

Open ELS Data & Metadata Quality

Report on compliancy with MQA

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Date: June 12, 2019

Version: 1.0 (final)



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2 Purpose of the document

This document is describing the MQA process for our Open ELS metadata and the link with the European Data Portal (EDP). In the Open ELS project, one of the requirements was to make sure that the metadata of the Open ELS products was made available to be harvested by the EDP and would be compliant with the MQA standards. When discussing how to make sure the deliverable is completed according the requirements, following was agreed on:

1. From the Grant Agreement the following requirements regarding MQA compliancy are mentioned:

“Relevant datasets (including metadata) resulting from the action are published on national portals or a catalogue that is harvested by the European Data Portal,... “.

- We are providing Pan-European datasets and products – therefore we have chosen to publish our datasets on the OpenELS catalogue. Our understanding is that the chosen approach is in line with the verification of the particular milestone in the Grant Agreement.
2. The European Data portal is creating a compliancy report on all datasets and metadata that has been harvested. These reports should state that the metadata that is harvested is compliant.
 - We have included the reports from EDP in this MQA compliance report. These reports all state that the metadata is compliant.

This document is also describing how this all has been done.

3 Metadata Quality Assurance (MQA)

Metadata that is available within Open ELS must be published in a catalogue that is harvested by the European Data Portal (EDP), under which the MQA (metadata Quality Assurance) can be performed. More information can be found in the European Data Portal Goldbook for preparing the data (<https://www.europeandataportal.eu/en/providing-data/goldbook/preparing-data>).

4 EDP Quality elements

The metadata stored in the EDP need to be of an appropriate quality in the terms of:

- DCAT-AP compliant mapping,
- Available distributions,
- Usage of machine readable distribution formats,
- Usage of known open source licenses.

In order to check the datasets for these quality indicators the Metadata Quality Assurance (MQA) tool was developed. The MQA runs as a periodic process in parallel to the harvesting. CKAN and Virtuoso are filled with metadata through the harvesting process. As CKAN cannot store DCAT-AP formatted datasets directly, the datasets are mapped into a JSON schema that is DCAT-AP compliant. The MQA uses this schema for checking each dataset for its DCAT-AP mapping compliance. If there are any compliance issues detected, for instance a mandatory field is missing, a dataset is considered as not DCAT-AP compliant (<https://www.europeandataportal.eu/en/content/what-analysed-metadata-quality-assurance-mqa-tool>).

4.1 DCAT-AP compliancy

EDP will convert the ISO metadata from GPF (ISO) to DCAT format.

4.2 Available distributions

OpenELS product metadata records (in Geoproductfinder) are harvested by the EDP.

<https://joinup.ec.europa.eu/release/geodcat-ap-working-drafts>

<https://www.europeandataportal.eu/en/providing-data/how-to-be-harvested-by-us>

4.3 Usage of the “Open ELS license”

The Open data definition of European Data Portal is: “Open Data carrying an open license stating it can be freely used, re-used and redistributed by anyone, for any purpose”.

The OpenELS products meet that definition. A document which describes the conditions of the “Open ELS license” for end-users is online available at the Open ELS website <https://openels.eu/licence/>.

A link to this webpage has been added in the metadata records of the Open ELS products:

- i. European Global Map (EGM)
- ii. Cadastral Index Map (CIM)
- iii. Buildings (WFS)
- iv. Addresses (WFS)

4.4 Multilingual Metadata

For international interoperability, it is useful to use multilingual metadata. This is a recommendation within ELS. (see: <http://www.eionet.europa.eu/gemet/en/inspire-themes/> and <http://inspire.ec.europa.eu/metadata-codelist/TopicCategory/>).

5 Results of compliancy check - conclusions

ELS has updated all the metadata in the ELS portal (GeoProductFinder) of the Open ELS products. They have been tested on ISO compliancy with the EU provided ETF compliancy validation tool.

All the metadata provided by ELS is compliant (100 %). These metadata has been harvested by EDP.

For validation of ELS metadata, the actual ETF INSPIRE validator has been used: <http://inspire-sandbox.jrc.ec.europa.eu/validator/>.

Next step is that EDP will convert the ISO metadata of ELS from ISO to DCAT format.

ELS product metadata (in Geoproductfinder) are harvested by the EDP.

<https://joinup.ec.europa.eu/release/geodcat-ap-working-drafts>

<https://www.europeandataportal.eu/en/providing-data/how-to-be-harvested-by-us>

The request for ‘Open ELS harvesting’ was submitting to the helpdesk of European Data Portal (JIRA) on 13th December 2018 using the form “be harvested by us”

(<https://demo.locationframework.eu/geonetwork/srv/eng/csw-openels?request=GetCapabilities&service=CSW&version=2.0.2>).

The harvester is now up and running.

OpenELS metadata (in Geoproductfinder) is harvested by the EDP. The OpenELS metadata is available via a virtuale CSW API: (<https://demo.locationframework.eu/geonetwork/srv/eng/csw->

[openels?request=GetRecords&service=CSW&version=2.0.2&ElementSetName=full&resultType=results&outputSchema=http://www.opengis.net/cat/csw/2.0.2&constraintLanguage=FILTER](https://www.opengis.net/cat/csw/2.0.2&constraintLanguage=FILTER))

EDP runs a harvester on this API each day.

The dataset and service ISO metadata records of 4 OpenELS products have been validated.

- ELS Cadastral Index map (CIM)
- ELS European Global Map (EGM)
- Buildings (WFS)
- Addresses (WFS)

The ETF validator is used (<http://inspire-sandbox.jrc.ec.europa.eu/validator/>).

5.1 Validation results Open ELS European Global Map

<https://www.europeandataportal.eu/mqa/openels>

<https://www.europeandataportal.eu/data/?#/datasets?locale=nl&query=openels&catalog=openels&page=1>

The Result:

10 datasets found

Catalogues: **OpenELS** ×

5.1.1.1.1.1 *OpenELS Regional Gazetteer (service)*

The Open Regional Gazetteer Service is an open gazetteer service providing authoritative geographical names (GN). It can be used for georeferencing or information purpose. The gazetteer is published as web feature service (WFS) and available in GeoPackage format on request. The gazetteer can be use...

WFS

Created

30.04.2019 02:00

Updated

-



OpenELS

5.1.1.1.1.2 *Open Address Dataset*

Address point data from across Europe, supporting users in a diverse range of sectors who require addresses for applications, such as geocoding and data validation, in addition to supporting address search functions in applications or providing data for emergency planning. Supplied as a web feature ...

Created

30.04.2019 02:00

Updated

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OpenELS

5.1.1.1.1.3 *Open Building Dataset*

Building footprints for use in visualisations or in combination with other data for analysis purposes. The service enables applications such as location of urban extents (e.g. for planning, emergency management or statistical purposes) in addition to supporting land and property applications. Suppli...

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Updated

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OpenELS

5.1.1.1.1.4 *Open Building Feature Service*

Building footprints for use in visualisations or in combination with other data for analysis purposes. The service enables applications such as location of urban extents (e.g. for planning, emergency management or statistical purposes) in addition to supporting land and property applications. Suppli...

WFS

Created

30.04.2019 02:00

Updated

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OpenELS

5.1.1.1.1.5 Open Address Feature Service

Address point data from across Europe, supporting users in a diverse range of sectors who require addresses for applications, such as geocoding and data validation, in addition to supporting address search functions in applications or providing data for emergency planning. Supplied as a web feature ...

WFS

Created

30.04.2019 02:00

Updated

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OpenELS

5.1.1.1.1.6 Open Cadastral Index Map Service (dataset)

The Open Cadastral Index Map provides a pre-styled representation of cadastral parcels with administrative units, addresses and buildings. It has "getfeatureinfo" enabled, to allow the user to find unique cadastral parcel references. As an index this allows other sources of data to be found using t...

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OpenELS

5.1.1.1.1.7 **Open Cadastral Index Map Service (service)**

The Open Cadastral Index Map provides a pre-styled representation of cadastral parcels with administrative units, addresses and buildings. It has "getfeatureinfo" enabled, to allow the user to find unique cadastral parcel references. As an index this allows other sources of data to be found using t...

WMS

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30.04.2019 02:00

Updated

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OpenELS

5.1.1.1.1.8 **Open EuroGlobalMap**

EuroGlobalMap is a topographic dataset that covers the EU, Andorra, Croatia, Faroe Islands, Georgia, Greenland, Iceland, Kosovo, Liechtenstein, Republic of North Macedonia, Moldova, Monaco, Norway, San Marino, Serbia, Switzerland, Ukraine and Vatican at the scale 1:1 Million. It is produced in coop...

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01.03.2019 01:00

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OpenELS

5.1.1.1.1.9 ***Open Regional Gazetteer***

The Open Regional Gazetteer Service is an open gazetteer service providing authoritative geographical names (GN). It can be used for georeferencing or information purpose. The gazetteer is published as web feature service (WFS) and available in GeoPackage format on request. The gazetteer can be use...

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30.04.2019 02:00

Updated

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OpenELS

5.1.1.1.1.10 ***Open EuroGlobalMap Feature Service***

EuroGlobalMap is a topographic dataset that covers the EU, Andorra, Croatia, Faroe Islands, Georgia, Greenland, Iceland, Kosovo, Liechtenstein, Republic of North Macedonia, Moldova, Monaco, Norway, San Marino, Serbia, Switzerland, Ukraine and Vatican at the scale 1:1 Million. It is produced in coo...

WFS

Created

01.03.2019 01:00

Updated

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OpenELS

The MQA report on compliancy is available on <https://www.europeandataportal.eu/mqa/openels>

For these products:

- Open EuroGlobalMap
- Open Cadastral Index Map Service
- OpenELS Regional Gazetteer
- Open Address
- Open Buildings

5.2 Conclusion:

EGM Dataset metadata validation:

- Compliant.

EGM Service metadata validation:

- Compliant.

CIM Dataset metadata validation:

- Compliant.

CIM Service metadata validation:

- Compliant.

WFS Buildings Dataset validation:

- Compliant.

WFS Buildings Service validation:

- Compliant.

WFS Addresses Dataset validation:

- Compliant.

WFS Addresses Service validation:

- Compliant.

6 Recommendation

Usage of machine readable distribution formats

Publishing metadata as Linked Data is a recommendation for future Open ELS projects and products. This increases the discoverability and interoperability of your datasets. You will use URI's to denote things and create a first step towards Linked Data. In practice, this means you will convert your files to RDF format and/or you will enrich your metadata with URIs. This would be the first step towards Linked Data. Is not yet implemented within INSPIRE/ELS or on national metadata portals.