

Conference and Plenary Meeting of the Permanent Committee on Cadastre in the European Union (PCC)

# “Valorisation of Digital Cadastral Data – Towards a More Sovereign, Effective, and Ecological European Model”

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## Results of the Questionnaire



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Topic 3 – The Cadastre and its Contribution to a More Sovereign, Effective, and Ecological European Model

“Valorisation of Digital Cadastral Data – Towards a More Sovereign, Effective and Ecological European Model“



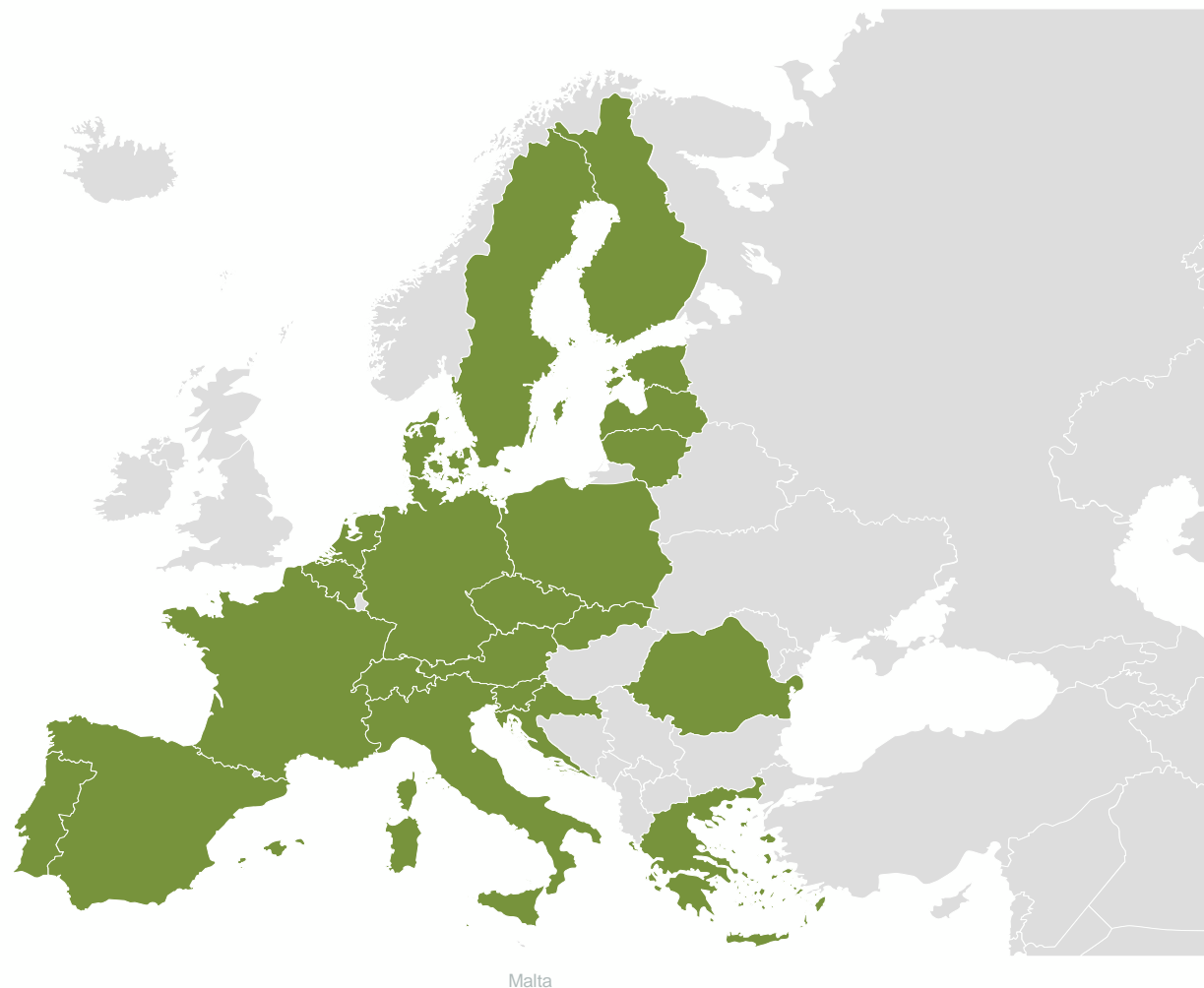
## 22 Countries



replied



no feedback or out of scope



## Focus and Aim of Topic 1

Cadastrals have to meet the demands of societies and are constantly being challenged to follow developments. There are new tools and technologies used in the cadastral field.

- Q2) Do you have any examples for the use of new technologies in your cadastral systems or datasets?

## Use of New Technologies (1/2)

Q2) Do you have any examples for the use of new technologies in your cadastral systems or datasets?

- 13x LiDAR: for 3D building models, verification of buildings, height models, DTM, slope, change detection, mapping of coastal areas, mountain areas, forest areas
- 5x AI: for building detection and identification, better reliability of tax base (FR), automatic procedure for evaluating and classifying parcels (PT), interpretation of cadastral documents (SE)
- 4x digital orthophotos, Copernicus: for updating, change detection
- 2x 3D modelling
- 2x BIM: pilot for registering rights in 3D, check possibilities, seek cooperation
- 2x upgrading of cadastral map: to authoritative boundary map (NL), to integrate servitudes
- 2x linked data, making use of other datasets: common web portal of cadastre and land registry, key registers

## Use of New Technologies (2/2)

Q2) Do you have any examples for the use of new technologies in your cadastral systems or datasets?

- 2x improve user relationship: for better service, better communication, crowd-sourcing
- 2x register of buildings
- 1x drone technology: to increase mapping accuracy, 3D representations
- 1x spatial analysis tools: for delimitation and categorization of buildings and zone
- 1x mathematical valuation models: for determining real property values
- 1x extension, enhancement of cadastral system: documentation of underground facilities
- 1x open data
- 1x crowd-sourcing

## Focus and Aim of Topic 2

Cadastral data are a crucial dataset in any spatial data infrastructure. However, it is only one among many others. Accessibility, interoperability, and actual interaction between those datasets is key for their value and usability.

- Q3) Available Tools To Access and Use Cadastral Data
- Q4) Technical Processes and Work Flow with Partners
- Q5) “Smart City” development projects

## Available Tools To Access and Use Cadastral Data

Q3) Examples of specific situations and experiences in your country: What tools are made available by the cadastral authorities to the various users to access and use cadastral data?

### web tools (portals, platforms, services):

- 10x to integrate cadastral data in other applications, WMS, WFS, ATOM feed, APIs
- 9x to combining cadastral data with other topics, key registers, SDIs
- 8x to download cadastral data
- 7x to view/consult cadastral data
- 1x to provide revision services (for reporting of updates or errors)
- 1x to initiate and carry out transactions

### other mentioned tools:

- 14x open data
- 6x INSPIRE compatibility
- 6x access for specialist professionals
- 1x once only principle



## Technical Processes and Work Flow with Partners

Q4) How does your cadastral system implement technical processes and workflow between the different kinds of users who access and work with cadastral data?

12x access through portal, webservices, API, WMS, WFS: AT, BE, CZ, DE, EE, ES, FI, GR, HR, IT, LV, SI

2x cooperation with municipalities: FI, SE

2x ID, digital signature: BE, ES

6x common and specialist system: DK, FR, LT, PL, SE, SI

1x One-Stop-Shop: HR

5x workflow with licensed surveyors: AT, FR, HR, IT, SI

5x shared data principles, standardized data modelling concept: CH, CZ, DE, NL, RO

## “Smart City” development projects

Q5) Are there any current “Smart City” development projects or management situations?

11x cadastral data as reference, core component: AT, BE, CH, CZ, DE, ES, FI, FR, GR, IT, SI

4x under responsibility of municipalities or local authorities: AT, BE, FR, LV

3x digital twin, urban twin: DE, FI, NL

3x smart solutions with: public transport RO / built environment SE / culture, sport, tourism, mobility, transport SI

2x 3DCity, 3D cadastre: FR, LT

1x cadastral data as linked data: CH

1x standardized and open interfaces: DE

1x open data platform: FR

1x online collaboration: IT

## Focus and Aim of Topic 3

Better and broader use of digital cadastral data can lead to a European model with added value. The availability of this authentic data would condition the possibility of public decision-making in ecological and other fields, i.e. it would be of real critical importance to the public authorities. Efficiency gains therefore suggest the cadastral systems for such data would be interoperable with other independent systems, in order to create a network and facilitate the transfer of data.

- Q6) Do you think that your cadastral authorities are contributing to the valorisation of digital cadastral data – towards a more sovereign, effective and ecological European model?

## Contribution to Valorisation of Cadastral Data

Q6) Do you think that your cadastral authorities are contributing to the valorisation of digital cadastral data – towards a more sovereign, effective and ecological European model?

Please, rate the contribution on a scale from 1 (not relevant at all) to 5 (very relevant)

5 – very relevant

4

4

11

3

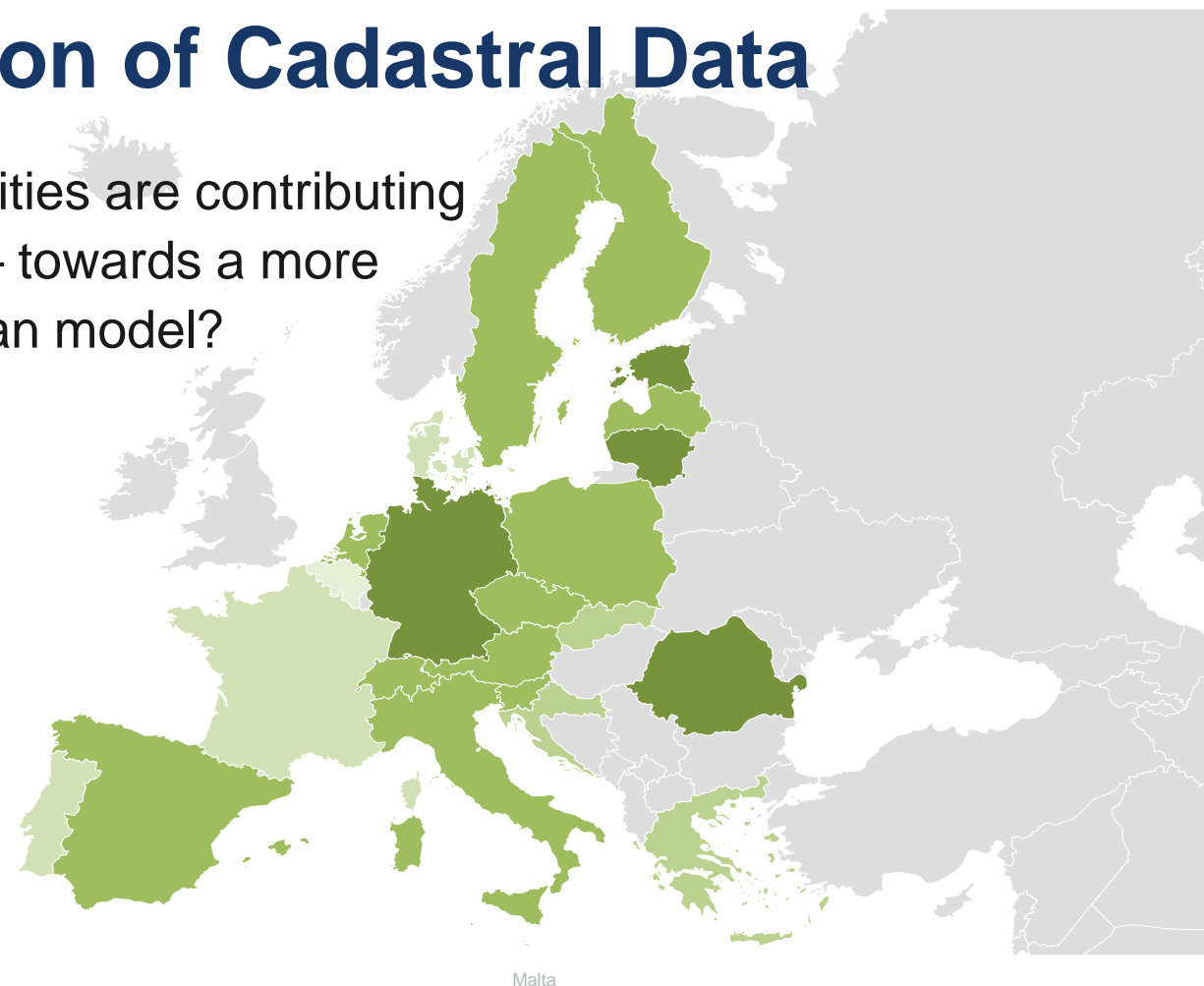
3

2

3

1 – not relevant at all

1



## Contribution to Valorisation of Cadastral Data

Q6) Do you think that your cadastral authorities are contributing to the valorisation of digital cadastral data – towards a more sovereign, effective and ecological European model?

- |    |  |    |  |
|----|--|----|--|
| 6x | <u>interoperability, dissemination of cadastral data for general use</u> : CH, FR, IT, LT, PT, SI                  | 2x | <u>collaboration between admin. levels</u> : BE, PL      |
| 3x | <u>combination of cadastral data with other reference data (orthophoto, LiDAR)</u> : CZ, DE, ES, SI                | 2x | <u>improvement of quality of cadastral data</u> : CZ, FR |
| 3x | <u>planning, emergency situations</u> : ES, GR, RO   | 1x | <u>unique identifiers, linked data</u> : CH              |
| 3x | <u>cadastral data critically important (for strategic issues, business processes, for investment)</u> : GR, HR, NL | 1x | <u>to include use rights, servitudes</u> : FI            |
|    |  | 1x | <u>full territorial coverage</u> : PT                    |
|    |  | 1x | <u>security aspects</u> : SE                             |