

eENVplus Thesaurus Framework

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Challenge

To make effective sharing and reuse of data overcoming the language and cultural barriers in the use of data.

Strategy:

❑ Employment of **Knowledge Organization System** (e.g. thesaurus) for metadata compilation and data discovery

❑ Define a brand new thesaurus ? No! Don't reinvent the wheel !

- ✓ many communities with different skills are involved in the Environment;
- ✓ many terminologies have been already developed on these skills;
- ✓ more than one terminology can be available for a given skill;
- ✓ terminologies adopted have often a national origin, so they are not uniform in all the European countries and often even stakeholders from the same country can adopt different terminology in everyday practice

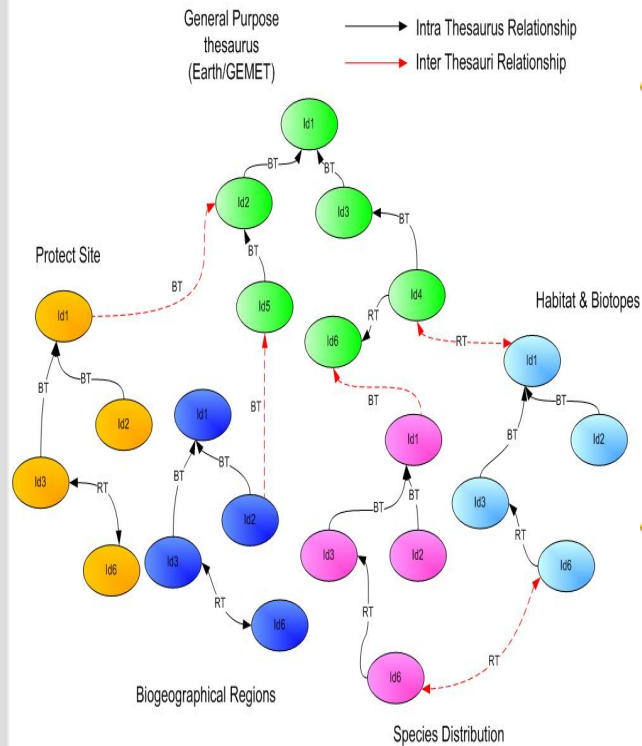


Thesaurus Framework

Exploiting existing thesauri (general purpose and target thesauri)
Thesaurus interoperability to shift from on thesaurus to another

KOS Content

Thesauri, code list ...



Interlinking

Linksets

Linkset Quality

TF exploitation Services

Metadata Compilation

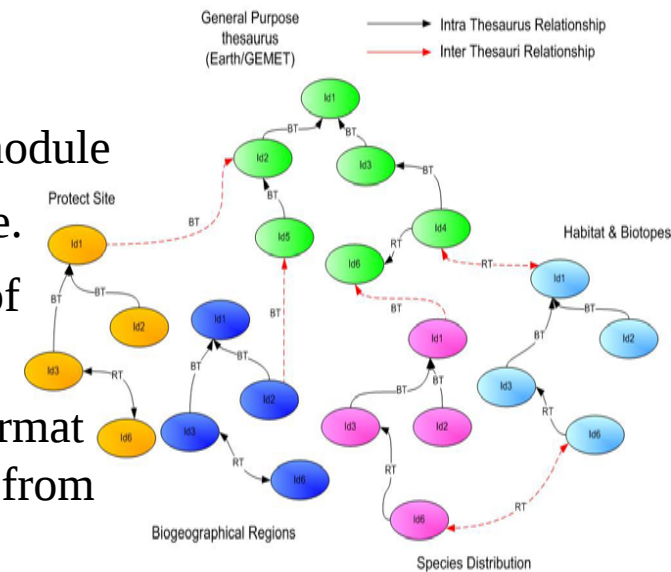
Data Discovery

Semantic Search

CROSS-WALKING

□ TF requirements

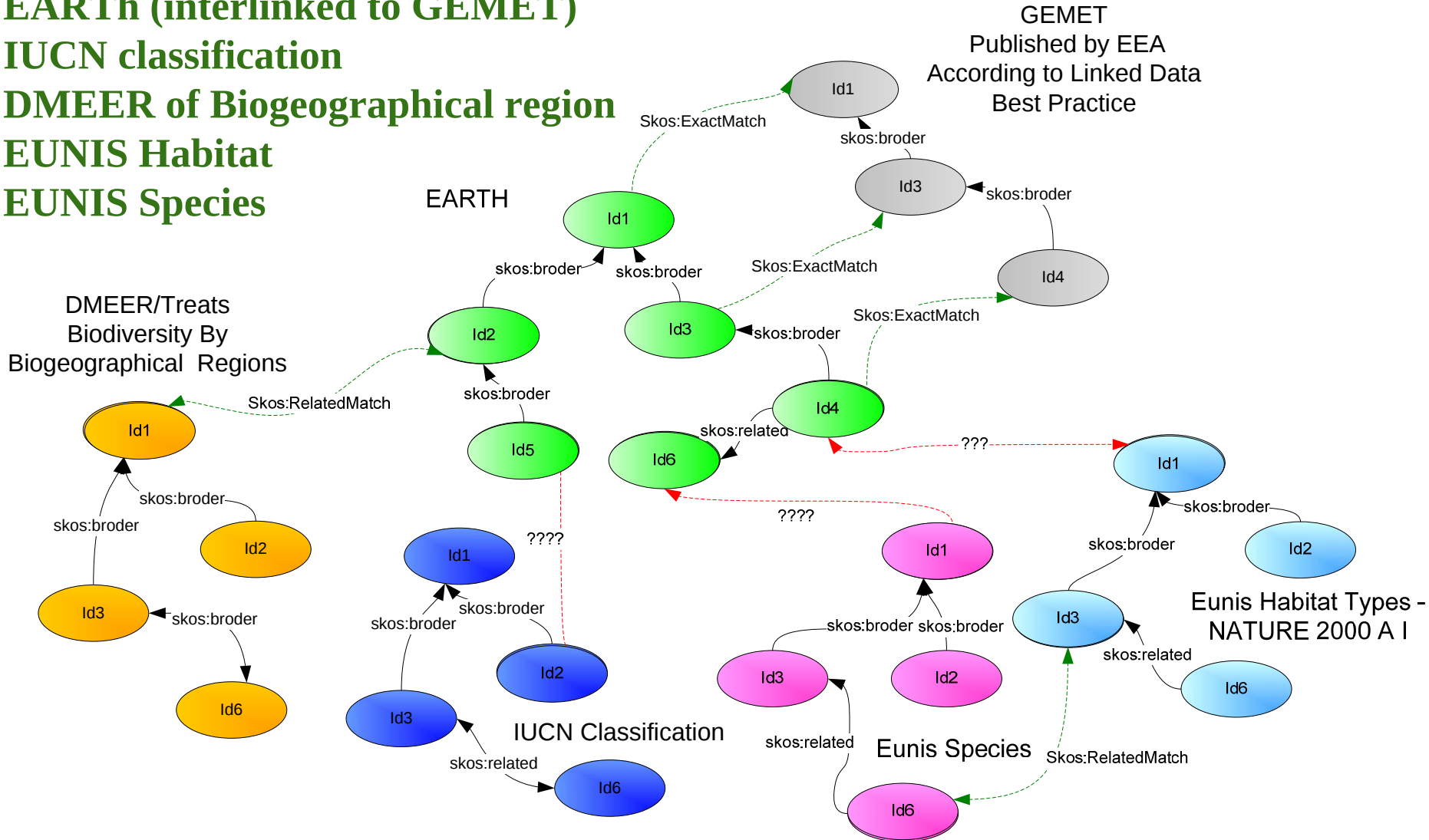
- **Modularity:** new thesaurus may be added as a new module
- **Openness:** each thesaurus should be easily extendable.
- **Interlinking:** linking among the terms and concepts of different thesauri in order to harmonize their usage.
- **Exploitability:** encoding in a standard and flexible format in order to encourage the adoption and its enrichment from third party system.



□ Design Principle

- **SKOS** to encode the thesaurus content according to semantic web\W3C recommendations
- **Linked data best practices** to publish the thesaurus in machine understandable format exploiting existing protocols in the web

EARTh (interlinked to GEMET)
IUCN classification
DMEER of Biogeographical region
EUNIS Habitat
EUNIS Species



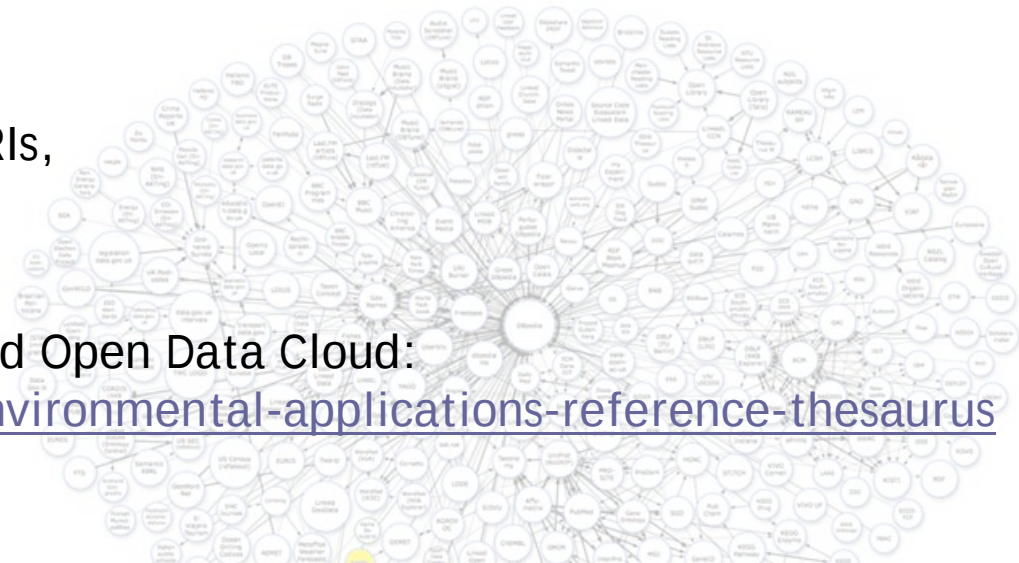
EARTh accessibility

■ EARTh accessible through

- HTTP dereferenceable URIs,
- RDF/XML Dump
- SPARQL Endpoint

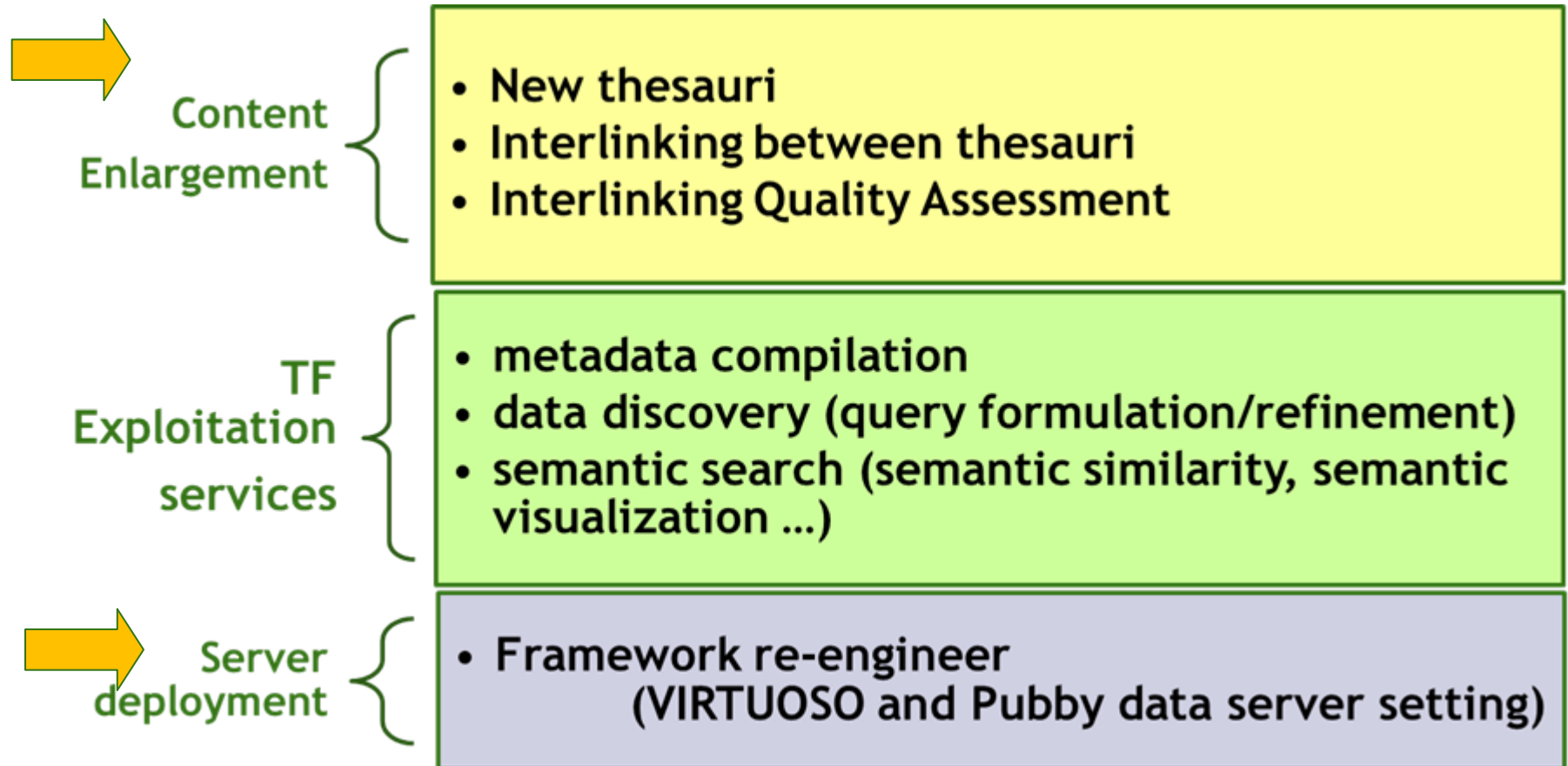
■ EARTh published into the Linked Open Data Cloud:

<http://datahub.io/it/dataset/environmental-applications-reference-thesaurus>



EARTh Interlinking

- GEMET
- AGROVOC
- UMTES
- DBPEDIA
- EUROVOC



Compliance with INSPIRE

... Waiting for eENVplus TF outcomes ... We invite you:

☐ To take a look at the Thesaurus Framework at:

<http://linkeddata.ge.imati.cnr.it:2020>

☐ To check if a term is contained in TF at:

<http://linkeddata.ge.imati.cnr.it:8890/fct/>

☐ To access the SPARQL ENDPOINT at:

<http://linkeddata.ge.imati.cnr.it:8890/sparql>

☐ To querying thesaurus concepts, relationships thesaurus

☐ To mappings between EARTH to GEMET, AGROVOC, UMTES...

☐ To build your own services/application on the TF

☐ To interlink your vocabularies/thesauri with the TF thesauri

... Thank you !

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