





# Authoritative Geospatial Data and its Quality

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#### **Objectives**

To provide a better and more comprehensive understanding of:

- Definition of authoritative data
- importance
- characteristics
- organization/governance
- usage

To help National Mapping, Land Registries, and Cadastral Authorities to better produce and sustain the usage of authoritative geospatial datasets in the (near) future

#### **Outline**

Introduction

Methodology (Survey + Focus Groups)

**Results Survey** 

Results Focus Groups

**Conclusions** 

**Key Recommendations** 



#### Introduction

**Authoritative** -> Popular term in the geospatial data scene

**Public mapping, cadastral and land registration agencies** -> Promoting their geospatial as *Authoritative*or as created from *Authoritative* sources

Authoritative sound impressive

But ...

What is the definition of authoritative data? How important are these datasets now and in the future?

What are its differentiating characteristics?

How are these datasets currently organized/governed?

How are these datasets used?

# **Methodology - Survey**

Online Survey with members of EuroGeographics as the target group

- Questions (closed and open) 11 in total
- Topics: Definition, Characteristics, Governance, Future
- Sent to 63 Permanent Corresponds (Organizations in 46 countries in Europe)
- Summer 2018
- Data Cleaning + Analysis



#### Methodology – Focus Groups

**Focus Groups** -> More in-depth / inside information

Executives of national mapping, cadastral and land registration agencies in Europe

Discussing issues related to authoritative data including definitions, importance, future

Roundtable

Prague (Czech Republic), 8 October 2018

Participation of 94 people



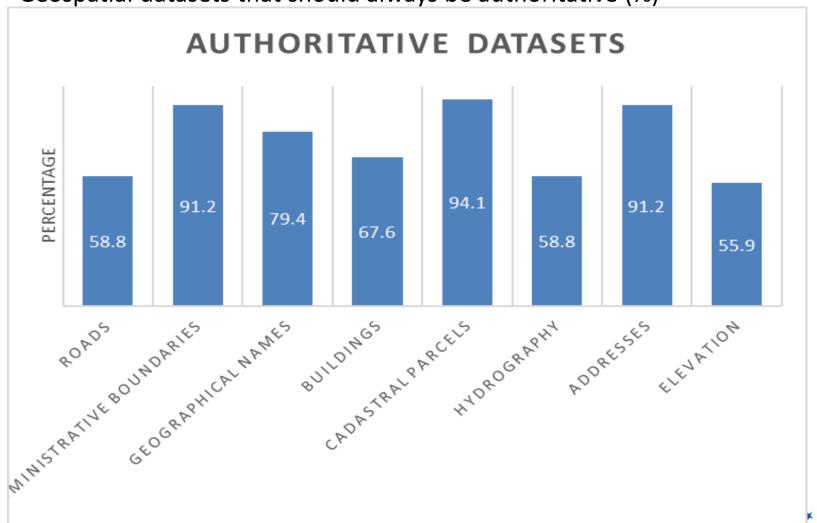
## **Survey: Response Rate**





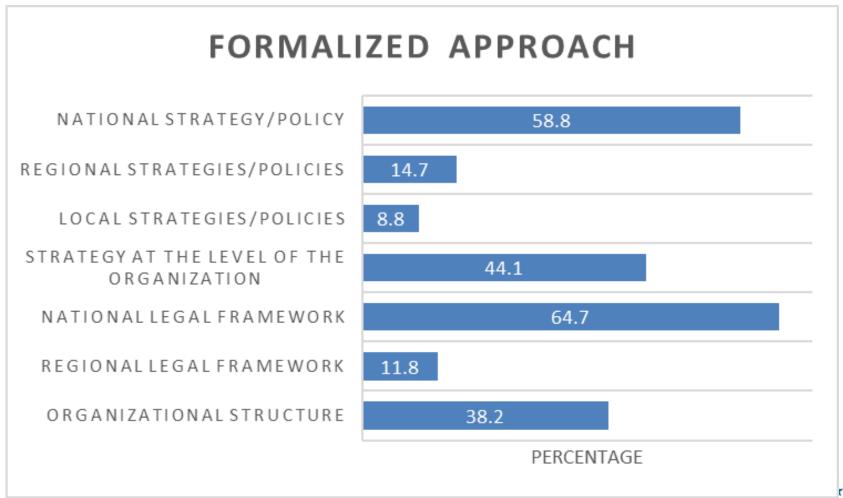
## **Survey Results: Characteristics**

Geospatial datasets that should always be authoritative (%)



#### **Survey Results: Governance**

Formalised approaches towards authoritative geospatial datasets (%)

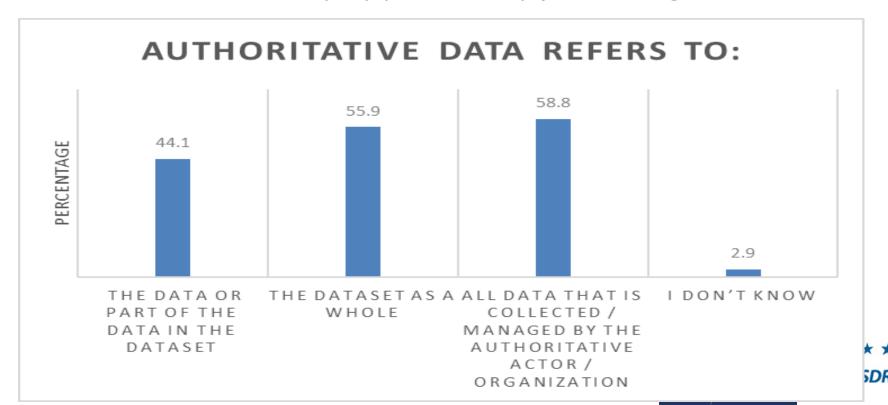


Yes: 82.4 %, No: 17.6%



#### **Survey: Definitions**

A definition was given by 21 respondents out of 37
13 definitions made reference to legal aspects
12 definitions to the provision by a public authority
A definition officially approved by just 5 organizations



#### **Survey Results: Governance**

Restrictions for practical management of authoritative geospatial datasets (%)





## **Conclusions Survey**

- 1. Most organizations have a formalised approach and obligation to use authoritative data
- 2. A strong variety in applied definitions and approaches
- Different opinions on which data to consider as authoritative
- 4. Consensus on central role of public organizations in the organization and use of authoritative data



#### **Focus Groups Results: Definitions**

#### Numerous aspects emerged

- Legally Binding
- Accountability
- Uniqueness
- Mandatory Use
- Liability
- Provision by a public authority
- Trusted
- Standardised
- High Quality
- Certified
- Traceability
- Accessibility



#### Focus Groups Results: Importance

#### **Crucial! But why?**

- Allowing to take authoritative decision
- Ensuring NMCAs to have a share in the 'market'

- → Label ensuring data of 'high value'
- → Need for improved accessibility and up-to-dateness



#### Focus Groups Results: Future

Definitely a **future** for authoritative data but only for a limited number of datasets (at least for addresses, cadastral and administrative boundaries)



## **Conclusions Focus Groups**

- 1. Confirmation of Survey results
- 2. Additional conditions and characteristics added
- 3. Validated authoritative data necessitates adequate resources for ensuring data quality + Up-to-dateness
- 4. Authoritative data better available and recognizable for other public organizations as well as private actors
- 5. Need for organizations within public sector to take up a central role in governance of authoritative data



#### **Key recommendations**

- 1. Need for transparency about the characteristics of authoritative data
- 2. A harmonisation of definitions and criteria is necessary at Country level + European level
  - → Use of network and hierarchy related instruments
- 3. Role public organizations needs to be re-evaluated
  - Core authoritative datasets authoritative public organizations in charge
  - Other datasets governed by other public organizations or the private sector → authoritative public organizations in side role

#### **New definition**

Data provided by or on behalf of a public body (authority) which has an official mandate to provide and sustain it, that is based on a set of criteria to ensure (inter alia) known data quality, and that is required to be used or aimed towards extensive use and reuse within the public sector and society as a whole.









# Thanks for your attention