

Vocabularies for cross-domain interoperability

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Be prepared - FAIR Vocabulary for Data Spaces

F Findable
A Accessible
I Interoperable
R Reusable

GO FAIR
<https://www.go-fair.org>

Principle I 2.
(Meta)data use vocabularies
that follow FAIR principles

Definition: The **controlled vocabulary** used
to describe **datasets** needs to be
documented and **resolvable using globally
unique and persistent identifiers. ...**



from EIF (European Interoperability Framework)
Conceptual Model, 2017

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Elaboration on existing landscape

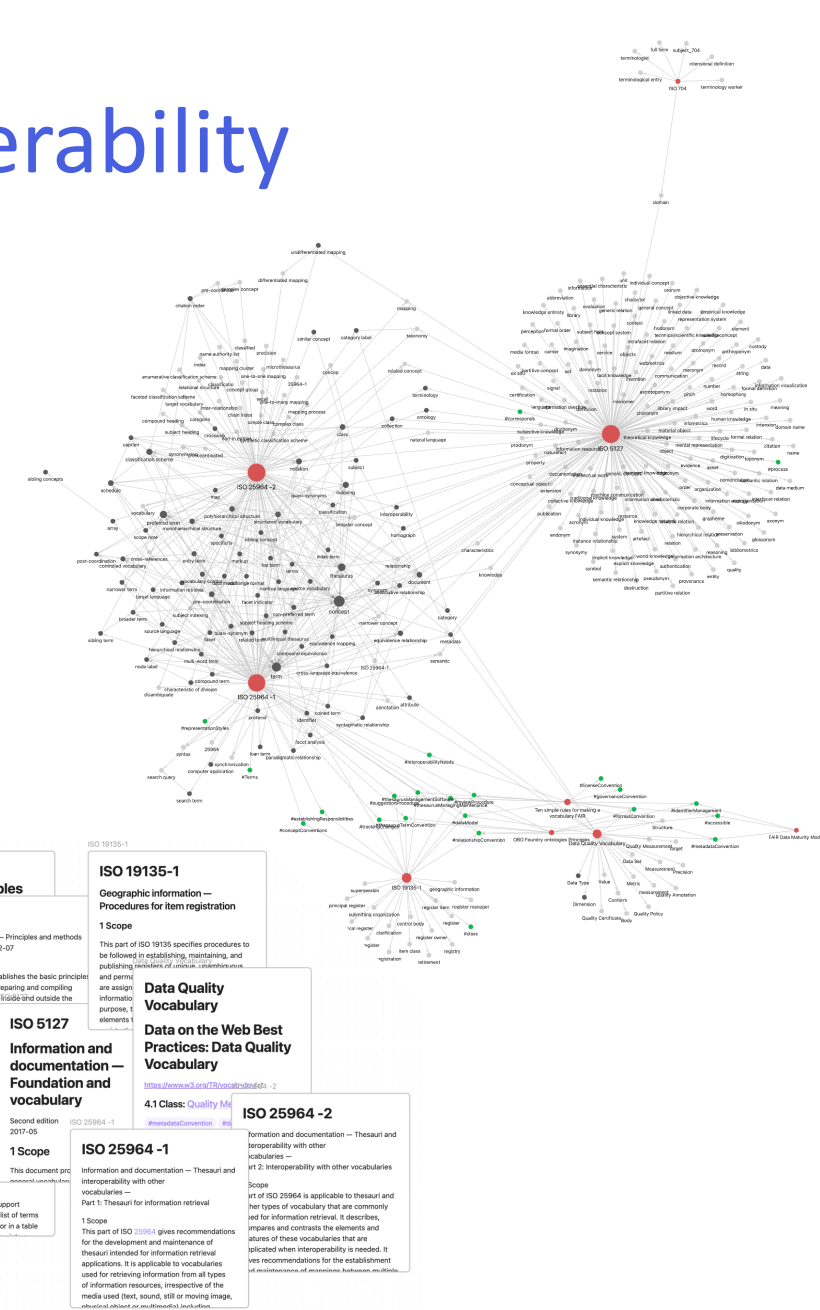
- Standards & recommendations e.g. ISO, W3C, OGC, etc.
- Scientific, Research & Innovation Actions, RDA (WG, IG), Horizon-Europe (EOSC), CODATA, etc.
- Existing software frameworks, registries, services
- Vocabulary management, reference concepts (for a vocabulary), registration, vocabulary curation, Provenance (e.g. version, change proposal history)- extension of vocabularies, co-creation process for terminologies
- Domain perspective & current practice

Bio Informatic | Biodiversity | Sensitive data | Informatics | Spatial Data | Geo Informatic

Library Science | Data Management | Data life cycle| Data Literacy | Vocabulary Management |

Recommendation for technical implementation

<https://eoscfuture-grants.eu/meet-the-grantees/design-concepts-registry-services-used-controlled-vocabularies-curation-regarding>



OBO Foundry ontologies Principles

OBO Foundry ontologies Principles
P1) Open - available to constraint of acknowledgment subsequent under the of identifiers.
P2) Common - available in a accepted of identifiers.
P3) Simple - simple rules.

ISO 704
Terminology work - Principles and methods
Fourth edition 2022-07
1 Scope
This document establishes the basic principles and methods for preparing and compiling terminologies both inside and outside the framework of standards. It also provides principles for the development and maintenance of terminologies.

ISO 5127
Information and documentation - Foundation and vocabulary
Second edition 2017-05
1 Scope
This document provides principles and methods for the development and maintenance of terminologies for information retrieval applications. It is applicable to vocabularies used for retrieving information from all types of information resources, irrespective of the media used (text, sound, still or moving image, audiovisual, abstract, etc.).

ISO 19135-1
Geographic information - Procedures for item registration
1 Scope
This part of ISO 19135 specifies procedures to be followed in establishing, maintaining, and publishing metadata of geographic information.

ISO 25964-1
Information and documentation - Thesauri and interoperability with other vocabularies - Part 1: Thesauri for information retrieval
1 Scope
This part of ISO 25964 gives recommendations for the development and maintenance of thesauri intended for information retrieval applications. It is applicable to vocabularies used for retrieving information from all types of information resources, irrespective of the media used (text, sound, still or moving image, audiovisual, abstract, etc.).

ISO 25964-2
Information and documentation - Thesauri and interoperability with other vocabularies - Part 2: Interoperability with other vocabularies
1 Scope
This part of ISO 25964 gives recommendations for the development and maintenance of thesauri intended for information retrieval applications. It is applicable to vocabularies used for retrieving information from all types of information resources, irrespective of the media used (text, sound, still or moving image, audiovisual, abstract, etc.).

ISO 25964-3
Information and documentation - Thesauri and interoperability with other vocabularies - Part 3: Quality management
1 Scope
This part of ISO 25964 gives recommendations for the development and maintenance of thesauri intended for information retrieval applications. It is applicable to vocabularies used for retrieving information from all types of information resources, irrespective of the media used (text, sound, still or moving image, audiovisual, abstract, etc.).