Need for Location Data Space

22.11.2024

Antti Jakobsson

Why Location Data Space?

- There is a need for accessing reference data from European countries

- Interoperability can not be solved at the regional/national level fully

- Connecting national sources for each data space would be too complicated

- No solution at the moment how to deal with location data within EU data spaces

Location Europe as pre Location Data Space

DATA INTEROPERABILITY/DATA EXCHANGE

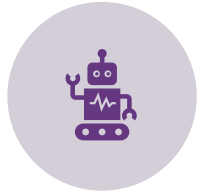It is based on distributed data access (supports OGC APIs and WFS,WCS,WMS)

DATA INTEROPERABILITY/DATA MODELS

Based on INSPIRE simple schemas but national schemas may also be used

DATA VALUE CREATION
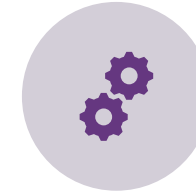
Supports data integration from multiple sources

DATA INTEROPERABILITY

Provides interoperability assessement based on EIF, FAIR

DATA INTEROPERABILITY/DATA VALUE CREATION

Supports data quality provision (automated evaluation and dashboard) POC

DATA VALUE CREATION

Supports processing capabilities with HPC

DATA SOVEREIGNTY and TRUST

Security (API key)

DATA INTEROPERABILITY/DATA EXCHANGE

One API to connect

DATA VALUE CREATION

Metadata based on INSPIRE and European Data Portal

Co-funded by the European Union

locationeurope.eu/geoe3/lihp/collections/items

Explore   Use cases   Join   APIs ▾   About us

Data themes

Explore the geospatial data provided by our APIs. Each API corresponds to a specific data theme.

- Buildings 2D ⌃
- Buildings 3D ⌃
- Roads 2D ⌃
- Roads 3D ⌃
- Digital Terrain Model ⌃

Show 3D view

© OpenStreetMap contributors.

1000 m

Location Europe - Explore

locationeurope.eu/geoe3/lihp/collections/items

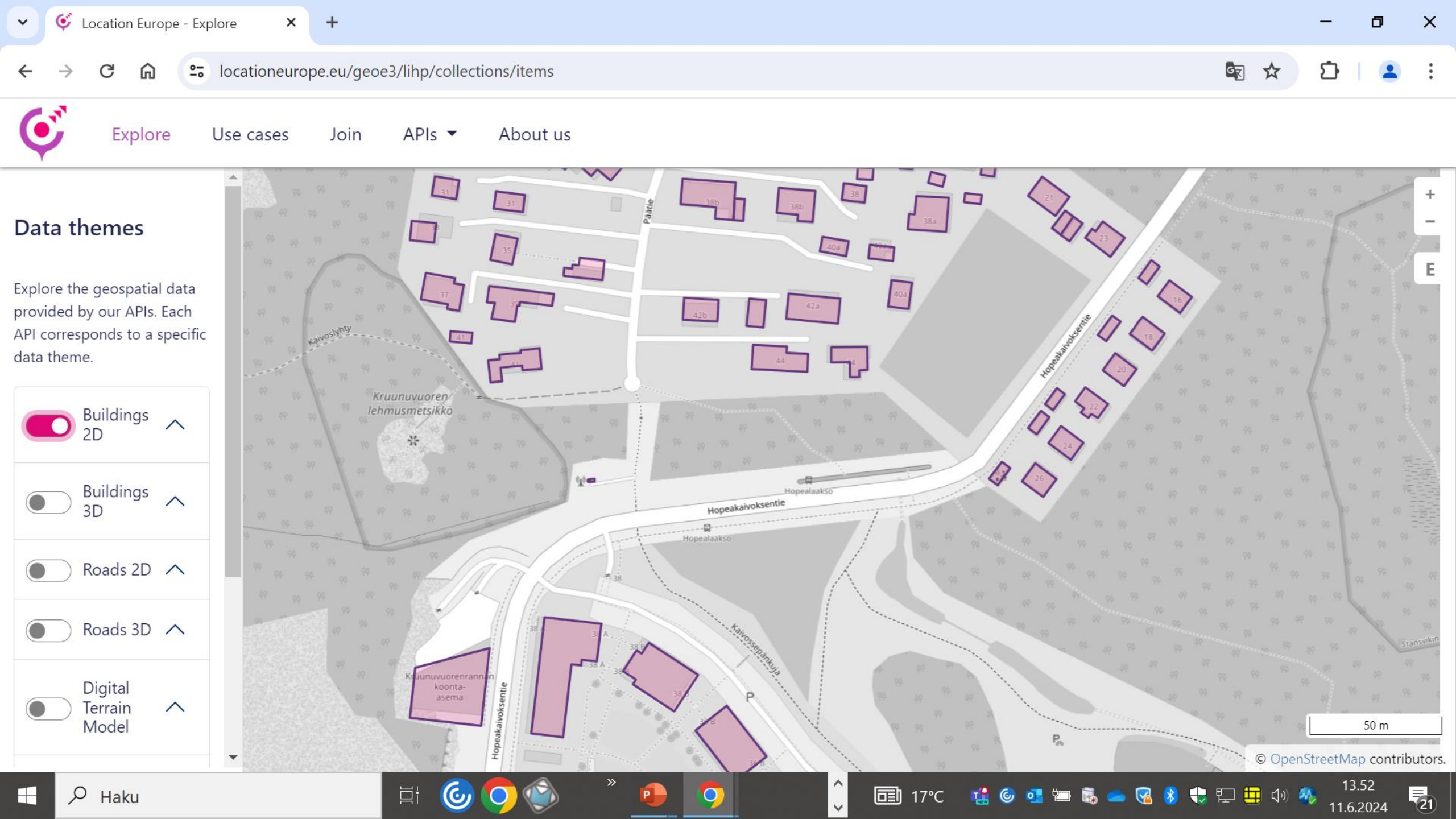Explore   Use cases   Join   APIs ▾   About us

Data themes

Explore the geospatial data provided by our APIs. Each API corresponds to a specific data theme.

- Buildings 2D
- Buildings 3D
- Roads 2D
- Roads 3D
- Digital Terrain Model

50 m

© OpenStreetMap contributors.

Haku

13.52
11.6.2024

locationeurope.eu/geoe3/api/buildings/collections/buildings_FI/items/b7c0ac47-b960-492c-9d2a-dd297892af93:4
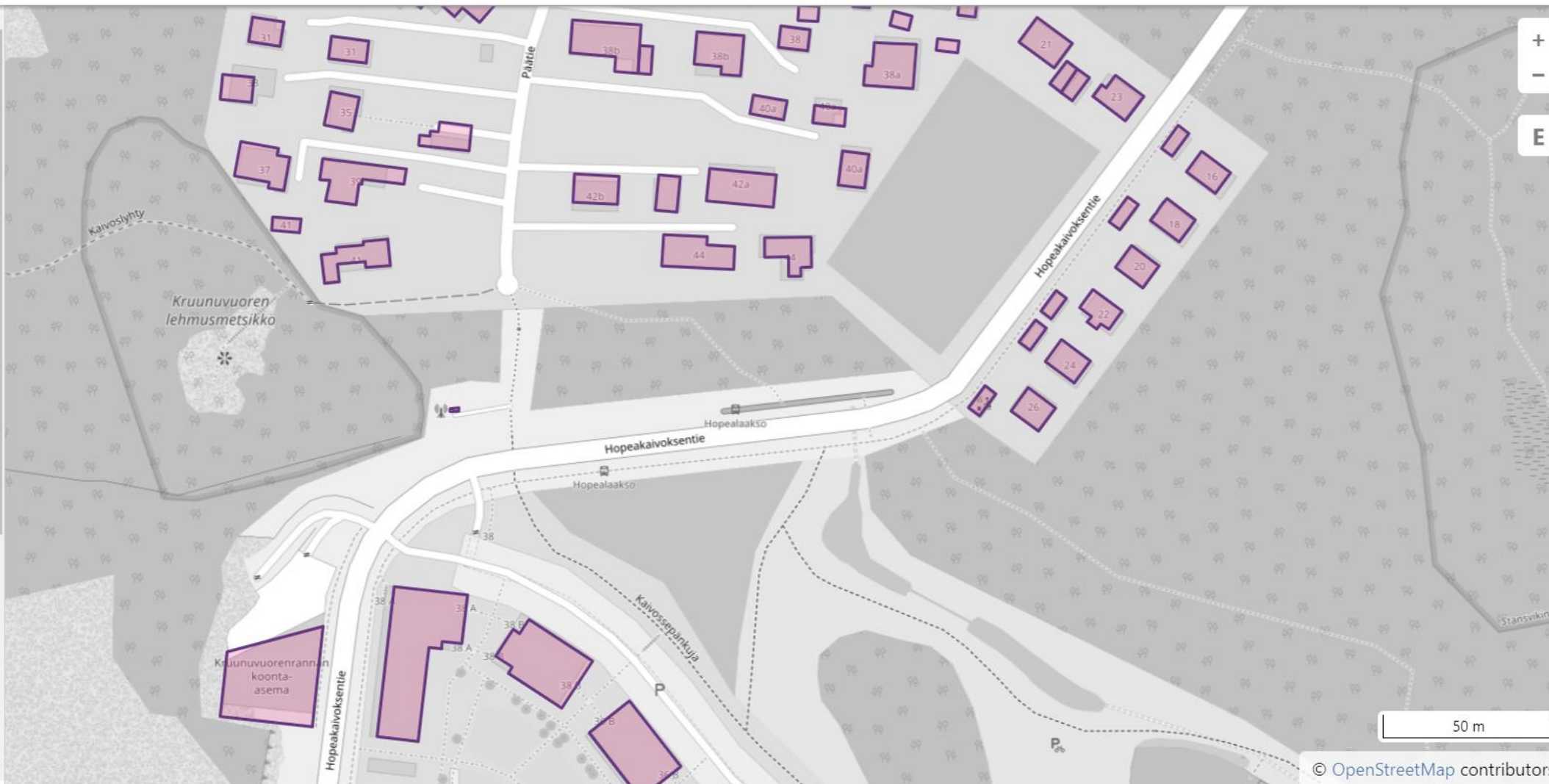
englanti   suomi

Google Translate

Explore   Use cases   Join   APIs   About us

Available information for an individual item in this collection.

footPrint

geometry2D_horizontalGeometryReference_href
http://inspire.ec.europa.eu/codelist
/HorizontalGeometryReferenceValue/footPrint

sourceId
772585970

forecast_temperature
14.7

temperature
6.0

windspeed
6.4

sunshine_hours
1824

20 m

Haku   17°C   13.52   11.6.2024

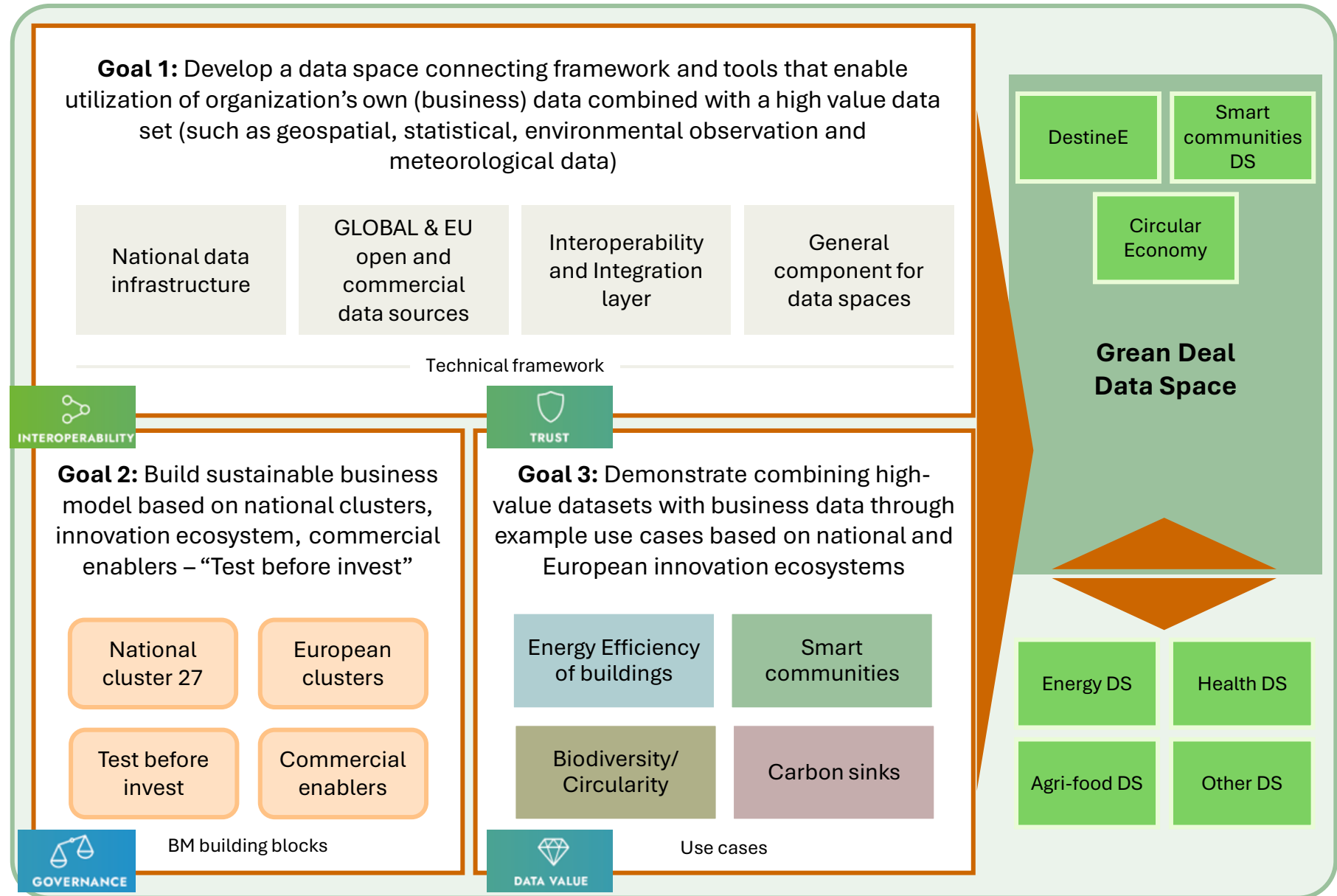# Location Data Space for Europe - Project concept

**Location Data Space for Europe – building on Location Europe Platform**

The purpose is to make **national location-based data services available as part of European data spaces**, thus enabling and driving the use of national high-value data sets needed for the European Green Deal in developing internationally **scalable, integrated digital services** for the European citizen

Goal 1: Develop a data space connecting framework and tools that enable utilization of organization's own (business) data combined with a high value data set (such as geospatial, statistical, environmental observation and meteorological data)

National data infrastructure	GLOBAL & EU open and commercial data sources	Interoperability and Integration layer	General component for data spaces

Technical framework

INTEROPERABILITY

TRUST

Goal 2: Build sustainable business model based on national clusters, innovation ecosystem, commercial enablers – "Test before invest"

National cluster 27	European clusters
Test before invest	Commercial enablers

GOVERNANCE   BM building blocks

Goal 3: Demonstrate combining high-value datasets with business data through example use cases based on national and European innovation ecosystems

Energy Efficiency of buildings	Smart communities
Biodiversity/ Circularity	Carbon sinks

DATA VALUE   Use cases

Grean Deal Data Space

DestineE	Smart communities DS
Circular Economy	

Energy DS	Health DS
Agri-food DS	Other DS

Consortium confidential

Want to learn more?

- Location Innovation Academy provides understanding of how this works - https://academy.ogc.org/
  - Most popular videos inside the academy OGC API Features
  - Short introduction to OGC APIs
  - How to implement OGC API Features by using pygeoapi

- Please join our Core Data Provider Network and provide you current data access for the Location Europe platform. https://locationeurope.eu/geoe3/lihp/join.

- Contact us if you want to start thinking of the use cases and test the platform for your users. Register for the testing the APIs https://locationeurope.eu/geoe3/lihp/getapikey
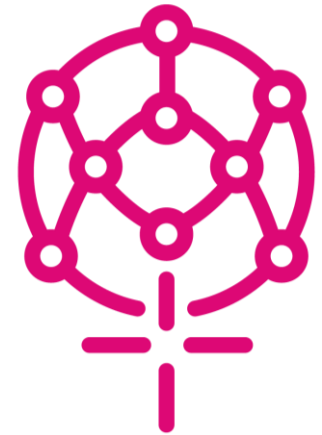
Coming soon: Location Finland

- Showcase and test before invest for interoperable location based services
- Test data for several themes
  - Built environment
  - Bioeconomy
- Urban test areas
- Other test areas like Agri, Drones etc.