

Linked Data Deployment for Spatial Data Infrastructure

What if – INSPIRE Conference 2017

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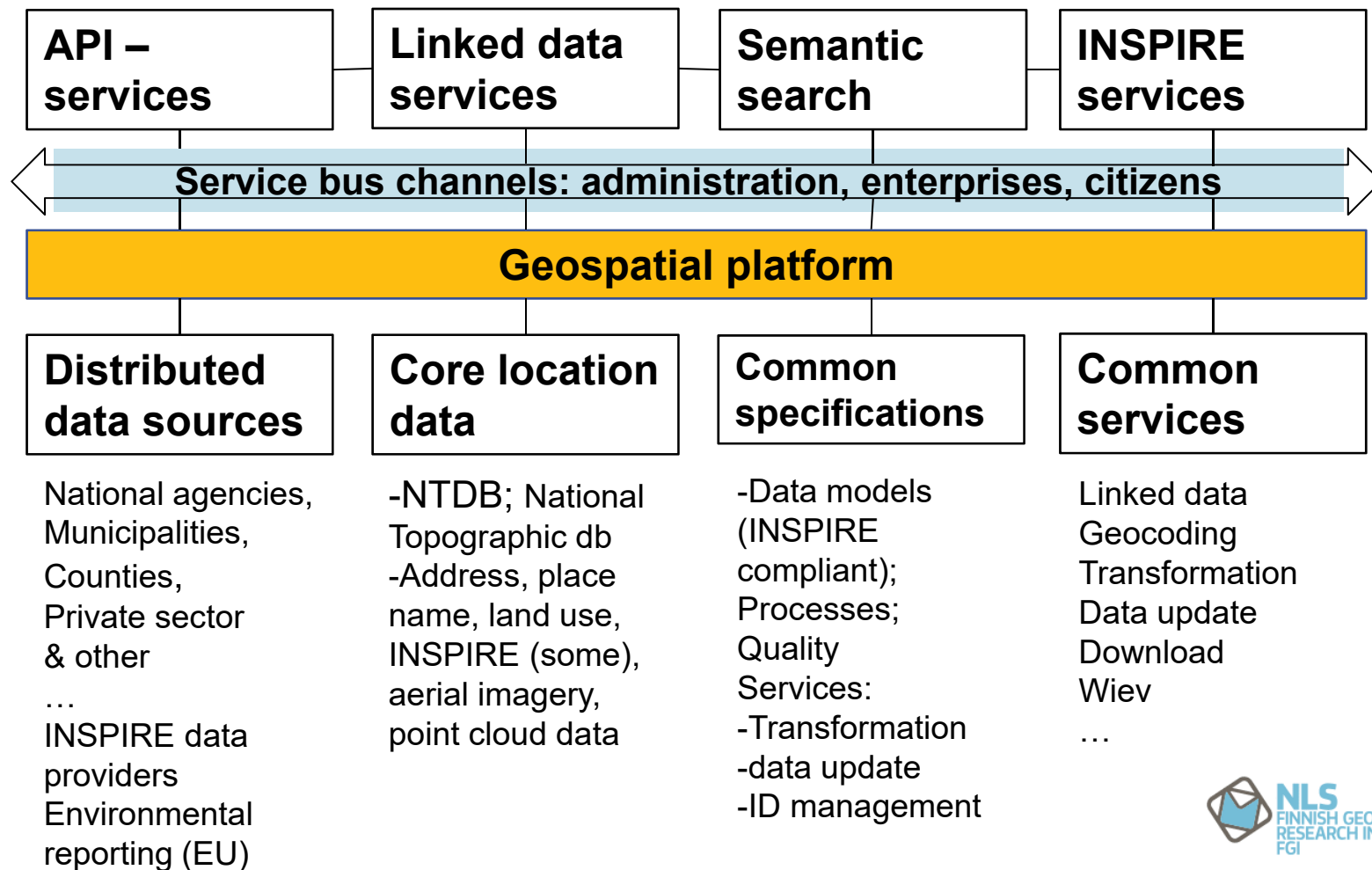
Contents

- National Geospatial Platform
- Framework for linked data infrastructure for spatial data and any other data
- RDF database
- Smart semantic search necessary

National Geospatial Platform

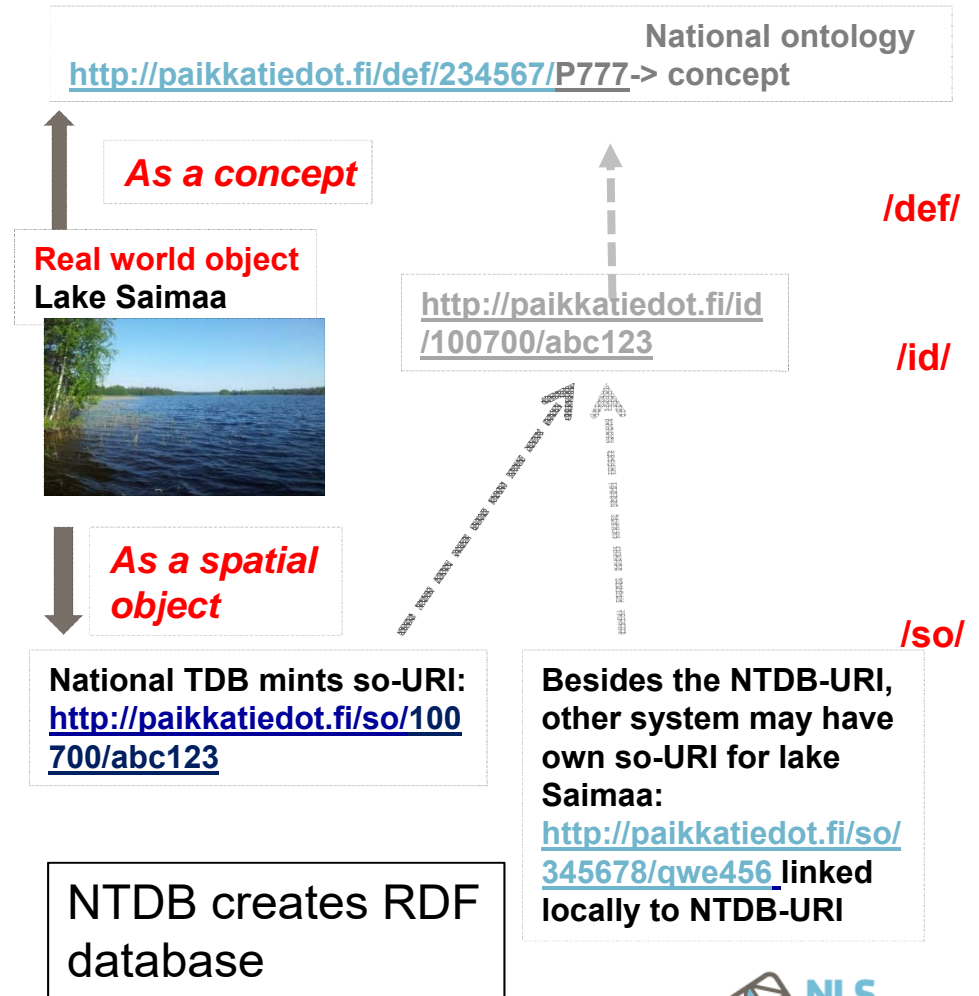
- programme

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Framework for linked data infrastructure

- National ontology concept hierarchy integrates spatial and non-spatial data (SKOS)
 - INSPIRE object types included in “spatial data ontology”-part
- NTDB spatial object URIs as placeholders for real world URIs (for the present)
- NTDB generates and submits URIs to the spatial objects in other system for updates or reuse
- Place names: RDF service
 - To develop a service platform to provide applications for tagging different assets and further RDF-linking
- URI-pattern: <http://{domain}/{type}/{datasetId}/{localId}/{versionId}>



RDF database



<http://paikkatiedot.fi/so/12345/FIN6789>

- Search
- URI
 - Bounding Boxes
 - Concept



paikkatiedot.fi



metadata



RDF (XML),
JSON-LD ...

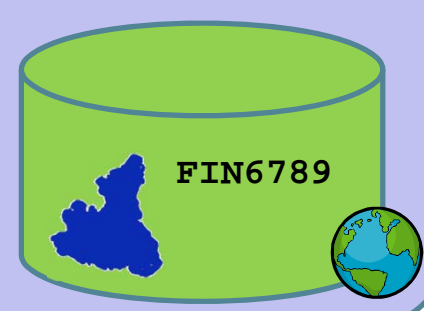
Links to frequently consumed external data sources created through their SPARQL endpoints. RDF data synchronized with the source data through standard SPARQL endpoint on Apache Jena Fuseki server (own script).

RDF Triple store

WFS

Dataset id
12345

FIN6789



Smart semantic search

Discovery service, Search engines like Google

Selected dataset

➤ Metadata description

To help users evaluate
if the dataset is
fit for purpose

Use data

- API-interface(s)
- Linked data
- TJS Linking
- RDF

Search function through RDF

- Spatial data ontology (SKOS)
- Registry service: schemas, code lists, code values

Semantic search - features

- Advanced search (WPS)
- Search area (GeoXACML)

More spatial datasets:

[your search term]

Advanced search:
[search term, attributes]

More links

User feedback,
User need
Geospatial platform,
INSPIRE services ...

- Queries in search engines are directed to landing page of SDI search & platform

More information

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