

DCAT-AP
Implementation guidelines
Semantic & technical

2nd Working Group Meeting

18 March 2016 ISA² Programme Action 2.1





Agenda

- Opening and welcome
- Tour de table
- Proposed guidelines
- Issues related to controlled vocabularies
- Future work on guidelines
- Issues for future DCAT-AP revision
- Next steps
- Closing



Opening and welcome



Introduction of participants - Tour de table





Report on work January-March



Issues voted by Working Group

- MI2: Dataset series
- DI1: Tools for DCAT-AP
- MAI1: Mapping national themes to MDR Data Themes Vocabulary
- UI4: Licence documents and licence URIs
- DI6: Detecting and handling duplicates
- UI1: Contact information
- MI3: Provenance
- UI6: Identifiers for datasets and distributions
- MI7: Extend DCAT-AP
- DI4: Input validation
- Other issues

See also:

https://joinup.ec.europa.eu/asset/dcat-ap_implementation_guidelines/issue/all



Interviews

- Switzerland
 - opendata.swiss
- Sweden
 - o öppnadata.se
- Belgium
 - data.gov.be
- Norway
 - data.norge.no
- European Data Portal
 - europeandataportal.eu

- Netherlands
 - data.overheid.nl
- Spain
 - datos.gob.es
- Publications Office
 - o open-data.europa.eu
 - publications.europa.eu/mdr/ authority/
- Italy
 - dati.gov.it



Proposed guidelines



Dataset series

- No common approach across data providers.
- Suggestions for modelling:
 - Create multiple Distributions of a single Dataset if users are mostly interested in the collection as such
 - Create different Datasets if users are mostly interested in the individual members
 - If user expectations are difficult to determine, create separate Datasets and one combined Dataset with the members as Distributions



Dataset series - versioning

- DCAT-AP allows relating datasets as 'versions' using dct:hasVersion/dct:isVersionOf but it is not clearly described in which cases to use these properties.
- Putting a versioning scheme in place and assigning the version number as value to owl:versionInfo can be used for indicating precedence/sequence among different versions.
- adms:versionNotes can be used for describing the differences between and version and its previous one, or for indicating that a newer version is more valid than an older one.



Tools

- Call for information for tools in various categories:
 - Editors (allowing for manual input and/or input validation)
 - DCAT-AP exporters
 - Mapping of themes
 - DCAT-AP validators



Themes

- The use of the MDR Data Themes on all levels (local, regional. National, European) is encouraged as it creates coherence.
- If local or national schemes must be used, mappings to the MDR Data Themes should be made available publicly.
- European Data Portal and Publications Office should work together in co-ordinating mappings to the MDR Data Themes.



Licences

- Licences should always be identified with URIs, which should resolve to the description of the licence.
- Well-known licences should be used wherever possible.
- If a local or national licence is used, its description should link to a well-known licence on which it is based.
- Observation: Licence types are not commonly provided



Duplicates

- Assign a stable identifier to the dataset in the catalogue where the dataset is first published.
- Include this identifier as the value of adms:identifier.
- Either locally minted identifiers or external identifiers, like Datacite, DOI, ELI etc., as long as they are globally unique and stable.
- Harvesting systems should **not delete** or **change** the value of adms:identifier and only use it to compare harvested metadata to detect duplicates.



Contact information

- Provide as a minimum name (v:fn) and e-mail address (v:hasEmail), and optionally telephone number (v:hasTel) and URL (v:hasURL).
- Additional recommendations:
 - Stable contact point, i.e. an organisational email address (e.g. feedback@organisation.org), not the email of an individual.
 - Department that handles requests and feedback, if such a department exists, rather than for the organisation as a whole.
 For example, the URL should point to a contact page or contact form rather than to the homepage of the organisation.



Provenance

- dct:provenance is used in few cases for local purposes, e.g. with free text.
- Usefulness in (international) harvesting is questionable and the information may be ignored.
- Detailed provenance requirements may be satisfied with PROV-O (out of scope for DCAT-AP).



Identifiers

- Stable URIs should be minted for all entities.
- If possible, URIs should resolve to metadata (303 redirect).
- URIs generated on export must be unique and stable (same URI every time it is generated).
 - In RDF/XML, URI goes in rdf:about in rdf:Description
 - In JSON-LD, URI goes in @id keyword
- If necessary, blank node to be assigned Skolem URIs
- Dataset URI should be copied dct:identifier



Extension policy

- Respect the minimum conformance requirements as defined in section 6 of the specification of DCAT-AP v1.1
- Further policy elements:
 - May only narrow, not widen, usage notes
 - May add classes and properties but not when similar elements already exist in DCAT-AP
 - May change obligations and cardinalities but mandatory must stay mandatory
 - May specify additional controlled vocabularies



Other issues

- dct:format and dcat:mediaType
 - Only use dct:format and do not use dcat:mediaType
- Multilingual metadata
 - Always provide language tag for text
- Examples of DCAT-AP-compliant data
 - Gather examples for a wide range of cases from implementations, including edge cases



Issues – controlled vocabularies



Recommendations

- Location
 - Use Geonames always, add terms from MDR NALs (Continents, Countries, Places, Administrative territorial units) if available
- Dataset type
 - Improve MDR Dataset Types NAL
- Access rights
 - Create Access Rights vocabulary



Future work on guidelines



Possible subjects

Technical guidelines

- Service-based data access
- Description of different types of Distributions (files, APIs, nested formats)
- (Multilingual) keywords
- Data versioning
- Examples of use

Organisational guidelines

- Referring to the DCAT-AP in public procurement
- Develop business case for Linked Data



Issues – future DCAT-AP revision



DCAT-AP revision

- Various types of relationships between Datasets
- Reference to legal framework under which the data is collected or published
- Add properties like rights holder, creator
- Add expression of metadata character set, like in GeoDCAT



Next steps



Next steps

- Publication of draft guidelines on Joinup, 25 March
- Working Group members comment and review, 1 April
- Finalisation and publication of guidelines, 8 April
- Further planning of activities in April

Presentation of guidelines and further work in the workshop in Rome on 13 May 2016. More information available at: https://joinup.ec.europa.eu/node/149828



Save the date!



Stay tuned at:

https://joinup.ec.europa.eu/node/148436



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