INSPIRE conference – Barcelona – 29 September 2016

UN-GGIM: Europe Core Data to complement the INSPIRE framework

Dominique Laurent, France

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Core data context and objectives

Context

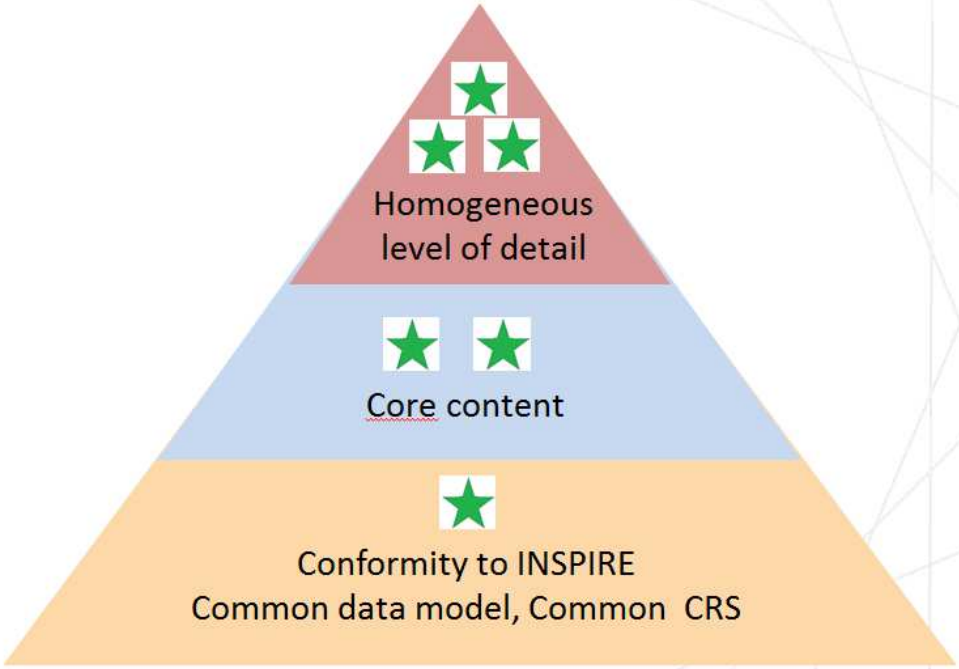
- INSPIRE aims to harmonise existing data
- INSPIRE supplies first level of interoperability (common data model)
- But INSPIRE data will remain heterogeneous
  - No requirements about levels of detail
  - Most concepts are « voidable »

Objectives of the Working Group on European core data

- **Specify homogeneous core data** to be supplied by geographic Europe Member States

- **Define priorities** for production of new data or for improvement of existing data
  - Specifications = recommendation for politicians
  - Commitment for production may be envisaged

Objectives of the Working Group on European core data



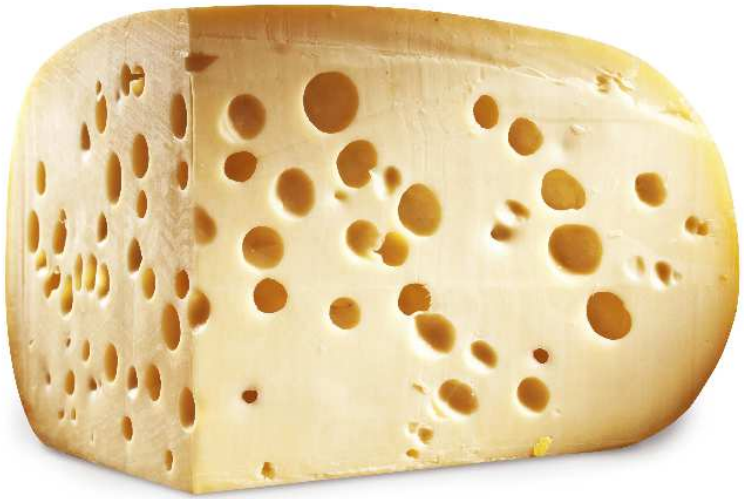
Data harmonisation degrees (ELF project)

- Target data ★ ★ ★
- Select core content from INSPIRE
- Include quality criteria to ensure homogeneous data

Comparison with INSPIRE

	INSPIRE	UN-GGIM: Europe WG core data
Driver	European Commission (DG ENV, JRC, Eurostat, EEA)	United Nations (UN-GGIM: Europe Executive Committee)
Geographic scope	European Union Politic Europe	Geographic Europe
Objective	Harmonise existing data	Get harmonised data by all means (including production of new data)
Status	European Directive Legal obligation for MS	UN Recommendation Encouragement to MS

Comparison with INSPIRE



The INSPIRE big cheese
with lots of holes

Users begin to complain:
not so much to eat!

The core data cheese:
smaller but compact
and really filled

Organisation and calendar

- 15 European countries
  - Austria, Belgium, Finland, France (chair), Germany, Greece, Netherland, Poland, Spain, Sweden, Switzerland, United Kingdom, Turkey
- Observers
  - JRC, EEA, EuroSDR
- Calendar
  - Theme selection : January 2016
  - Core data specifications : 2016 – 2017

Core data theme selection (January 2016)

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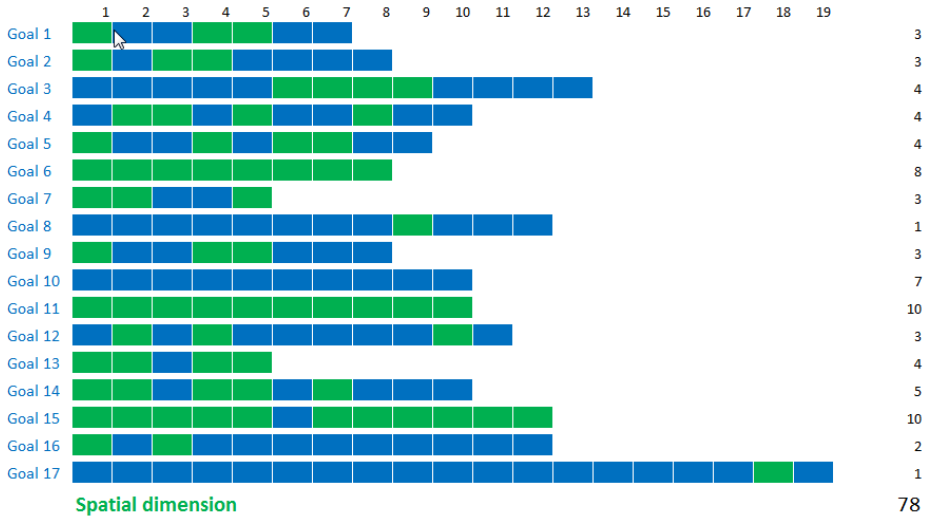
Approach: user requirements

- Sustainable Development Goals

Approach: user requirements

- Sustainable Development Goals
  - Identify the targets consuming geographic information

Eurostat selection very close to WG A one



  - Identify the actions enabling to reach these targets
  - Identify the required data
  - Make summary by « use case maps » for each theme

EL

source

To make OI

To delimit DrainageBasins (HY)

analysis

Forecast propagation of physical phenomena (risk, water, sun, pollution, winds ….)

Understand influence on ecosystems and climate change

Influence city spreading

operational

decision

Find relevant place for project (slope, sun, visibility,…)

Find relevant activity on given area (species…)

communication

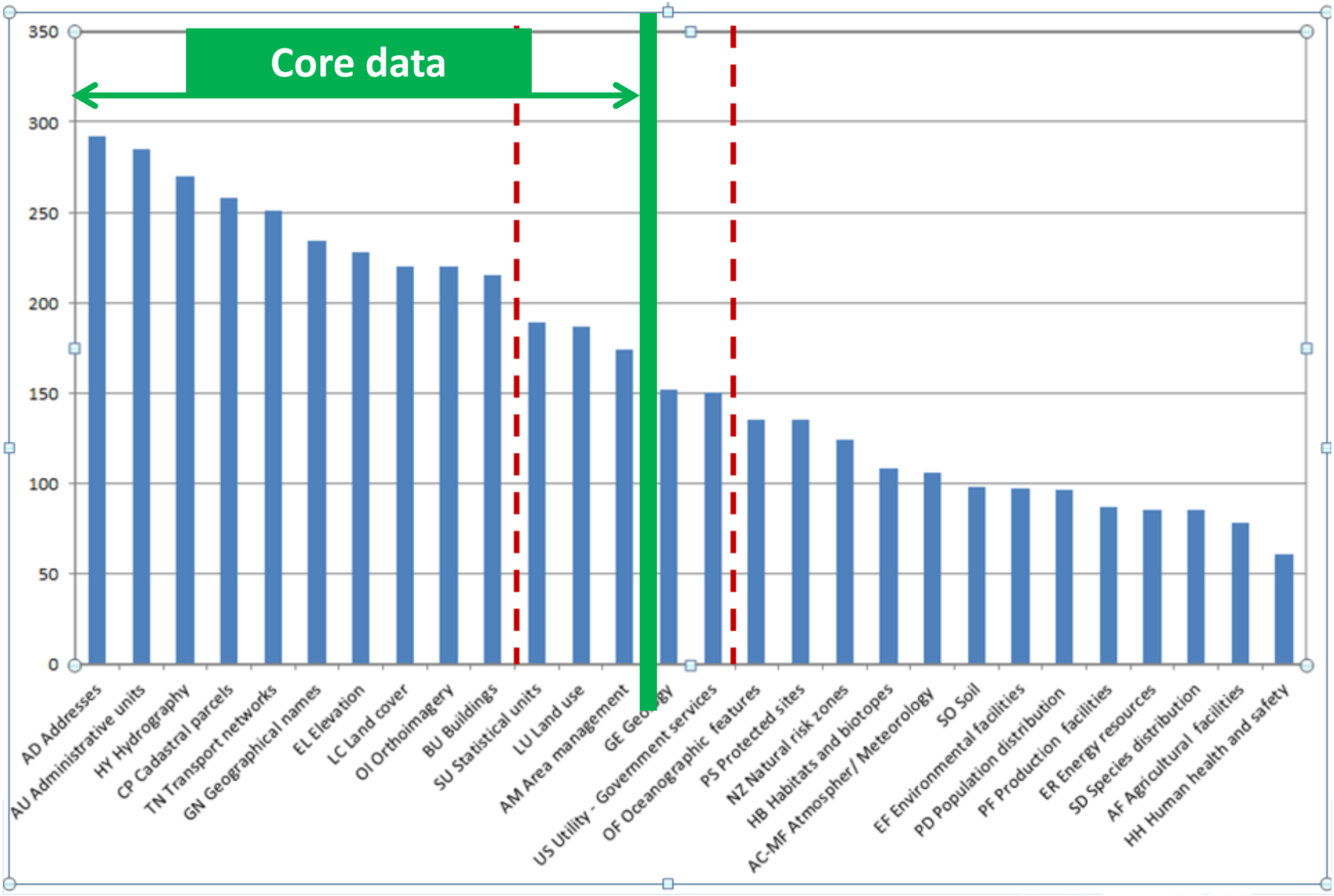
Background 2D map

3D models (risk, projects…)

monitoring

Protection of landscapes (visibility)

Themes Selection



Final list of selected core data themes

Annex I

Coordinate Reference Systems

Geographical Grid Systems

Geographical Names

Administrative Units

Addresses

Cadastral Parcels

Transport Networks

Hydrography

Protected Sites

Annex II

Elevation

Land Cover

OrthoImagery

Geology

Annex III

Statistical units

Buildings

Soil

Land use

Human health and safety

Utility and governmental services

Environmental monitoring facilities

Production and industrial facilities

Agricultural and aquaculture facilities

Population distribution - demography

Area management/restriction/regulation

Natural risk zones

Atmospheric conditions

Meteorological geographical features

Oceanographic geographical features

Sea regions

Bio-geographical regions

Habitats and biotopes

Species distribution

Energy resources

Mineral resources

How INSPIRE has helped

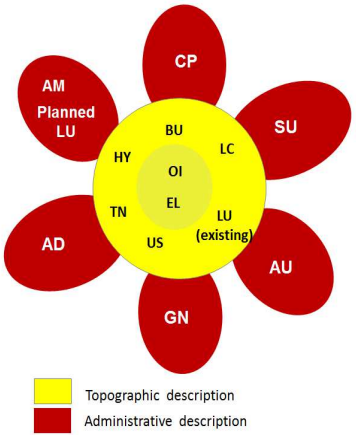
	INSPIRE	UN-GGIM: Europe WG core data
Terminology	INSPIRE themes well defined in the Directive and in data specifications	Wonderful common understanding within WG and for communication
Use cases (scope)	Environmental policies and policies having impact on Environment	Sustainable Development Goals: - Environment - Economy - Society
Use cases (documentation)	Described in data specification (annex B) but with heterogeneous quality	Have been used as main source by WG in the user requirement survey

To be completed by other sources (expert interviews, ...)

Other learnings

- Data are required at various levels of detail:
  - Global/Regional: analyse, monitoring, rapportage
  - Local: policy implementation

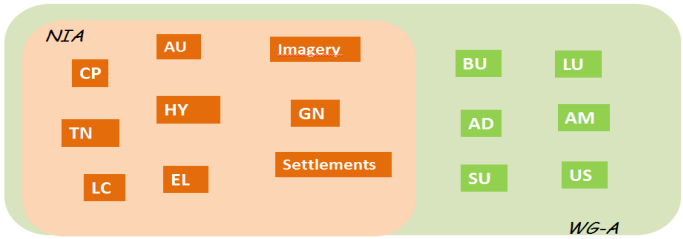
- Need for topographic and « administrative » dat
  - Topographic: direct use
  - Administrative: link with other data

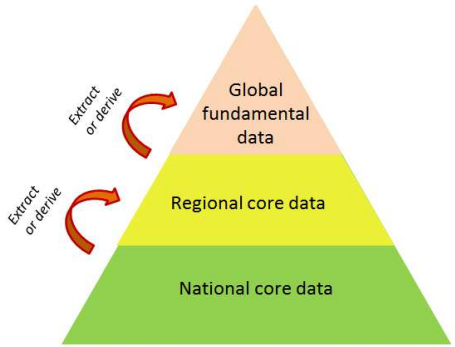


- Core data pyramid

global

Europe





Core data specifications

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Calendar

- On-going work

- 3 themes to be specified before end 2016
  - Cadastral Parcels
  - Geographical Names
  - Addresses or Administrative Units

- All themes to be specified before end 2017

Principles

- Use INSPIRE specification as starting point
- Define priorities, extract core data:
  - From data model
  - From theme scope (e.g. if generic model as for SU or AM)
- Decide on levels of detail, quality criteria

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Discussion examples

- General case : simplify INSPIRE and make it more explicit (ex: theme Transport):
  - Only Road, Railway networks + airports
  - Need for large scale data
- Enrich INSPIRE
  - Addresses : have true addresses (with street name + house number) everywhere?

- To know more:
  - Selection of core data themes

http://un-ggim-europe.org/content/wg-a-core-data

- Specification of core data themes
  - Next year INSPIRE conference (may be) !

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