

Towards FAIRness

Useful links

The joint 2020 Nordic Seismology and Nordic EPOS Seminar

30 Sep – 2 Oct 2020

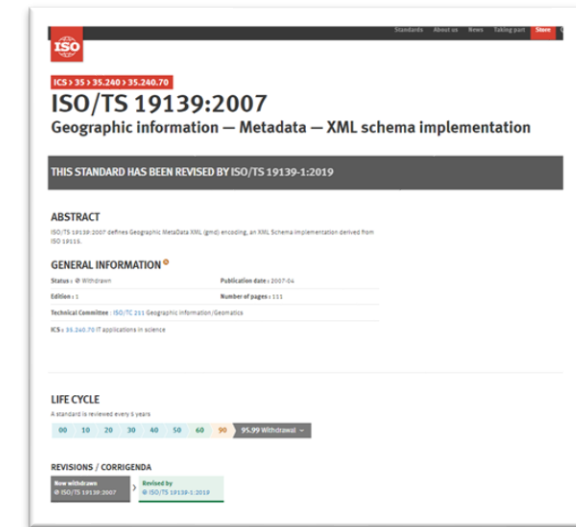
Jan Michalek

Outline

- Overview of topics
 - Standards for data and metadata exchange
 - Persistent identifiers
 - Licenses
 - Data Policy
 - Data Management Plan tools
 - Certification of repositories
 - Scientific Data Publishers

Standards for data and metadata exchange

- International standards
 - ISO
 - [Open Geospatial Consortium \(OGC\)](#)
 - KML
 - NetCDF
 - WMS, WFS, ...
- National standards: NGP (US)
- Community standards
 - Seismology:
 - [Standard for the Exchange of Earthquake Data \(SEED\) format](#)
 - [FDSN StationXML](#)
 - [QuakeML](#)



Standards for data and metadata exchange

- EPOS
 - Accepts community standards
 - Developed new metadata model to suit needs of multidisciplinary research
 - [EPOS-DCAT-AP](#)
 - It extends and builds on an established W3C standard - the Data Catalog Vocabulary (DCAT)
 - <https://github.com/epos-eu/EPOS-DCAT-AP>

Persistent identifiers

- Organizations

- European Commission: [PIC](#)
- ROR – linking [GRID](#), [ISNI](#), [Crossref ID](#), ...

- Persons

- [ORCID](#)

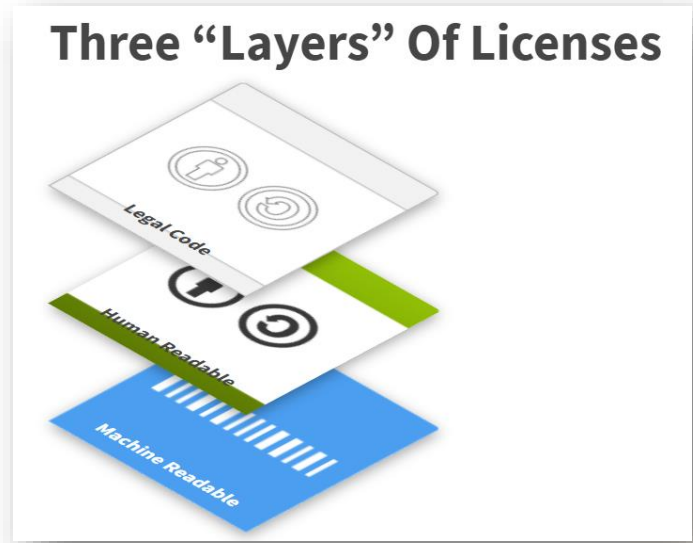
- Digital Objects

- [ePIC](#)
- [DOI](#) (ISO 26324)



Licenses

- Creative Commons

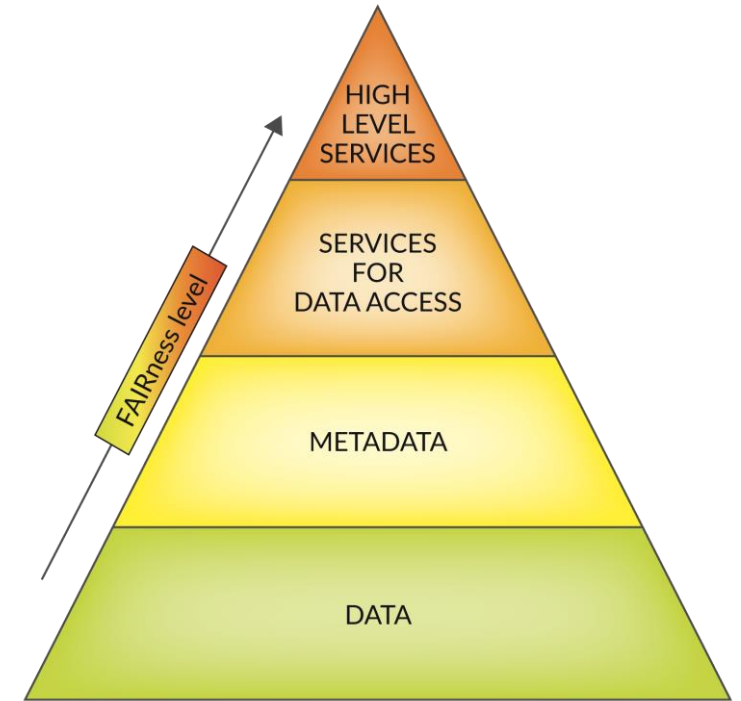


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Data policy

- Each institution has its own data policy
- The EPOS data policy implies open, usually toll free access to data, a clear data management plan, and respect for the widely accepted/general/national/international conventions and standards. The EPOS Data Management Plan (DMP) is based on the “FAIR” principles: Findable, Accessible, Interoperable and Re-usable.



Data Management Plan tools

[Digital Curation Centre](#)



[easy.DMP](#) – EUDAT – online service for creating DMP



Certification of repositories

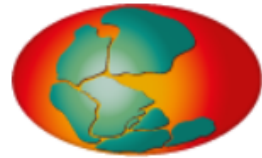
- In the European Framework for audit and certification of digital repositories three certification instruments are available
 - [Core Trust Seal](#)
 - [Nestor Seal](#)
 - [ISO 16363 certification](#)



Source: <https://www.openaire.eu/find-trustworthy-data-repository-certified-repositories>

Scientific Data Publishers

- [Pangaea](#)



PANGAEA.

Data Publisher for Earth & Environmental Science

