

# OME 2 – OPEN CADASTRAL MAP

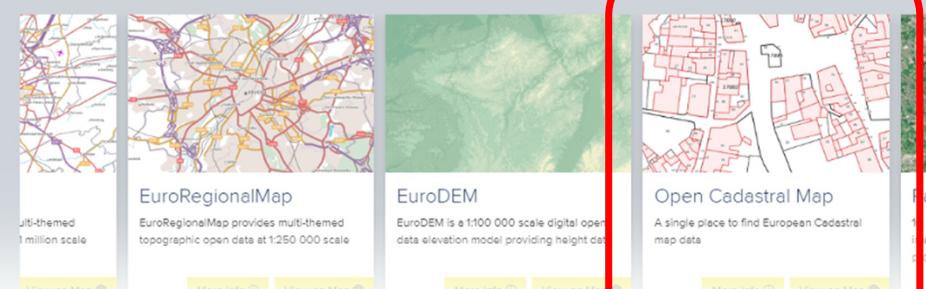
WP6 – Development and Enhancement  
of the Open Cadastral Map

# Open Maps for Europe

<https://www.mapsforeurope.org/>



## Datasets



# The Open Cadastral Map

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

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

**Sustain:** Currently data from 6 countries provided through the OME interface

The OME 2 Open Cadastral Map project will build on the successful results of the OME project

**Extend:** 9 additional countries

**Enhance:** New functionalities



Czech Republic

Denmark

Netherlands

Poland

Slovenia

Spain

# OCM current view and features

## Administrative Units

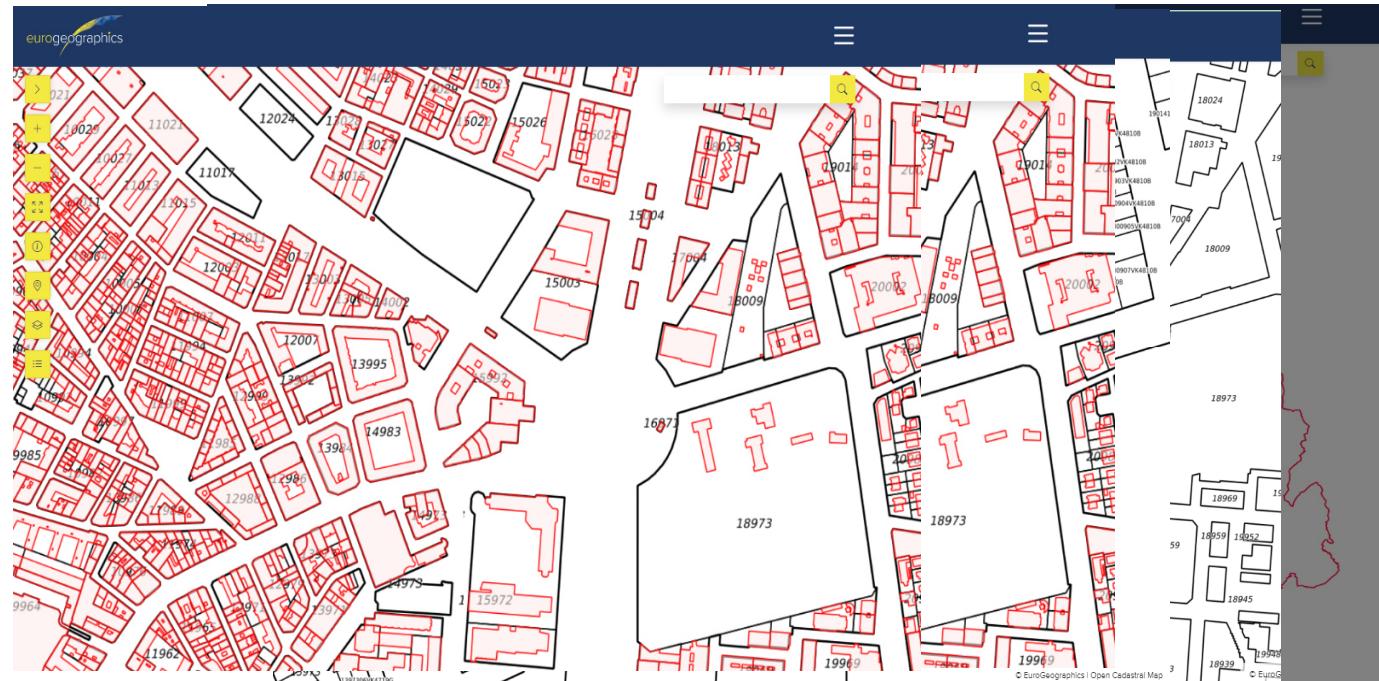
## Cadastral Zoning

## Cadastral Parcels

## Building

## Building Part

## Addresses



All these themes are defined as part of the High Value Datasets

They can generate significant socioeconomic and environmental benefits

They are of great interest to the European Commission and its Services, to private sector companies and citizens.



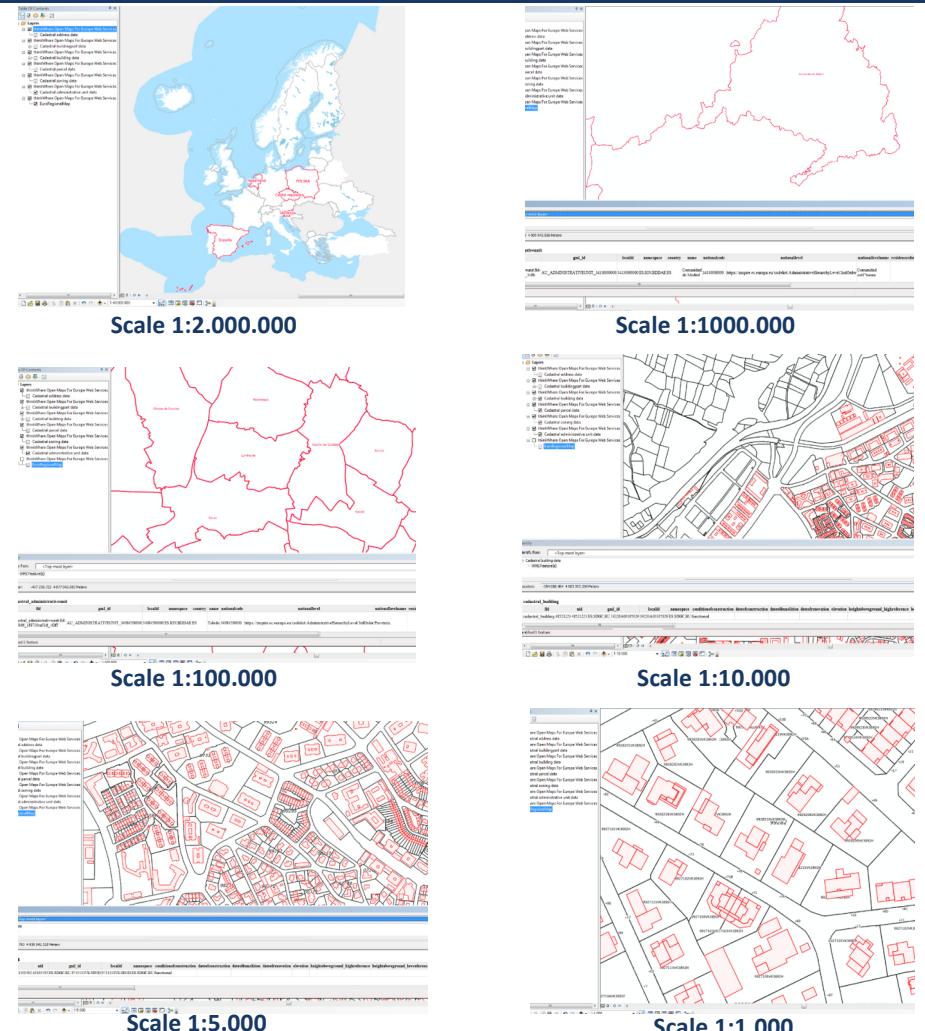
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# OCM current view and features

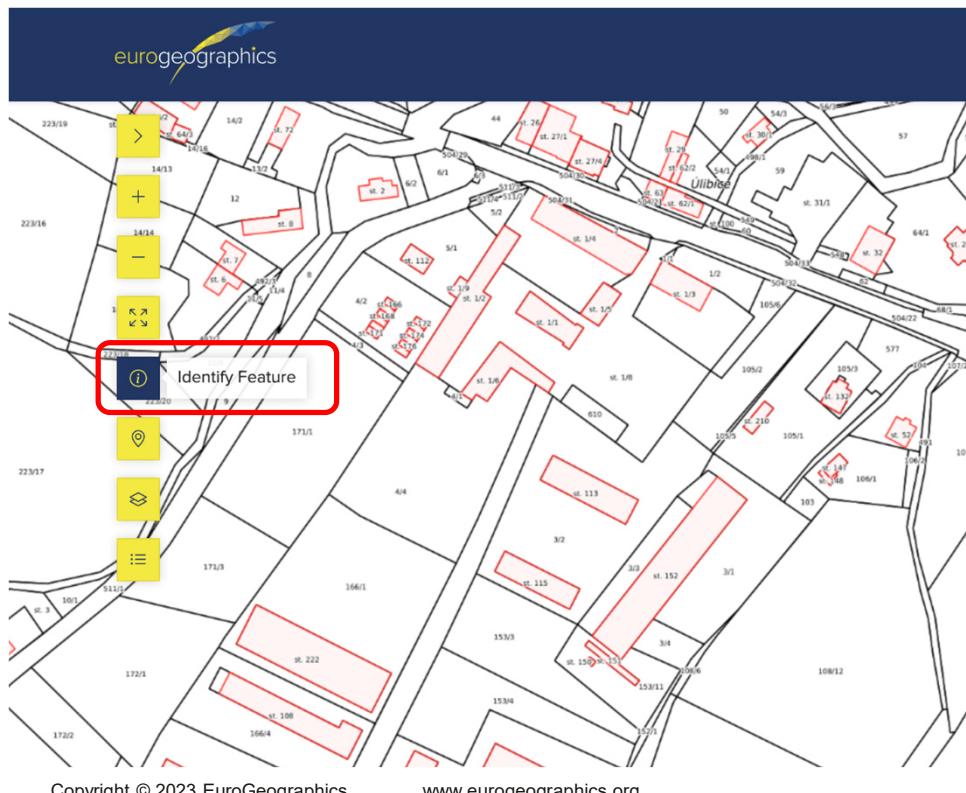
## Layers Visibility

Map Scale	Visible Layers	Labeled
1: 2.500.000	Administrative Units / AUHierarchyLevel /1 <sup>st</sup> Order	Yes
1:1.000.000	Administrative Units / AUHierarchyLevel/2 <sup>nd</sup> Order	Yes
1:100.000	Administrative Units / AUHierarchyLevel/3 <sup>rd</sup> Order	Yes
	Administrative Units / AUHierarchyLevel/3 <sup>rd</sup> Order	Yes
	Cadastral Zoning	No
	Cadastral Parcels	No
1:10.000	Buildings	No
	Administrative Units / AUHierarchyLevel/4 <sup>th</sup> Order	Yes
	Cadastral Zoning	Yes
	Cadastral Parcels	No
1:5.000	Buildings	No
	Administrative Units / AUHierarchyLevel/4 <sup>th</sup> Order	Yes
	Cadastral Zoning	Yes
	Cadastral Parcels	Yes
	Buildings	No
	Building Parts	No
1:2.500	Postal Addresses	No



# OCM current view and features

View data & Get information online: `getFeatureInfo`



## Identify Feature

**cadastral\_cadastralparcel.fid-5276166\_188710ca51d\_-25d9**  
**gml\_id** CP.1391346202  
**localid** CP.1391346202  
**namespace** C2-00025712-CUZK\_CP  
**label** 192  
**nationalcadastralreference** 790389-192  
**areavalue** 6559.0  
**areavalue uom** m2  
**beginlifeSpanversion** 2022-09-20T07:16:20Z  
**administrativeunit\_href** [http://services.cuzk.cz/wfs/inspire-ae-wfs.asp?service=WFS&VERSION=2.0.0&request=GetFeature&storedQuery\\_id=urn:ogc:def:query:OGC-WFS::GetFeatureByld&ld=AU.531995](http://services.cuzk.cz/wfs/inspire-ae-wfs.asp?service=WFS&VERSION=2.0.0&request=GetFeature&storedQuery_id=urn:ogc:def:query:OGC-WFS::GetFeatureByld&ld=AU.531995)  
**administrativeunit\_title** Zaječov  
**zoning\_href** [http://services.cuzk.cz/wfs/inspire-cp-wfs.asp?service=WFS&VERSION=2.0.0&request=GetFeature&storedQuery\\_id=urn:ogc:def:query:OGC-WFS::GetFeatureByld&ld=CZ.790389](http://services.cuzk.cz/wfs/inspire-cp-wfs.asp?service=WFS&VERSION=2.0.0&request=GetFeature&storedQuery_id=urn:ogc:def:query:OGC-WFS::GetFeatureByld&ld=CZ.790389)  
**zoning\_title** Zaječov  
**cadastral\_cadastralzoning.fid-56e7899b\_18871752e48 -4cbc**

[Back to top ↑](#)

**GetFeatureInfo (GFI) for cadastral parcel** returns information provided through the national service like the national cadastral reference and **if possible a hyperlink (URL)** to access the national portal.

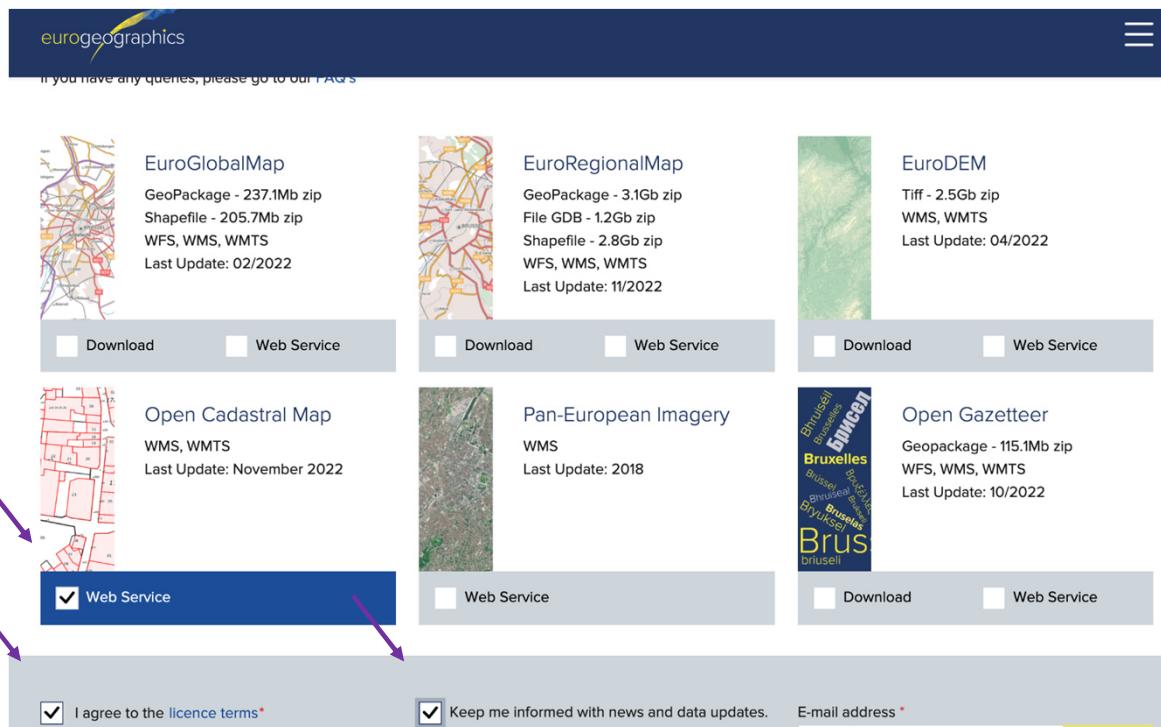


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# OCM current view and features

## View Service



The screenshot shows the 'View Service' section of the OCM interface. It displays several datasets:

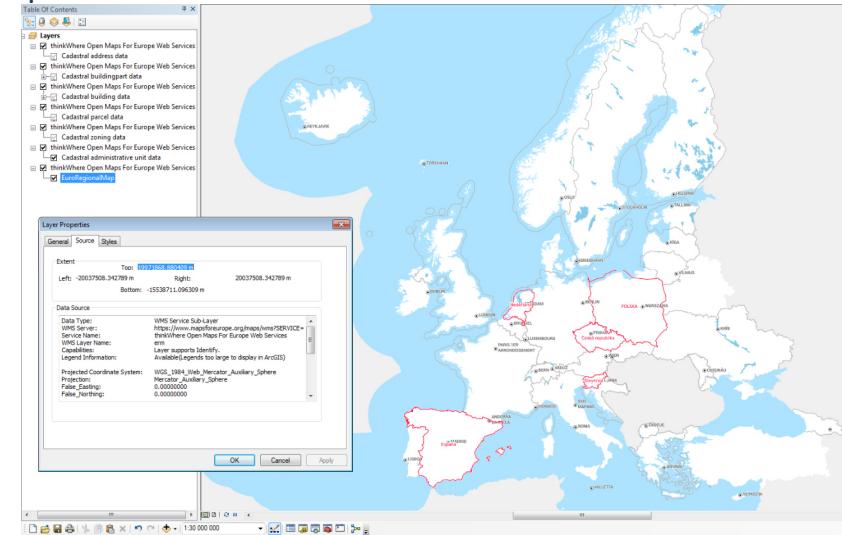
- EuroGlobalMap**: GeoPackage - 237.1Mb zip, Shapefile - 205.7Mb zip, WFS, WMS, WMPS. Last Update: 02/2022. Buttons: Download, Web Service.
- EuroRegionalMap**: GeoPackage - 3.1Gb zip, File GDB - 1.2Gb zip, Shapefile - 2.8Gb zip, WFS, WMS, WMPS. Last Update: 11/2022. Buttons: Download, Web Service.
- EuroDEM**: Tiff - 2.5Gb zip, WMS, WMPS. Last Update: 04/2022. Buttons: Download, Web Service.
- Open Cadastral Map**: WMS, WMPS. Last Update: November 2022. Buttons: Download, Web Service. A purple arrow points to the 'Web Service' button.
- Pan-European Imagery**: WMS. Last Update: 2018. Buttons: Download, Web Service.
- Open Gazetteer**: Geopackage - 115.1Mb zip, WFS, WMS, WMPS. Last Update: 10/2022. Buttons: Download, Web Service.

At the bottom, there are checkboxes for 'I agree to the licence terms\*' and 'Keep me informed with news and data updates.', and an 'E-mail address \*' input field.

The user receives an email with a unique access token and the url to the available WMS view services

<https://www.mapsforeurope.org/maps/wms?SERVICE=WMS&VERSION=1.3.0&REQUEST=GetCapabilities&token>

The url, when imported into a GIS software, provides view to all countries' available datasets



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# OCM info & Attributions

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



## Themes

Addresses, Administrative Units, Buildings, Cadastral Parcels

## Scales

Administrative Units national to municipal  
 Cadastral Parcels / zones from 1:100 - 1:10000  
 Buildings 1:100 - 1:10000  
 Addresses 1:100 - 1:2000

## Coordinate System

Decimal degrees ETRS89-WGS84

## Available Formats

### Web Services

WMS, WMTS

## Dataset Documentation

[Attribution Document](#)

## Attribution statement

The Open Cadastral Map web service is licenced through the EuroGeographics Open licence. The Open Cadastral Map web service is owned by all contributing National Mapping and Cadastral Agencies listed below, and collectively represented by © EuroGeographics

Country	Member	Attribution Statement
Czech Republic	Czech Office for Surveying, Mapping and Cadastre	© Český úřad zeměřický a katastrální (CUZK)
Denmark	Danish Ministry of Energy, Utilities and Climate / Agency for Data supply and Efficiency	© Energi-, forsynings- og klimaministeriet / Styrelsen for Dataforsyning og Effektivisering (SDFE)
Netherlands	Cadastre, Land Registry and Mapping Agency, The Netherlands	© Kadaster (KADASTER)
Poland	Head Office of Geodesy and Cartography, Poland	© Head Office of Geodesy and Cartography (GUGIK)
Slovenia	Surveying and Mapping Authority of the Republic of Slovenia	© Geodetska uprava Republike Slovenije (GU)
Spain	General Directorate for the Cadastre, Spain	© Dirección General del Catastro (DGC)
Spain	National Geographic Institute Spain	© National Geographic Institute (NGI)



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# OME 2 – Open Cadastral Map (OCM) project

Duration of the project: 3 years

## Project tasks:

- Continue the operation of the Open Maps for Europe platform
- Expand its data and functionalities both for the countries already on the map and for the new ones
- Increase OCM's coverage by 4 new countries by 31st Dec 2024 and 5 additional countries by 31st Dec 2025
- Increase the harmonisation of the access to cadastral data
  - Document cadastral data
  - Develop user-oriented description of the datasets offered by OCM
  - Metadata Quality Assurance (**Findability Accessibility Interoperability Reusability**)

**Note: The layers of the OCM are those provided by NMAs contain the authoritative information that shows legal or official boundaries. No cross-border automated edge-matching procedure applies.**

- The potential for edge-matching handling will be investigated

## OME 2 – Open Cadastral Map (OCM) project (cont'd)

Duration of the project: 3 years

### Project tasks:

- Enhance further the awareness of the Open Cadastral Map and its usefulness to cadastral communities
- Develop a long term pan-European strategy in delivering cadastral data.
  - specifying common deliverables and
  - applying standardisation approaches in order to homogenise datasets that are going to be integrated in the OCM.
- Develop guidelines about best practices for cadastral agencies and users
- Identify current and future OCM users (public and private organizations, companies and citizens), as well as, related needs.

***National Cadastral Agencies' approval and engagement are essential for the project's future operation and further improvement.***



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# Prerequisites for incorporating data in the OCM

- Availability of the Cadastral Parcel Dataset
- Compliance with the INSPIRE Directive's specifications
  - *Data*  
<https://inspire.ec.europa.eu/id/document/tg/cp>  
<https://inspire.ec.europa.eu/data-model/approved/r4618-ir/html>  
<https://inspire.ec.europa.eu/schemas/>
  - *Metadata*  
[Technical Guidance for the implementation of INSPIRE dataset and based on ISO/TS 19139:2007](https://inspire.ec.europa.eu/documents/10180/1018000/Technical+Guidance+for+the+implementation+of+INSPIRE+dataset+and+based+on+ISO/TS+19139:2007)
- No restrictions on public access and use for the provided datasets
  - Datasets available for reuse under the conditions of the Creative Commons license or any equivalent or less restrictive open license



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INSPIRE  
Infrastructure for Spatial Information in Europe

## D2.8.I.6 Data Specification on Cadastral Parcels – Technical Guidelines

<b>Title</b>	02.8.1.6 Data Specification on Cadastral Parcels – Technical Guidelines
<b>Creator</b>	INSPIRE Thematic Working Group Cadastral Parcels
<b>Date</b>	2014-04-17
<b>Subject</b>	INSPIRE Data Specification for the spatial data theme Cadastral Parcels
<b>Publisher</b>	European Commission Joint Research Centre
<b>Type</b>	Text
<b>Description</b>	This document describes the INSPIRE Data Specification for the spatial data theme Cadastral Parcels
<b>Contributor</b>	Members of the INSPIRE Thematic Working Group Cadastral Parcels
<b>Format</b>	Portable Document Format (pdf)
<b>Source</b>	
<b>Rights</b>	Public
<b>Identifier</b>	D2.8.1.6_v3.1
<b>Language</b>	En
<b>Relation</b>	Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)
<b>Coverage</b>	Project duration



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Hara Papadaki – Hellenic Cadastre / Amalia Velasco – Spanish D.G. for Cadastre

# Nice to have for incorporating data into the OCM project

## Download Service :

INSPIRE ATOM Feed Service with a gml in a zip file available for download

<https://inspire.ec.europa.eu/documents/technical-guidance-implementation-inspire-download-services>

## Dataset format :

GML format & INSPIRE endorsed Schemas

<https://inspire.ec.europa.eu/schemas/>



All the rest of the Open Cadastral Map themes

- Administrative Units
- Buildings
- Building Parts
- Addresses



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## Some requirements are easy to achieve

In case you want to participate but you think your data don't meet the requirements.

We encourage you to contact us to discuss further details.

### Examples:

- If datasets are in other formats rather than in gml  
Transformation might be feasible through simple programming  
Or easily accessible transformation tools
- If datasets are available for download but not via INSPIRE ATOM Feed Service  
The implementation of INSPIRE ATOM Feed Service is not so complex  
The ATOM FEED must follow INSPIRE Download Services Technical Guidance

<https://inspire.ec.europa.eu/documents/technical-guidance-implementation-inspire-dov>



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## What makes OCM an important project

- Provides pan-European cadastral data access from a single point and addresses the challenge of
  - finding
  - easily accessing and
  - licensing authoritative and up-to-date pan-European high-value geospatial data.

**Note:** Whilst EuroGeographics update the Open Cadastral Map every six months, the data from the Cadastral Agency may be updated on a different frequency cycle.

- Saves users time, effort and resources by providing harmonized data from multiple countries through one central portal.
- Demonstrates how demand for geospatial information in all common data spaces of the European Strategy for Data can be met.



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# Why it's important to participate

**The OCM aims to :**

- **provide** users with a simplified and harmonised web service of the INSPIRE themes Cadastral Parcels (CP), Buildings (BU), Addresses (AD) and Administrative Units (AU).
- **establish** a unified pan-European cadastral map
- **constitute** a fundamental layer of authoritative data in Europe (High Value Datasets).
- **satisfy** the everyday needs of a wide spectrum of users
- **support** NMCAs in implementing rules for the Open Data by re-using OME2 techniques nationally and sharing good practices.
- **increase NMCAs' prominence** as key authoritative data providers in Europe



# Find out more about the OCM and Get involved

- **Guide for Data Producers:**

An informative document describing how to generate the necessary files to incorporate your country's national cadastral datasets to the Open Cadastral Map is developed within the OME2 project and will be distributed to participating EG members

- **Europegeographics Informational Webinar on June 21<sup>st</sup>**

The Work Package 6 team of the OME 2 project will:

- Give a presentation on the technical and procedural aspects of the project
- Demonstrate the currently available features on the OCM
- Provide answers to your questions



The screenshot shows the 'Guide for Data Producers' document. At the top right is the eurogeographics logo. Below it is a blue header bar with the text 'OPEN CADASTRAL MAP' and a small icon. The main content area has a light grey background. The title 'Guide for Data Producers' is in bold. Below it is a short description of the document's purpose. A numbered list of five sections follows. The first section is titled '1. What is Open Cadastral Map'.

OPEN CADASTRAL MAP |

**Guide for Data Producers**

This document contains a simple description of how to generate the necessary files to incorporate the national cadastral datasets to the Open Cadastral Map that EuroGeographics is developing within the OME2 project (Open Maps for Europe2) and is structured in the following sections:

1. What is Open Cadastral Map
2. Implementation of ATOM FEEDS
3. [GetFeatureInfo](#) functionality
4. Licences and Attribution
5. OME2 plan for Open Cadastral Map and contact

**1. What is Open Cadastral Map**

The Open Cadastral Map is a view service that provides a simplified and harmonised view of the INSPIRE themes: Cadastral Parcels (CP), Buildings (BU), Addresses (AD) and Administrative Units (AU), all of them High Value Data set, for pan-European use.

It is not one single map layer. It is composed by theme-specific map layers organised theme-wise. Each theme has its [layers](#) and the styles are defined for each layer. This also makes the Open Cadastral Map visualization more flexible, as the layers can be individually switched on and off.

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



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# Find out more about the OCM and Get involved

## Contact us

If you need more information, please feel free to contact us either at EuroGeographics Head Office

- Victoria Persson, e-mail: [victoria.persson@eurogeographics.org](mailto:victoria.persson@eurogeographics.org)

or the WP6 team members of

the Hellenic Cadastre

- Hara Papadaki, e-mail: [hpapadak@ktimatologio.gr](mailto:hpapadak@ktimatologio.gr)

the Spanish Cadastre

- Amalia Velasco, e-mail: [amalia.velasco@catastro.hacienda.gob.es](mailto:amalia.velasco@catastro.hacienda.gob.es)



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# Thank you for your attention!

**Hara Papadaki – Hellenic Cadastre / Geospatial Information Directorate**

**Amalia Velasco – Spanish Directorate General for Cadastre**

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