eurogeographics

# Pan-European Strategy for Open Cadastral Maps in Europe

**PERMANENT COMMITTEE ON CADASTRE IN THE EU (PCC)**

**CONFERENCE AND PLENARY MEETING**

**Bruges (Brugge), 17 – 19 June 2024**

Hellenic Cadastre

*Hara Papadaki, Surveyor Engineer MSc – OME2 WP6*

HELLENIC REPUBLIC
Ministry of Digital Governance

# NMCAs in operation - Common goals and strategies

Hellenic Cadastre

**NMCAs goals and strategies worldwide**

Identified strategy in most NMCAs through the years "serve the needs of governments, businesses, and the public".

Current focus: Create "better services"

The authorities are increasingly (re)considering what are the user's needs in the era of e-government and digitalizing societies and trying to respond to them.

**More than just a trend in geospatial data management**

**Became Legal Requirement**

- harmonized
- openly accessed
- re-usable authoritative data

**Findable – Accessible – Interoperable – Re-usable**

**Challenges**

Compliance to OD framework is likely to force changes to the business model of NMCAs, especially if they are required to generate sufficient revenue to cover a substantial part of their operating costs

Co-funded by
the European Union

Digital Europe Programme
Grant Agreement No 101100625

# The Open Cadastral Map

https://www.mapsforeurope.org/datasets/cadastral-all

HELLENIC REPUBLIC
Ministry of Digital Governance

Hellenic Cadastre

**Vision:** Become a single point to access pan-European cadastral data and addresses the challenge of easily finding authoritative pan-European high-value geospatial data.

Currently data from 6 countries provided through the OME interface

**HVD:** Cadastral Parcels, Buildings, Addresses and Administrative Units

**Extend:** 9 additional countries by the end of 2025

**Enhance:** New functionalities

**Common process for all countries used to integrate data**
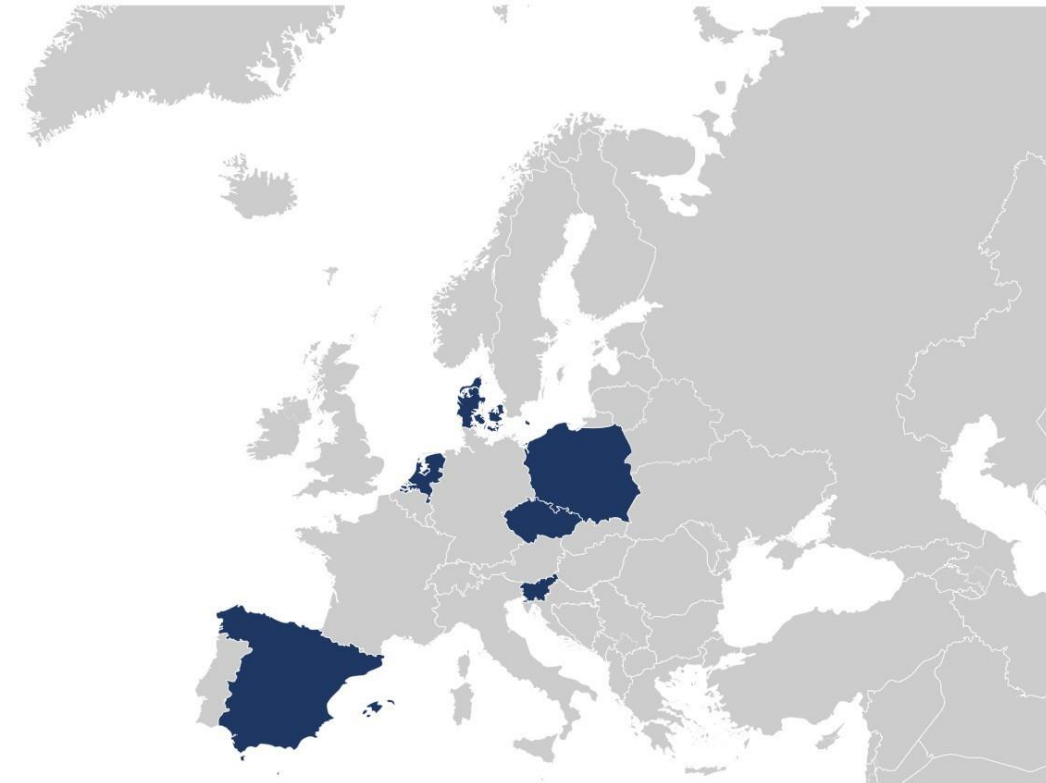
Czech Republic

Denmark

Netherlands

Poland

Slovenia

Spain

Co-funded by
the European Union

Digital Europe Programme
Grant Agreement No 101100625

# Common Cadastral Data Strategy

## Deliverable D6.2 – Pan European Cadastral Data Strategy

| Deliverable Number | D6.2 | Lead Beneficiary | 5. HC |
|---|---|---|---|
| Deliverable Name | Pan European Cadastral Data Strategy | | |
| Type | R — Document, report | Dissemination Level | PU - Public |
| Due Date (month) | 36 | Work Package No | WP6 |

| Description | | | |
|---|---|---|---|
| Format: Electronic, Language: English | | | |

- Develop Support for a long term strategy in delivering of pan-European cadastral data (enhance further the awareness of the OCM)

- What members think about the potential of specifying common deliverables and applying standardization approaches in order to homogenize datasets that are going to be integrated in the OCM.

- Develop Guidelines

- Propose Best Practices
  - Auto-translation, edge-matching handling e.t.c.

- Identify current and future OCM users (public, such as European Commission and other international organizations, and private, companies and citizens

- Identify related needs

Co-funded by
the European Union

Digital Europe Programme
Grant Agreement No 101100625

# Pan-European Cadastral Data Strategy

Define the technology, processes, people and rules required to manage NMCAs information assets.

Outline the long-term vision for collecting, storing, sharing, and usage of the information assets.

Make working with cadastral data easier for everyone who needs it.

**Data engineers / Scientists / Analysts/ Business managers**
**Specific guidelines for geospatial data in Europe**
**Overcome existing technical barriers to data sharing**
**Focus on FAIR data**

Co-funded by the European Union

Digital Europe Programme
Grant Agreement No 101100625

# One harmonized view from different national authorities

## Need for common rules:

INSPIRE sets some common regulations which help streamline the existing data from countries that comply with the Directive and thus, make the OCM possible.

## INSPIRE regulations allow:

- variations in implementation
- different approaches for data formats or download services
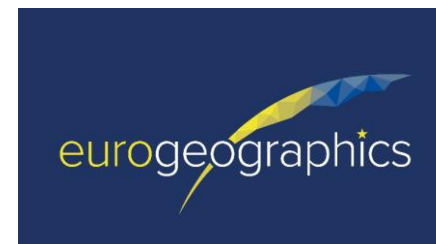- INSPIRE compliance to not identical solutions

## OCM production process had to impose further specifications:

- INSPIRE endorsed gml schema required (*.zip)
- INSPIRE ATOM Feed Service for download
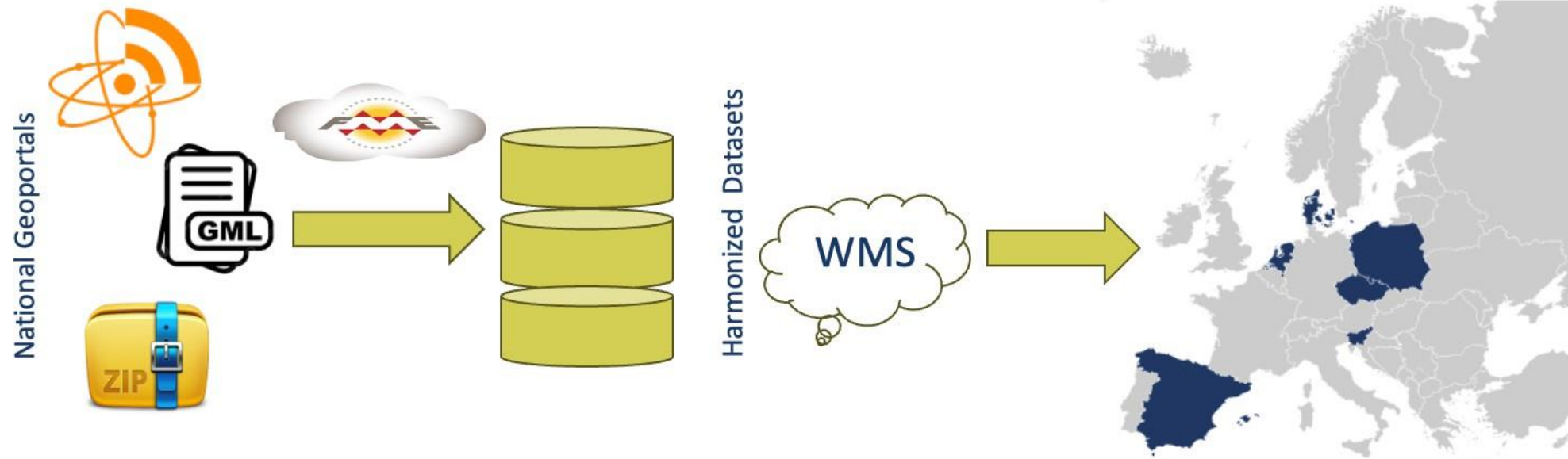- ETRS 89 Coordinate Reference System

# Current specifications and process for the OCM

# The Open Cadastral Map in 31.12.2024
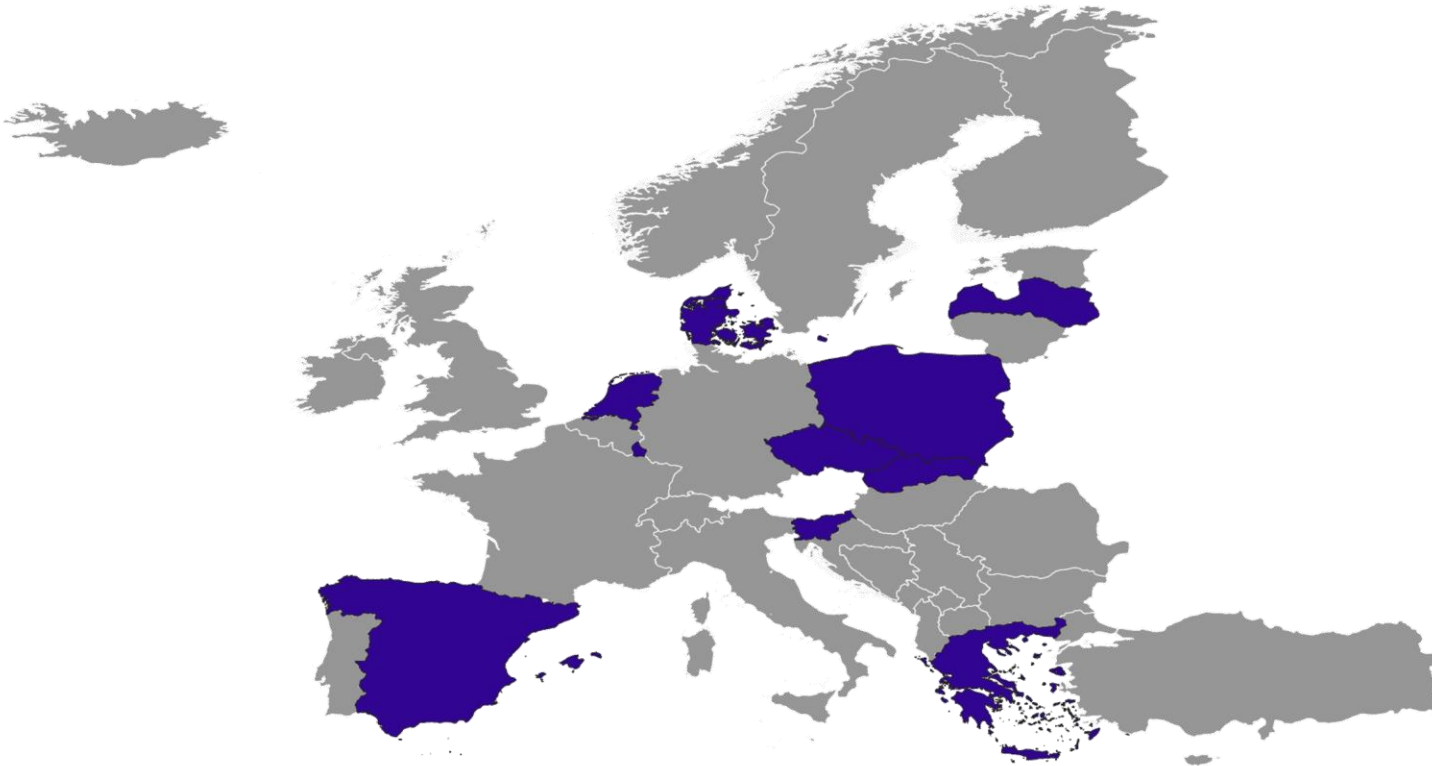
https://www.mapsforeurope.org/datasets/cadastral-all

**Data provided in 2024 from:**

- Greece
- Latvia
- Luxembourg
- Slovakia

**Data provided in 2025 from: ?**

- Five additional data providers

## Challenges Encountered

Most members understand the usefulness of the OCM and embraced the initiative

✓ Some members had legal restrictions in opening their data

✓ Few members were already compliant

✓ Most members needed to make adaptations to the OCM requirements

✓ Many members expressed their wish for a more flexible process

✓ Some members recommended the migration to new forms of data and services

**We work with members one by one to reach compliance**

Co-funded by
the European Union

Digital Europe Programme
Grant Agreement No 101100625

# The Open Cadastral Map beyond OME 2

**The Open Cadastral Map  needs to be sustainable**

- In terms of finance
- In terms of a well-established process that ensures data quality, up to date, authorized, easy to use and combine cadastral data

**Adapt to members' needs and expectations**

- Identify current and future OCM users (businesses, researchers, public administrations)
- Identify their needs and expectations
- Adapt respectively the process when possible.

# The future Open Cadastral Map

**Examine the alternatives to create common processes for delivering pan-european cadastral data**

- Do nothing and continue with the same process
- Keep a similar process but become more flexible (e.g. regarding the data formats and the services provided)
- Adopt an entirely new process
- Do not create a european cadastral map

**Identify the Resources needed**

- Time
- Budget
- Personnel
- Technology

- **Identify Risks and Vulnerabilities**
  - Risk Mitigation Measures

HELLENIC REPUBLIC
Ministry of Digital Governance

Hellenic Cadastre

# Evaluate the Proposed Strategy

■ **Raise awareness**
  ■ Present the pan-european cadastral data strategy proposal to major events
  ■ Organize workshops

■ **Assess the view of members**
  ■ Conduct assessment of members' views through structured questionnaire(s)
  ■ Collect feedback from members
  ■ Analyse results

■ **Evaluate stakeholders needs / satisfaction** *(Aligned with the EG strategy plan)*
  ■ Engage with key stakeholders to confirm options for the future sustainability of the outputs of the Action

■ **Feedback loops for continuous improvement**
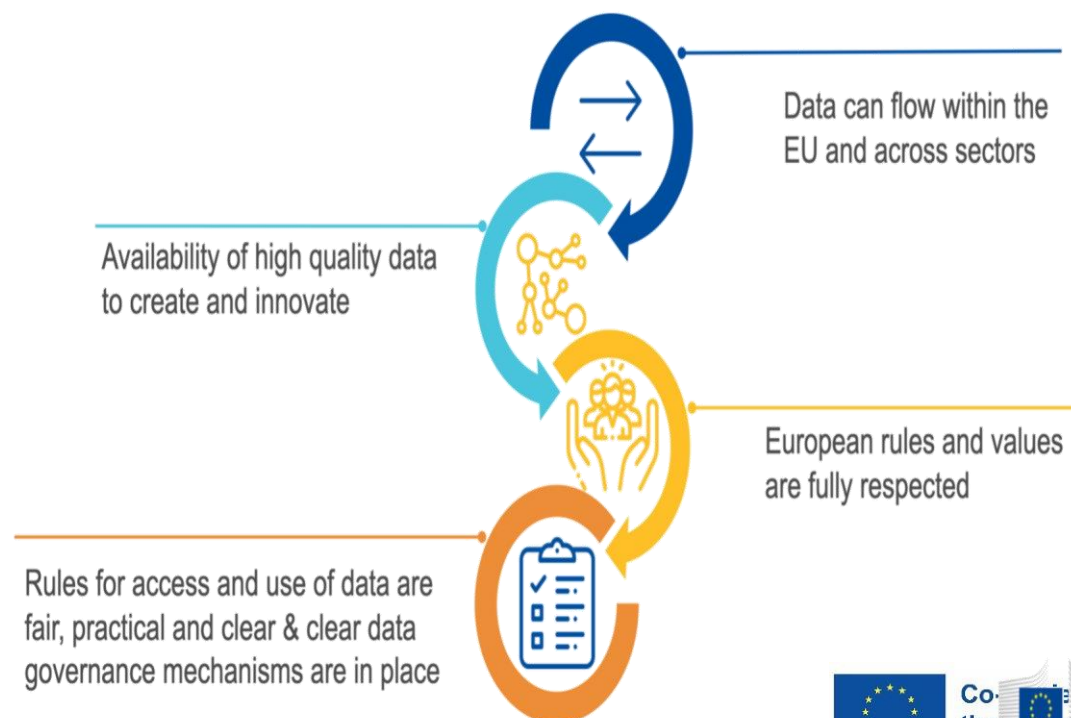
# A European strategy for data

The European data strategy aims into turning EU a leader in a data-driven society and ensure that Europe's digital transition happens according to European values and principles. The data strategy sets out the vision of creating a single market for data, where data can flow freely within the EU and across sectors.

- Enabling access to competitive, secure and fair European cloud services

- Support progress on data technologies

- The availability of data is essential for training artificial intelligence systems, with products and services rapidly moving from pattern recognition and insight generation to more sophisticated forecasting techniques and, thus, better decisions.

- A European way for handling data will ensure that more data becomes available for addressing societal challenges and for use in the economy, while respecting and promoting European shared values.



**European Strategy for Data**

A common European data space, a single market for data

- Data can flow within the EU and across sectors
- Availability of high quality data to create and innovate
- European rules and values are fully respected
- Rules for access and use of data are fair, practical and clear & clear data governance mechanisms are in place

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0066

Digital Europe Programme
Grant Agreement No 101100625

# Action Plan for developing a pan-European Cadastral Data Strategy

| Tasks in Time | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Develop a pan-European Cadastral Data Strategy** | Jan-24 | Feb-24 | Mar-24 | Apr-24 | May-24 | Jun-24 | Jul-24 | Aug-24 | Sep-24 | Oct-24 | Nov-24 | Dec-24 | Jan-25 | Feb-25 | Mar-25 | Apr-25 | May-25 | Jun-25 | Jul-25 | Aug-25 | Sep-25 | Oct-25 | Nov-25 | Dec-25 |
| Design of the plan of action | | | | | | | | | | | | | | | | | | | | | | | | |
| Development of the supporting information | | | | | | | | | | | | | | | | | | | | | | | | |
| Presentation and consultation of the strategy options with stakeholders | | | | | | | | | | | | | | | | | | | | | | | | |
| Collection and assessment of input provided during consultation | | | | | | | | | | | | | | | | | | | | | | | | |
| Drafting of the strategy document | | | | | | | | | | | | | | | | | | | | | | | | |
| Presentation of the result to various fora | | | | | | | | | | | | | | | | | | | | | | | | |
| Collection and assessment of new input | | | | | | | | | | | | | | | | | | | | | | | | |
| Incorporation of the input to the document | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery of the final outcome | | | | | | | | | | | | | | | | | | | | | | | | |

**D6.2 Pan-European Cadastral Data Strategy**

Co-funded by the European Union

Digital Europe Programme
Grant Agreement No 101100625

# A European strategy for cadastral data

HELLENIC REPUBLIC
Ministry of Digital Governance

Hellenic Cadastre

**Who needs Pan-European Open Cadastral Data?**

**Only a few examples:**

- Governmental Agencies
- European policy makers
- Financial Institutions
- Real-Estate insurance companies that operate across Europe
- International companies specializing in the property data and location intelligence industry
- Companies specializing in  environmental services, sustainability, renewable energy
- Researchers and Academics
- Telecommunication Companies
- Citizens – Property owners

## MORE DETAILS IN THE UPCOMING PRESENTATION

# Thank you for your attention!

Contact: **hpapadak@ktimatologio.gr**