2: +1

Lorena Hernández: I like the idea of using dcat:Catalog for discovery services, but if a discovery service includes records pointing to others CSW?

Andrea Perego (JRC): About how to express coupled resources, a possible solution could be:Use dcat:dataset for metadata records describing catalogue services (i.e., those services modelled with dcat:Catalog).Use dct:hasPart for all the other services.

Udo Einspanier: +1 Antonio Rotundo 2: +1 Angelos Tzotsos: +1 Lorena Hernández: ok Antonio Rotundo 2: ok

04/05/2015 Page 9 of 13

Hannes Reuter: +1

Stijn Goedertier - PwC: (minute) proposal on coupled resource accepted.

Stijn Goedertier - PwC: start discussion on resource locator

Stijn Goedertier - PwC: (minutes) Andrea Perego: in the previous meeting it was agreed to differentiate resource locator based on the 'CI\_FunctionCode' value and whether or not the resource is a data, data series, and service.

Stijn Goedertier - PwC: (see issue: 142481 - How to encode resource locator?:

https://joinup.ec.europa.eu/node/142481)

Udo Einspanier: +1 Angelos Tzotsos: +1

Andrea Perego (JRC): Proposed: use dcat:accessURL for function code "download

Lorena Hernández: +1

Andrea Perego (JRC): Proposed: use dcat:accessURL for function code offlineAccess" Andrea Perego (JRC): Proposed: use dcat:landingPage for function code "offlineAccess" Andrea Perego (JRC): Proposed: use dcat:accessURL when the function code is missing Udo Einspanier: +1

Stijn Goedertier - PwC: dcat:landingPage for 'offlineAccess' is better... also for missing value

Andrea Perego (JRC): Proposed: use dcat:accessURL for function code "order"

Udo Einspanier: +1

Antonio Rotundo 2: A question: is CI\_FunctionCode the codelist in ISO 19115? It is not used in INSPIRE metadata, how can be possible the mapping?

Stijn Goedertier - PwC: (minutes) Andrea: CI\_FunctionCode is mentioned in the Technical Guidelines for INSPIRE metadata (based on ISO19139)

Antonio Rotundo 2: Yes, but it is not required

Stijn Goedertier - PwC: VOTE: for CI\_FunctionCode 'offlineAccess' we use dcat:landingPage

Angelos Tzotsos: +1 Lorena Hernández: +1 Antonio Rotundo 2: +1

Stijn Goedertier - PwC: VOTE: for CI\_FunctionCode 'order' we use dcat:landingPage Andrea Perego (JRC): Proposed: use dcat:accessURL for function code "offlineAccess"

Udo Einspanier: +1 Angelos Tzotsos: +1 Lorena Hernández: +1 Udo Einspanier: +1

Andrea Perego (JRC): Proposed: use foaf:page for function code "information"

Antonio Rotundo 2: +1 Lorena Hernández: +1 Angelos Tzotsos: +1

Andrea Perego (JRC): Proposed: use foaf:page for function code "search"

Angelos Tzotsos: +1 Antonio Rotundo 2: +1 Udo Einspanier: +1

Stijn Goedertier - PwC: Start discussion on 'lineage'

Stijn Goedertier - PwC: (minutes) Andrea: If the description is text, dct:provenance can be used. This is sufficient for our needs.

Andrea Perego (JRC): Proposed: use dct:provenance for "lineage"

Udo Einspanier: +1 Antonio Rotundo 2: +1

Willem van Gemert (Publications Office EU): +1

Angelos Tzotsos: +1

04/05/2015 Page 10 of 13

Hans Overbeek (NL): +1

Andrea Perego (JRC): Next: How to encode or represent a geographic bounding box or geometry

Stijn Goedertier - PwC: (see issue: https://joinup.ec.europa.eu/node/141755)

Lorena Hernández: +1 (for provenance)

Stijn Goedertier - PwC: (minutes) Andrea: in the previous meeting we agreed to use locn:geometry to encoude the property. What was left open is a preferred way to encode geometry (e.g. using WKT, GeoJSON, GML, etc.). The property 'locn:geometry' of the

Core Location Vocabulary supports any encoding. This issue is also being discussed in the W3C Spatial Data on the Web working Group.

Stijn Goedertier - PwC: (minutes) Hans Overbeek: in the Netherlands Geonovum is in favour of making a choice for a specific encoding.

Udo Einspanier: +1 for making a choice for one specific encoding

Stijn Goedertier - PwC: (minutes) Hans Overbeek: WGS84 as cooridnate reference system would be preferred. No preference for an encoding of the bounding box was made. Athanasios KARALOPOULOS: (minutes) Andrea: WKT has an accessible textual representation that is used in many systems.

Udo Einspanier: +1

Athanasios KARALOPOULOS: (minutes) Andrea: it may be easier to recommend an encoding,... Would that make sense?

Hans Overbeek (NL): +1 Antonio Rotundo 2: +1 Lorena Hernández: +1

Athanasios KARALOPOULOS: decision: a recommendation on using multiple alternative encodings in WKT, GML, or GeoJSON would be recommended.

Angelos Tzotsos: +1 Lorena Hernández: +1

Athanasios KARALOPOULOS: (minutes) Andrea: literals using locn:geometry should be typed... for example using ogc:gmlLiteral to indicate that a geometry is encoded in GML.

Athanasios KARALOPOULOS: (minutes) Andrea: this is also a good practice from the Core Location Vocabulary.

Lorena Hernández: WKT Udo Einspanier: no preference Stijn Goedertier - PwC: WKT

Angelos Tzotsos: GML, but not strongly

Hannes Reuter: for quick visualization my personal preference is GeoJSON

Stijn Goedertier - PwC: (minutes) Udo: I have no preference for encoding... a choice must be made. For the pan-european data portal it makes no real difference.

Hannes Reuter: but im fine with WKT

Antonio Rotundo 2: INSPIRE Data specification TG proposes the use of GML as the default encoding, so at least GML

Hans Overbeek (NL): GML was no problem for Geonovum. Don't know about other encodings

Hans Overbeek (NL): Anything \*against\* GML?

Andrea Perego (JRC):

https://webgate.ec.europa.eu/CITnet/stash/projects/ODCKAN/repos/iso-19139-to-dcatap/browse

Stijn Goedertier - PwC: (minutes) Andrea: I have created an XSLT for automatic conversion of ISO19115 metadata records to GeoDCAT-AP.

Stijn Goedertier - PwC: (minutes) Angelo: the specification should have examples for all encodings that we are supported.

04/05/2015 Page 11 of 13

Stijn Goedertier - PwC: TODO: editors to add examples for all encodings

Angelos Tzotsos: We should also be careful of the axis order

Andrea Perego (JRC): Proposed: Geometry to be encoded by using either GML, WKT

and&or GeoJSON, but you can also have other encodings

Angelos Tzotsos: +1 Hans Overbeek (NL): +1 Antonio Rotundo 2: +1 Udo Einspanier: +1

Stijn Goedertier - PwC: Start discussion 'responsible party roles'

Andrea Perego (JRC): Proposed: confirmed alignments for responsible party roles

metadata point of contact, owner, originator, point of contact, publisher

Angelos Tzotsos: +1 Udo Einspanier: +1 Lorena Hernández: +1 Antonio Rotundo 2: +1 Hans Overbeek (NL): +1

Stijn Goedertier - PwC: (minutes) Andrea: for GeoDCAT-AP Extended, we propose using prov:qualifiedAttribution... in combination with a dct:type assertion pointing to the code list for ResponsiblePartyRole in the INSPIRE registry:

http://inspire.ec.europa.eu/metadata-codelist/ResponsiblePartyRole/

Stijn Goedertier - PwC: (minutes) Andrea contacted the PROV Ontology working group to conform the proposed syntax binding;

Udo Einspanier: +1

Willem van Gemert (Publications Office EU): In the MDR we have published a Role authority table. Not sure if this can be useful in this discussion:

http://publications.europa.eu/mdr/authority/role/index.html

Andrea Perego (JRC): Proposed: Use PROV-O to model responsible party roles, as per the current proposal

Willem van Gemert (Publications Office EU): At OP we support the use of PROV

Stijn Goedertier - PwC: +1 (for PROV: this is GeoDCAT-AP extended)

Antonio Rotundo 2: +1 Angelos Tzotsos: +1

Hans Overbeek (NL): neutral

Stijn Goedertier - PwC: decision: approved.

Stijn Goedertier - PwC: Start discussion on 'maintenance information'

Stijn Goedertier - PwC: (minutes) Andrea: the main (only mandatory) information that is in ISO19115 / INSPIRE is the update frequency.

Stijn Goedertier - PwC: (minutes) Andrea: the proposal is to represent that using the DCAT-AP property dct:accrualPeriodicity.

Willem van Gemert (Publications Office EU): I confirm...

Stijn Goedertier - PwC: (minutes) Andrea: additionally, a mapping table was made between the codes in MD\_MaintenanceFrequencyCode to the Dublin Core Frequency Vocabulary.

Stijn Goedertier - PwC: (minutes) Wilem Van Gemert: the metadata registry of the Publications Office also has a controlled vocabulary on frequency information (NAL frequencies): http://publications.europa.eu/mdr/authority/index.html

Andrea Perego (JRC): Proposed: use dct:accrualPeriodicity for maintenance information (limited to update frequency)

Udo Einspanier: +1 Lorena Hernández: +1 Angelos Tzotsos: +1 Hans Overbeek (NL): +1

04/05/2015 Page 12 of 13

Antonio Rotundo 2: +1

Willem van Gemert (Publications Office EU): Stijn, maybe we can add link to the related discussion in the DCAT-AP revision

Andrea Perego (JRC):

https://geo-ide.noaa.gov/wiki/index.php?title=ISO\_19115\_Metadata\_Maintenance

Hans Overbeek (NL): We only use 11 values from DCMI-list including continuous and irregular

Stijn Goedertier - PwC: (minutes) Andrea: ISO10115 foresee a number of optional properties for maintenance information. Do you believe these properties need an RDF syntax binding? If yes, which syntax binding would you suggest?

Andrea Perego (JRC): Proposed: alignments for additional attributes of maintenance information are not required

Hans Overbeek (NL): +1 Angelos Tzotsos: +1 Lorena Hernández: +1

Willem van Gemert (Publications Office EU): Found it:

https://joinup.ec.europa.eu/asset/dcat\_application\_profile/issue/vo4-choose-between-dcmi-and-sdmx-frequency-vocabulary#comment-16530

Stijn Goedertier - PwC: (minutes) Andrea: Will the URIs in the medata registry be dereferenceable (resolvable)?

Stijn Goedertier - PwC: (minutes) Willem: we will make them de-referenceable, but the full codelist would be included in the HTTP response (not the individual codes). Would that be fine for Hans Overbeek?

Stijn Goedertier - PwC: (minutes) Hans: that would be fine for us for hte time being.

Stijn Goedertier - PwC: start discussion: 142452 - How to encode spatial resolution, coordinate reference system, and temporal reference system in RDF

Stijn Goedertier - PwC: see issue: https://joinup.ec.europa.eu/node/142452

Stijn Goedertier - PwC: (minutes) Andrea: are you having any issues with encoding these properties in RDF?

Stijn Goedertier - PwC: (minutes) Andrea: Udo, to you plan to address these properties on the pan-European open data portal?

Stijn Goedertier - PwC: (minutes) Udo: the pan-European data portal is a generic data portal. These metadata elements are specfici to spatial data... whereas there are many other datasets on the pan-European data portal. Therefore, we will not support these properties, at least not for the first release.

Stijn Goedertier - PwC: Closing Angelos Tzotsos: thank you all Antonio Rotundo 2: Thanks, bye Hans Overbeek (NL): thnx bye

Udo Einspanier: bye

Athanasios Karalopoulos (ISA): Thank you all, bye Lorena Hernández: Thank you all. Good afternoon.

Hannes Reuter: bye

Stijn Goedertier - PwC: Thank you everybody. And also you, Andrea! Willem van Gemert (Publications Office EU): Bye from Luxembourg!

04/05/2015 Page 13 of 13