



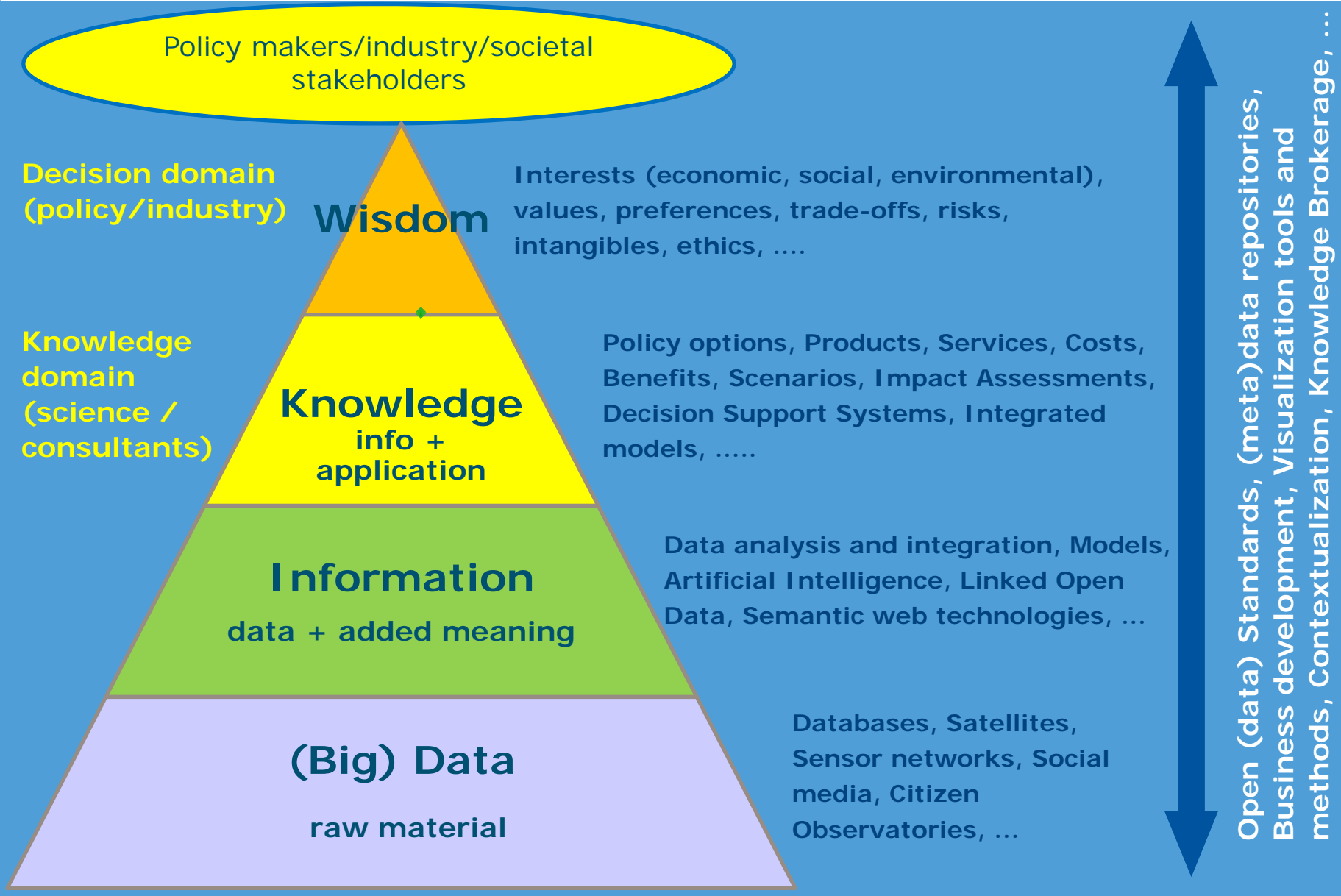
Transparent access to distributed forestry resources

Trees4Future Final Conference - Designing Trees for the Future: data are the keystone

Brussels, 5 April 2016

Designing Trees for the Future

Data based value creation and innovation and roles involved



Research infrastructures:

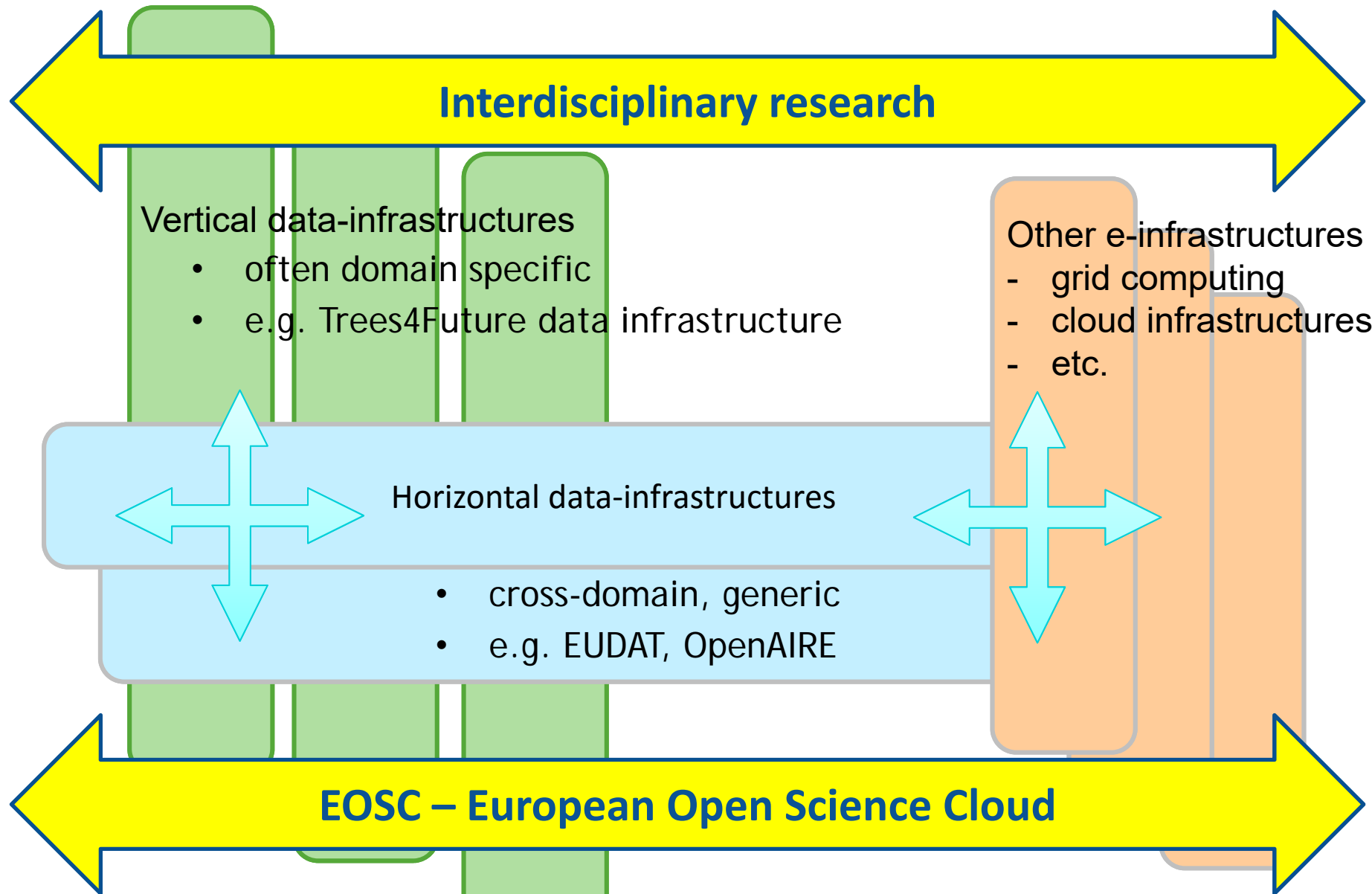
- Facilities, resources and related services used by the scientific community to conduct top-level research in their respective fields

E-infrastructures:

- Pan European ICT infrastructural facilities, supporting research, e.g. networking, high-performance and high-throughput computing, data and cloud infrastructures

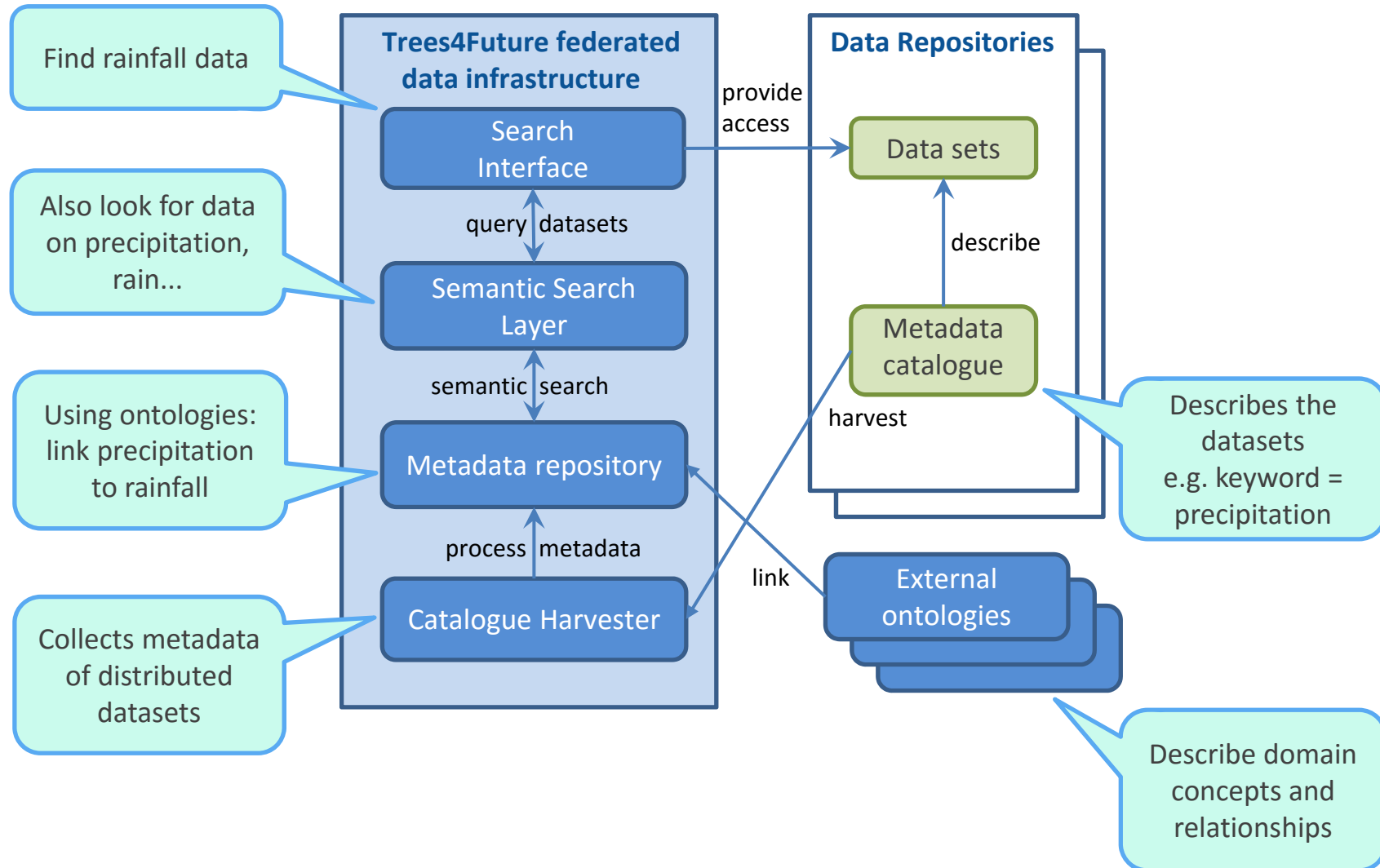
Data infrastructures:

- E-infrastructures focussing on data sharing, supporting sustainable data storage, data management, data sharing/publication



Objectives

- Develop a central access point for forestry research data, providing federated access to distributed data resources
 - Data and metadata hosted and maintained by the owner
 - No duplication of data
- Also open for data sharing by small organisations and individuals
- Support end users by offering advanced ways to discover the data they need for their work
 - Use existing knowledge (terminology, vocabularies) where possible to improve discoverability
- Use open standards and protocols
- Easy to use metadata schema
- Support “FAIR principles”

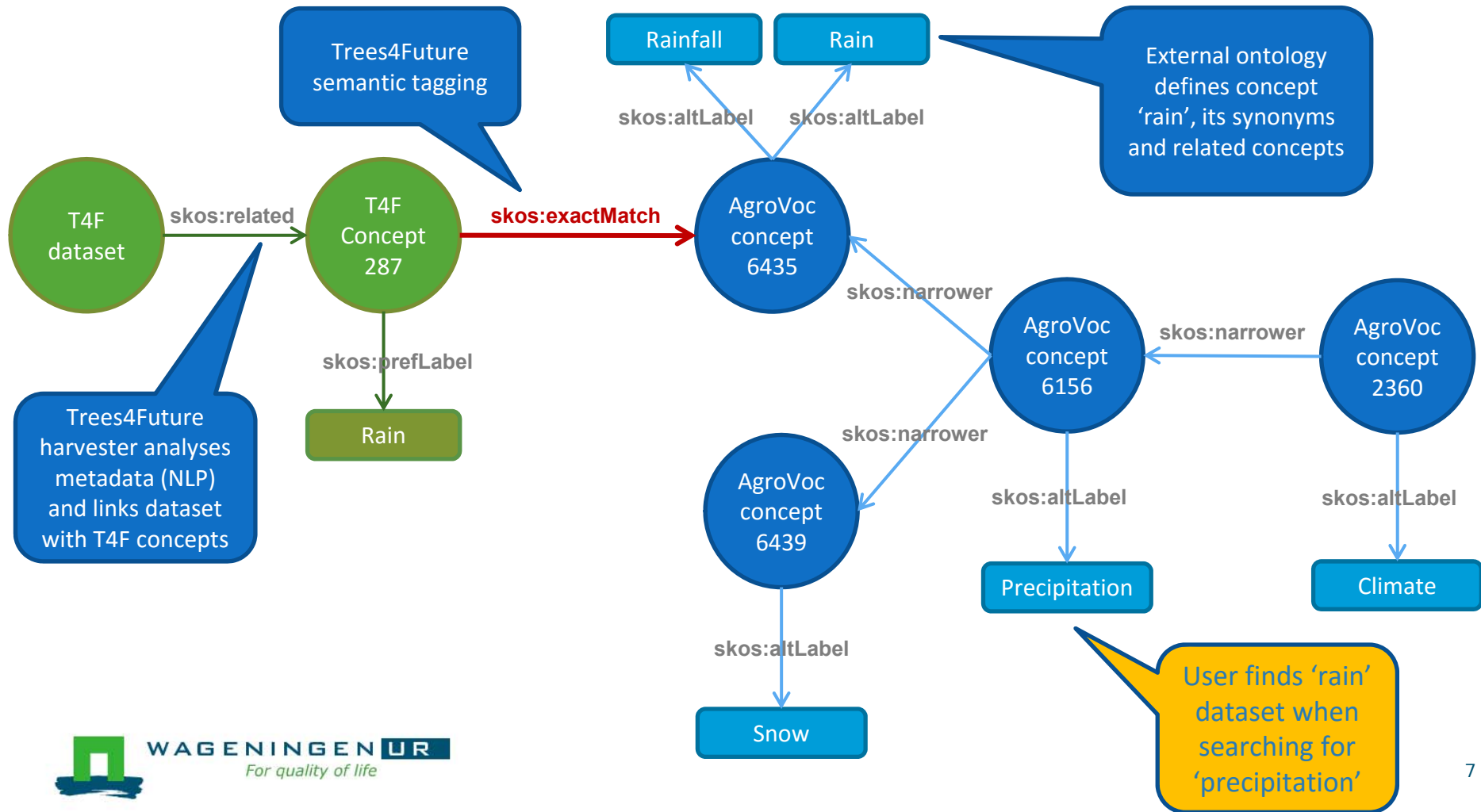


Example – semantic tagging & search

Climate dataset - metadata contains term rain

Trees4Future ontology

AGROVOC



Discover forestry research datasets



Keyword
(min three letters)

quercus robur; distribution
 Exact Contains Starts with



Southwest

(33, -14)

Northeast

(46.08062783775034, 34)

Overlap Within



From

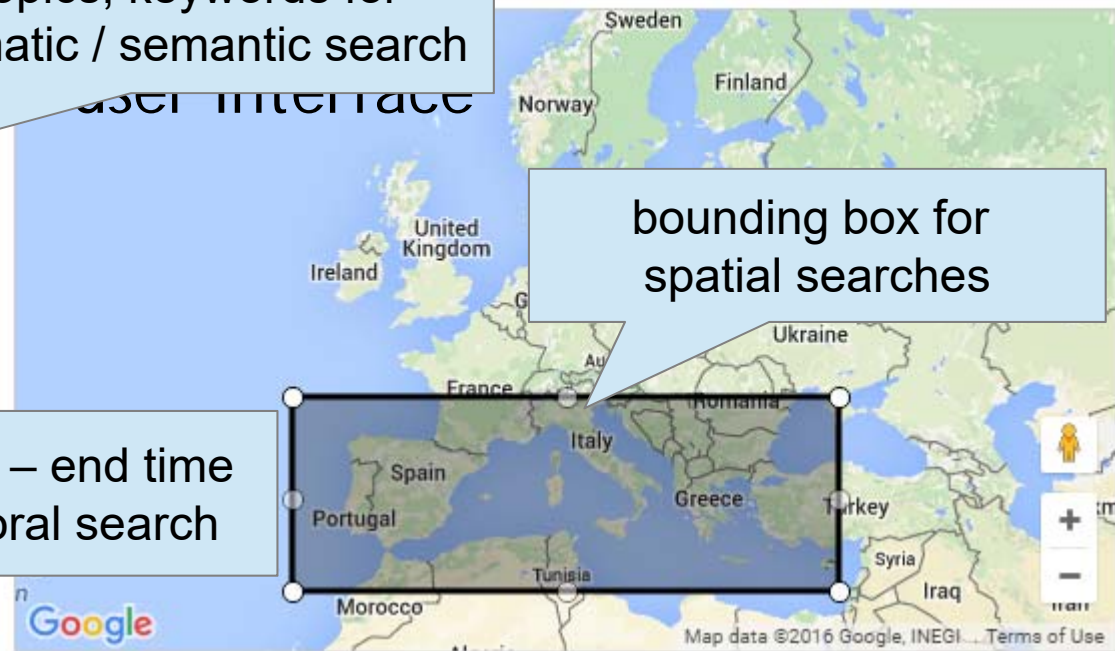
To date

Search

Topics, keywords for thematic / semantic search

bounding box for spatial searches

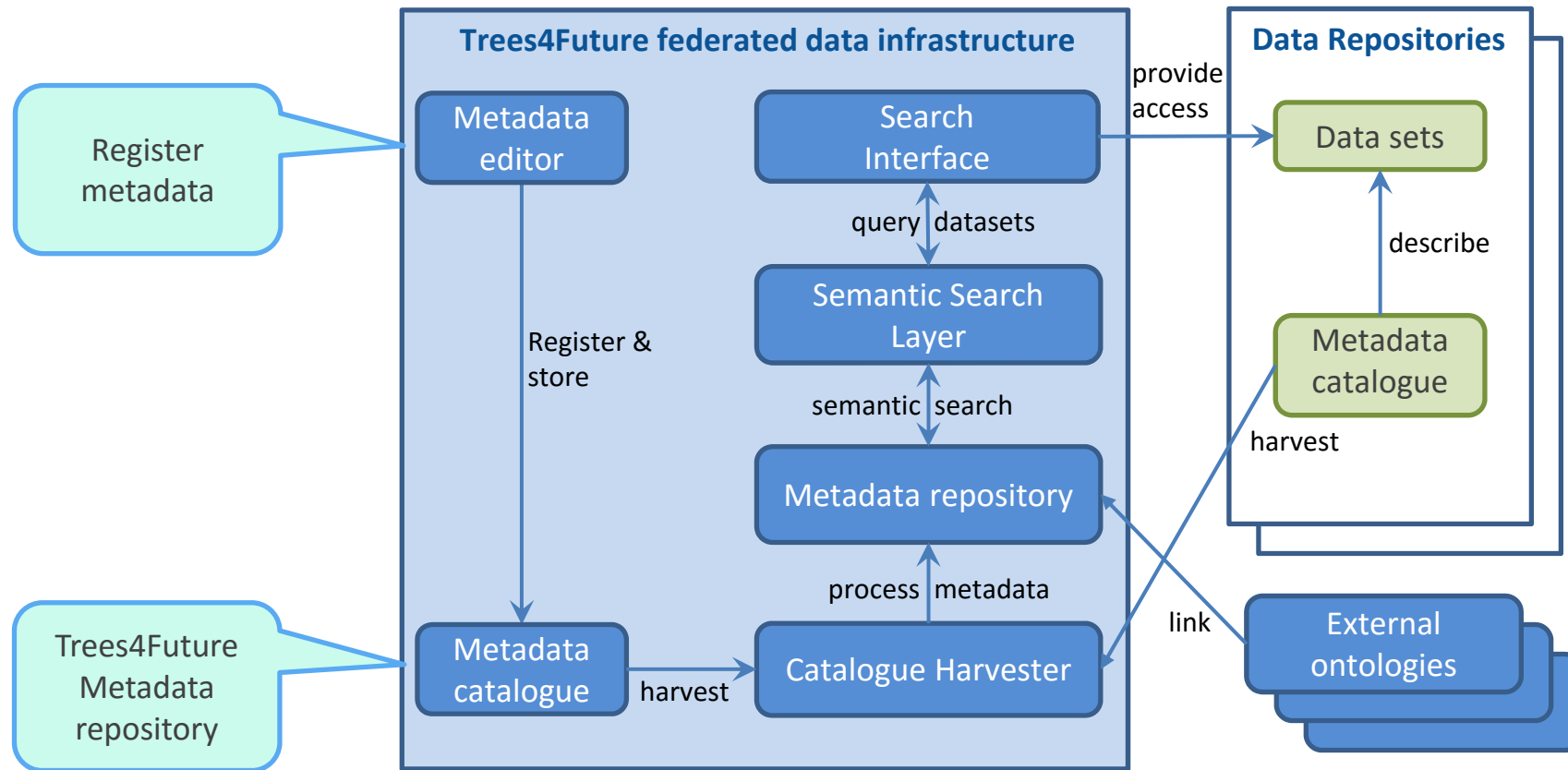
Start time – end time for temporal search



Search for keyword: quercus robur; distribution

Results: 44 total

N	Name (click to see metadata)	Description	Publisher	Score	Services	Source
1	Suitability maps of Quercus robur (ForestFocus)	Suitability maps (raster format: geotiff) of Quercus robur, computed using the ForestFocus European dataset of species presence/absence. The adopted suitability model estimates the optimal environmental conditions for European tree species under present and future climates. Available years: 2000, 2020, 2050, 2080. For year 2000 the observed (WorldClim) climate conditions have been used. For years 2020, 2050, 2080 the climate conditions simulated for the climate change scenarios A2 and B2 have been used (by means of the climate models CCCMA, CSIRO, HANDCM3 and of an ensemble model of them). The maps are available in the European Forest Data Center (EFDAC). The specific goal of EFDAC is to become a focal point for policy relevant forest data and information by hosting and pointing to relevant forest information as well as providing web-based tools for accessing information located in EFDAC.			Location ▼	GO
2	CMAP database	Genetic and comparative maps				



Database Access

[Database search](#) (AIT T4F search)
[Access to T4F Clearinghouse using SOAP](#)

User Interface

[Enter new metadata](#) (Input form)
[List records](#)
[List records in OAI-PMH format](#)

Admin interface

List records to be validated
 (authorization required)

Report your dataset for inclusion in the T4F clearinghouse

▼ Required Information

Title	European Soil Map (dummy)
Creator	the Soil Insitute
Subject	soils and soil types
Description	A harmonized European map of soils according to <u>FAO</u> classification
Publisher	the Soil Expert
Type	NetCDF
Link (URL)	http://soilinstitute/soilmap
Location name	Europe
Northeast	northlimit=72.270737; eastlimit=33
Southwest	southlimit=35.613184; westlimit=-9.593
Keywords	soil; soil type
Rights	open access
Reporter's email	soilexpert@soilinstitute.eu

► Optional Information

Submit





Trees4Future data infrastructure



Search interface: trees4future.eu/jul2014/chgui.php

Metadata editor: <http://193.185.149.21/oai-pmh/dataentry/>

Final version will be accessible through trees4future.eu