



Towards metadata interoperability

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Outline

- Metadata – why we need them?
 - GeoDCAT-AP
- 😊 Thanks for all the work and contribution of the OGC/W3C, open data and INSPIRE metadata communities

Metadata

- ... we 'hate' metadata (a bit) ... but we need metadata ...

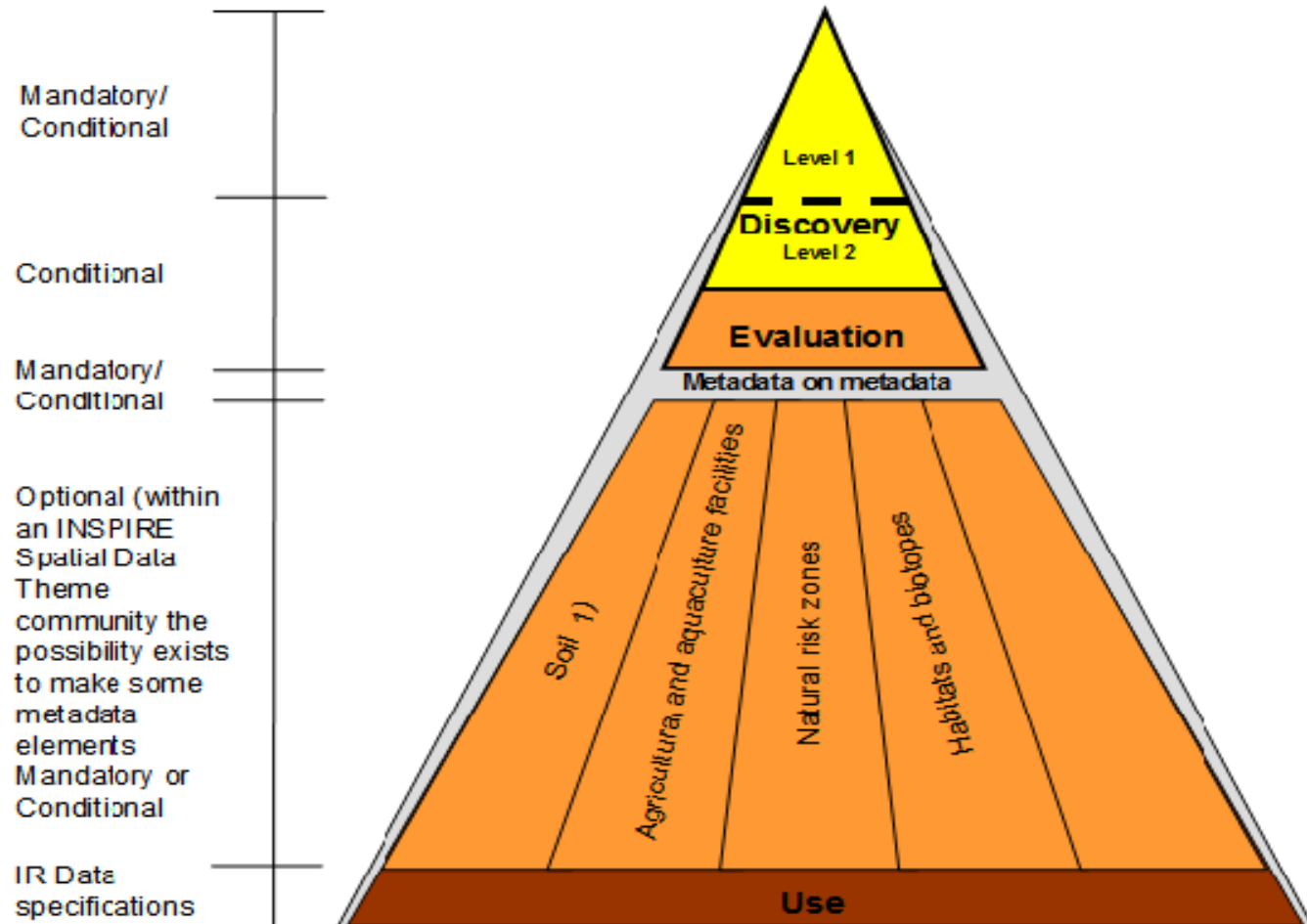


- ... metadata are everywhere



Metadata

- Different functions
 - Discover
 - Evaluate
 - Use



Metadata

- Different communities have different metadata standards

- Dublin Core



- ADMS (Assets Descriptor Metadata Schema)



- DCAT(-AP)







- ISO 19115 (3 parts) and related standards (different versions !)

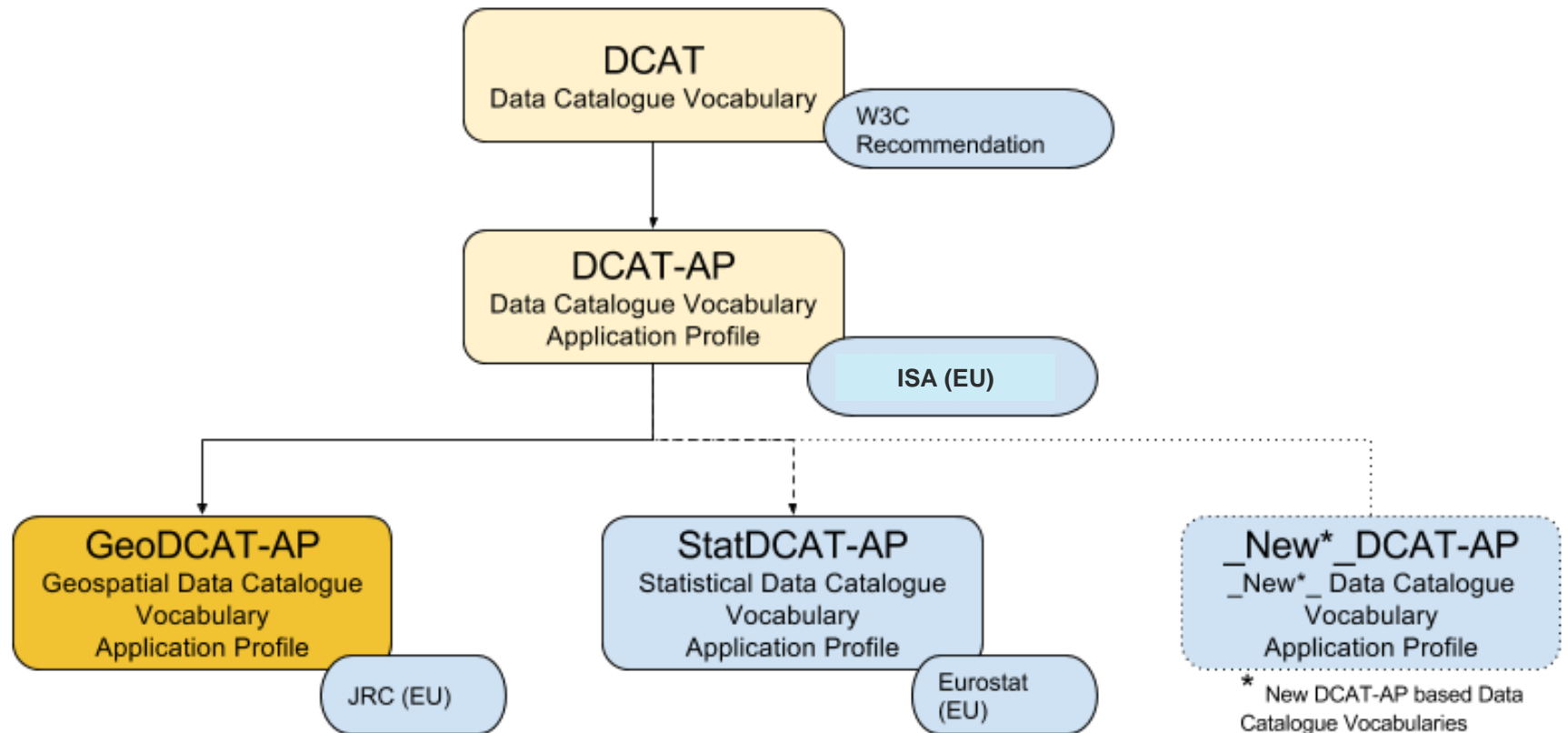


Metadata

- Different worlds, different solutions ...

	FORMATS (standards)	TOOLS
 GEO-WORLD	Geo-metadata <ul style="list-style-type: none"> - Inspire (Europe) - Geo-DCAT (JRC) - ISO 19115 - ISO 19139 - ... 	Geo-portals (meta data) <ul style="list-style-type: none"> - GeoNetwork - Micka - ...
 Open-data & E-GOV WORLD	(Open)meta data <ul style="list-style-type: none"> - DCAT (W3C) - Dublin core (ISO 15836) - ... 	(open)-data portals <ul style="list-style-type: none"> - CKAN - ...
 Developers WORLD	API descriptions <ul style="list-style-type: none"> - API description frameworks - Open API 3.0 - Swagger - Hypermedia - ... 	Developer portals <ul style="list-style-type: none"> - Github - ...
 Archive WORLD	Archive standards <ul style="list-style-type: none"> - Dublin core (ISO 15836) - E-GMS (E-GOV) - ISO 23081 - ... 	Document management & Archive systems <ul style="list-style-type: none"> - Open archive - ...

GeoDCAT-AP

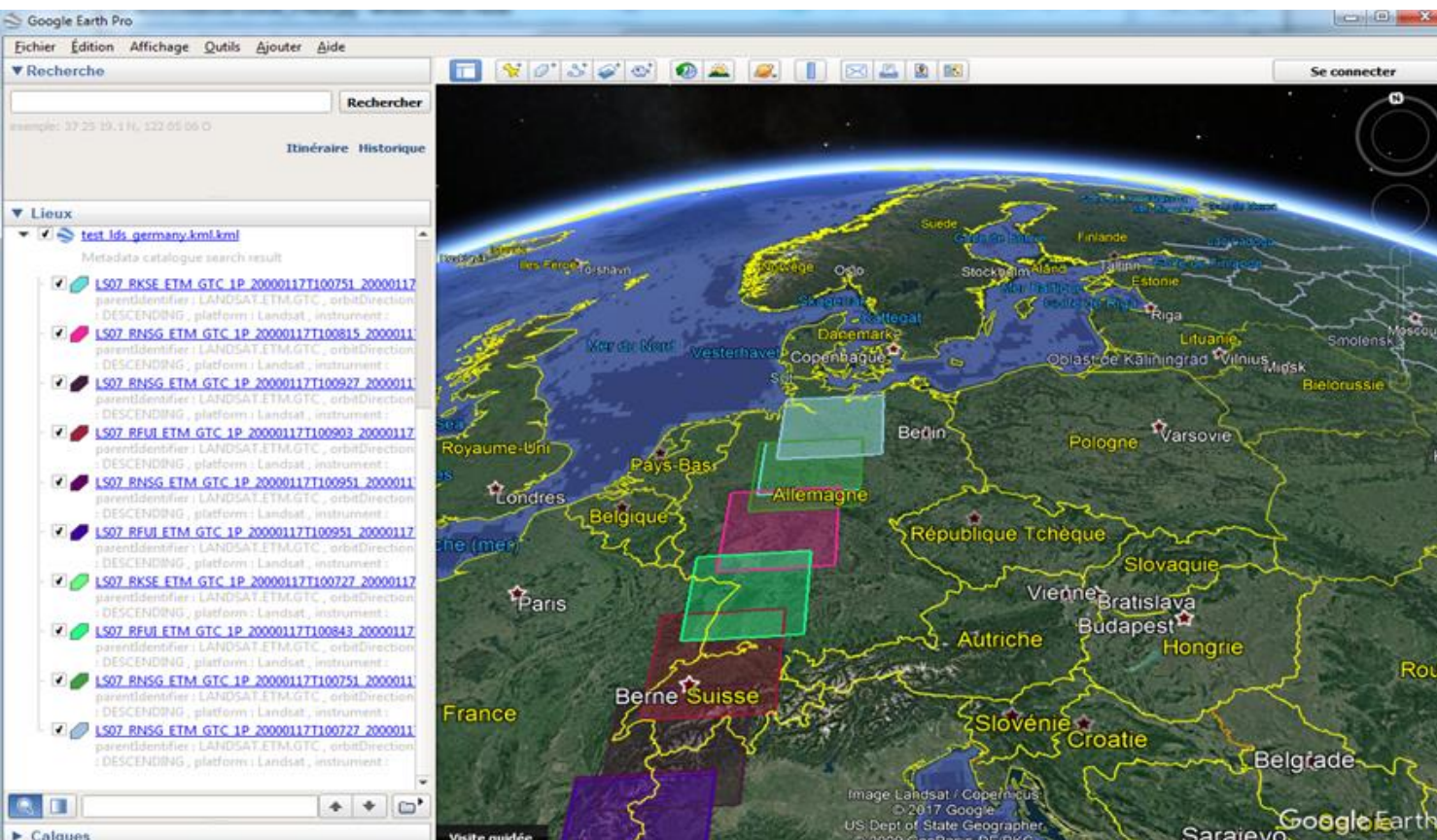


GeoDCAT-AP

- Towards OGC Best Practice document
 - 7 examples of GeoDCAT-AP implementations

ESA (OBEOS)
OGC Testbed 12
CZ INSPIRE portal
DataBio project
OTN project
Information Flanders
Testbed Geonovum

KML visualization of INSPIRE metadata for Sentinel-1 dataset series, originally published in the GeoDCAT/RDF (DataBio)



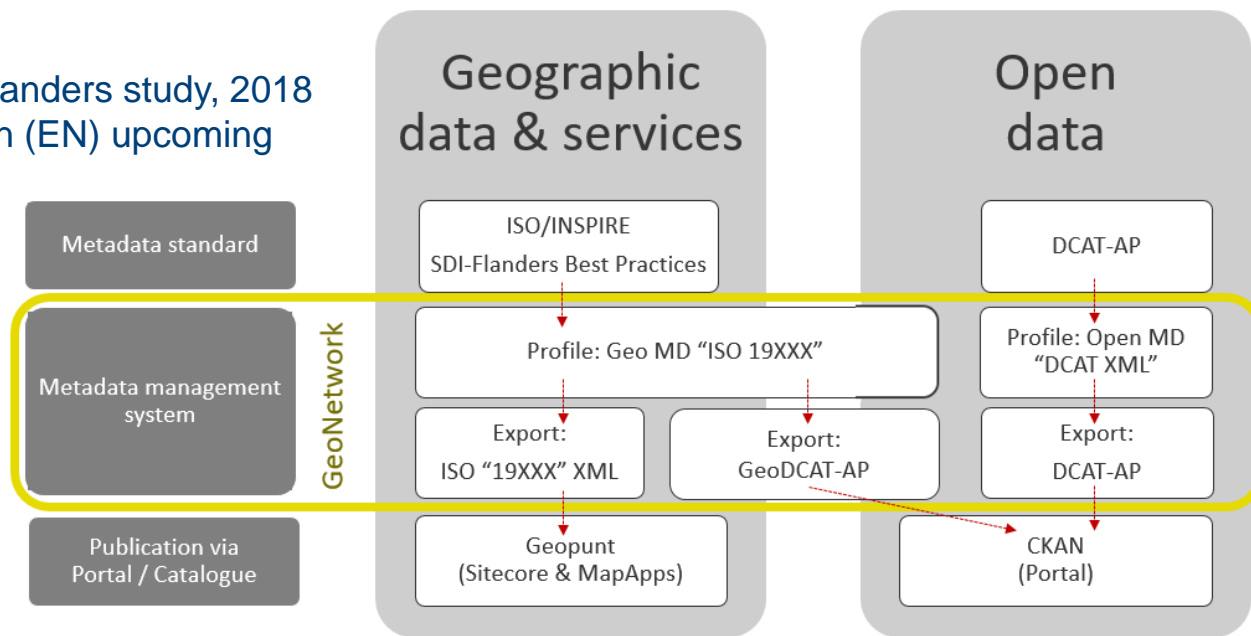
KU LEUVEN

SPATIAL APPLICATIONS DIVISION

GeoDCAT-AP

- Towards OGC Best Practice document
 - Integrated metadata management and publication

Information Flanders study, 2018
Full translation (EN) upcoming



- Metadata input (manually or automatically harvested);
- Metadata publication into an integrated geo/open data portal;
 - Publication of metadata as Linked Open Data (LOD);
 - Information mapping (ISO 19115, INSPIRE, DCAT,...)

GeoDCAT-AP

- OGC Metadata & Catalogue DWG being set-up
 - Current version of document is accepted by OGC community as a Discussion Paper
1. Introduction
 2. Overview of relevant metadata standards and related initiatives
 3. GeoDCAT-AP best practices implementations
 4. GeoDCAT-AP alignment (INSPIRE) and future integration
 5. Annexes (details on the 7 cases)

👉 Extending the document towards BP

GeoDCAT-AP

- Examples of implementations (guidance & recomm.)
 - Short narrative on the example implementation
 - The type of implementation and technical environment used
 - CSW implementation
 - CKAN implementation
 - The use of XSLT and API
 - XSLT: reference implementations of the mappings defined in the GeoDCAT-AP specification used to transform ISO 19139 encodings
 - API: implementation of GeoDCAT-AP in an OGC CSW (Catalog Service for the Web), re-using the standard CSW interface, and supporting multiple RDF serialisations (including HTML+RDFa) and HTTP content negotiation
 - Testing and showing results of transformed metadata
 - Issues encountered and recommendations

GeoDCAT-AP

- Experiments with the Orléans OGC/TC INSPIRE Hackathon
 - Visualisation of metadata
 - Linked data approaches for MD
 - Sensor based concepts
 - Link GI & EO portals
 - Use of Schema.org for discovery
 - ...

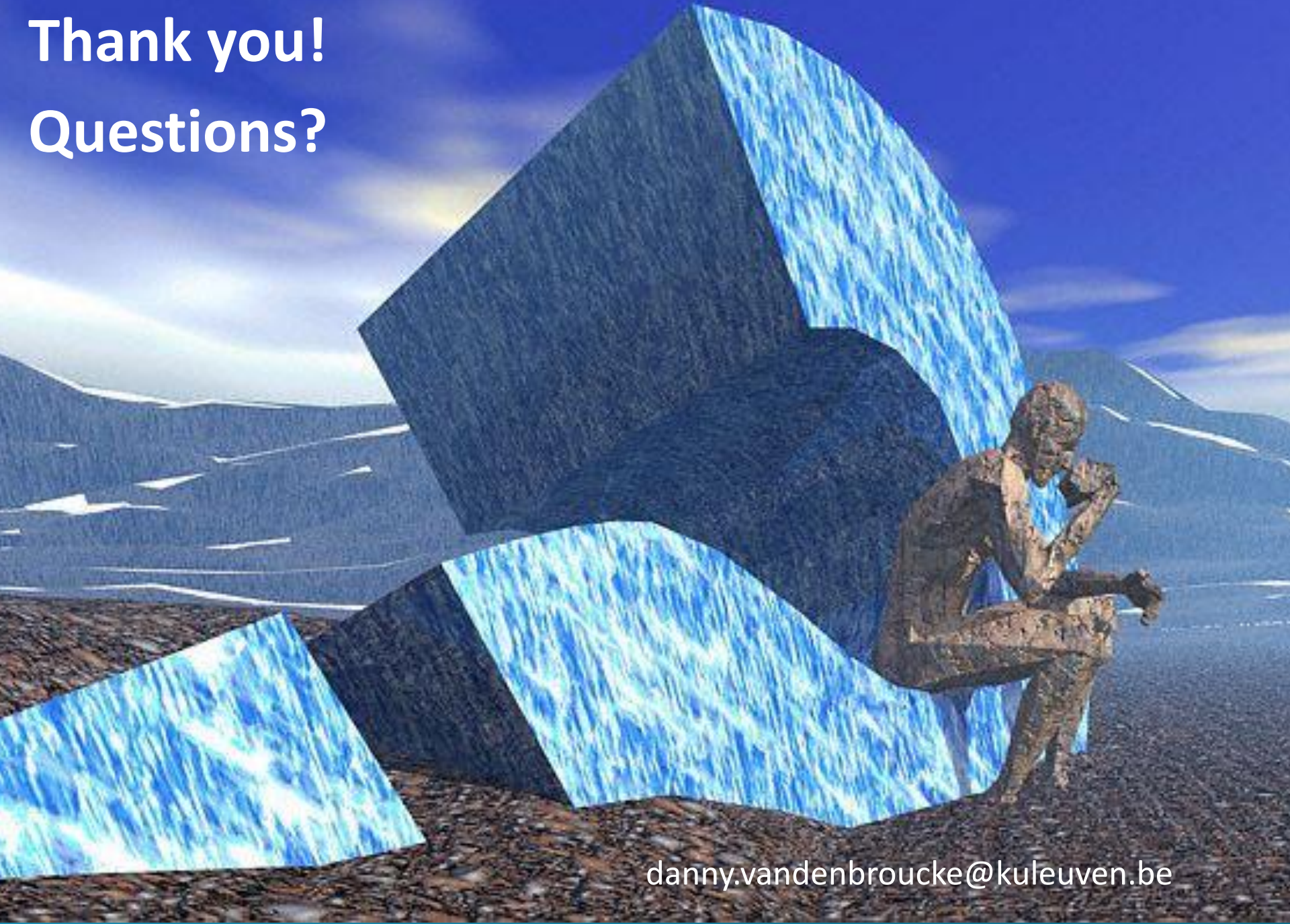


☞ Some of the results shown in this session

GeoDCAT-AP

- Ongoing work in different places
 - Metadata & Catalogue DWG – charter in preparation
 - Close collaboration with W3C DXWG
 - Work on DCAT 1.1
 - New metadata study by Information Flanders
 - New work as part of the H2020 POLIVISU project
 - New testing of harvesting in the European portal landscape (IGN-BE)
 - ...
 - ☞ Inform us about ongoing or new work !
 - ☞ Possibly making GeoDCAT-AP an OGC community standard
 - ...

Thank you!
Questions?



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