UN-GGIM: Europe ExCom 22 June 2015

Work Group A « Core Data » Report

François Chirié, France

UN-GGIM: EUROPE

UNITED NATIONS INITIATIVE ON GLOBAL GEOSPATIAL INFORMATION MANAGEMENT

Plan

- Work and progress
- Issues preventing from achieving agreed objectives
- Deliverables planned for the next six months

Work and Progress

- First draft proposal **scoping minimum core data**

- For each of the 3 major usage themes*
  - Investigation of **main issues** regarding **selection of core data themes**
  - Draft **list of core data** and **use levels**

*3 major usage themes:
- Technological and natural hazard prediction
- Availability of natural resources & maintenance of biodiversity
- Sustainable economy and facilities

Data group	Data theme	International and strategic level	National and management level	Local and action level
Topography	Elevation		x	x
	Orthophotos			x
	Hydrology - surface waters		x	x
Location	Geographical names	x	x	x
	Administrative units	x	x	x
	Addresses			x
	Cadastral parcels			x
Transport networks	Transport network		x	x
Land resources	Land cover	x	x	x
	Land use and land restrictions			x
Constructions and networks	Utilities, pipelines and water network			x
	Constructions for risk reduction			x
	Non-physical networks			x
Population and settlements	Buildings and settlement areas			x
	Demography	x	x	x
	Socio-economic indicators	x	x	x
Public services, production and human activities	Public services		x	x
	Production facilities		x	x
Environment	Environmental valuable areas/sites	x	x	x
	Precipitation		x	x
	Winds		x	x
	Storms		x	x

Draft list of core data for "technological and natural hazard prediction"

Data group	INSPIRE Data theme	International and strategic level	National and management level	Local and action level
Topography	Elevation		x	x
	Orthoimagery			x
	Hydrography		x	x
	Sea regions	x	x	x
Location	Geographical names	x	x	x
	Administrative units	x	x	x
Transport networks	Transport network		x	x
Land resources	Land cover	x	x	x
	Land use and restricted areas		x	x
	Protected sites		x	x
Constructions and networks	Utilities, pipelines and water network			x
Population and settlements	Buildings			x
	Demography		x	x
Public services, production and human activities	Public services			x
	Production facilities			x
Environment	Environmental valuable areas or sites	x	x	x
	Bio-geographical regions		x	x
	Habitats and biotopes		x	x
	Meteorological & geographical features		x	x
	Species distribution			
	Atmospheric conditions		x	x

Draft list of core data for "availability of natural resources and maintenance of biodiversity"

Data Group	Theme	Local Level	Medium	Strategic
LOCATION (mapping & physical geography)	Imagery	X		
	Elevation & Depth	X		
	Land Cover	X (for example, buildings etc)		
	Physical Networks	X (eg transport networks & services, utilities etc)		
	Non-physical networks	X (for example, internet & network coverage etc)		
	Addressing, Names and Places	X (eg addressing, production facilities, greensapce etc)		
	Non-physical Boundaries	X (for example, cadastre/land parcels)	X (for example, administrative units, species distribution & regional habitats)	X (for example ecological Boundaries (SSSI's, AONB's))
	Geology, Environment & Resources	X (for example, mineral resources, energy facilities and resources, access to water etc)		
PEOPLE (statistics & human geography)	Human Settlement	X (for example, buildings energy efficiency ratings & water usage etc)		
	Demographic	X (for example, population density, litercay rates, ethnicity etc)		
	Socioeconomic	X (for example, employment & living costs data, education & employment etc)	X (for example, land use etc)	X (for example, GDP)
TEMPORAL	Meteorological/Weather	X (for example, droughts, winds, storms, extreme weather etc)	X	
	Tidal	X (e.g. storm surges etc)	X	

Work and Progress (cont.)

- **Description of core data** selected for sustainable development usages
  - overall descriptions of selected core data
  - their characteristics
  - their relevance to major usages 1, 2 and 3

Data group	Data theme	Description
Topography	Elevation and coastline	Required by major usages 1, 2 and 3. Continuous description of the altimetry. Elevation is key to assess several hazards (floods, avalanches, pollutant propagation) and is important information for land use. Coastline as a topographical description of the mean sea level is the ground for marine submersion analysis. The Integrated Coastal Zone Management (ICZM) policy is an EU integrated strategy for coastal zone management. Key areas of action for ICZM are environmental impact assessment, coastal land planning, habitat management and pollution control. Elevation is required to produce orthoimagery, upon which analysis on the land cover might be useful to assess evolutions of biodiversity on mountain areas.
	Orthoimagery	Required by major usages 1 and 2. Orthoimages are used to plot main topographical assets and are used as a main background layer in any map system. They also provide a good description of the environment (as a background) for hazard and risk management and for displaying natural resources.
	Hydrology, surface waters and sea regions	Required by major usages 1 and 2. Locations of surface waters and river networks are key to understand water flows and assets, to predict different kind of floods and to describe water quality and water pollution. Theme should include data on water tables to predict water table overflows.

Issue 1 of this core data list: Too much defined as 'core'?

Comparison Core data list / INSPIRE themes list:

→ Lot of overlap

List of SDG core data should be smaller to be acknowledged as fundamental core data?

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

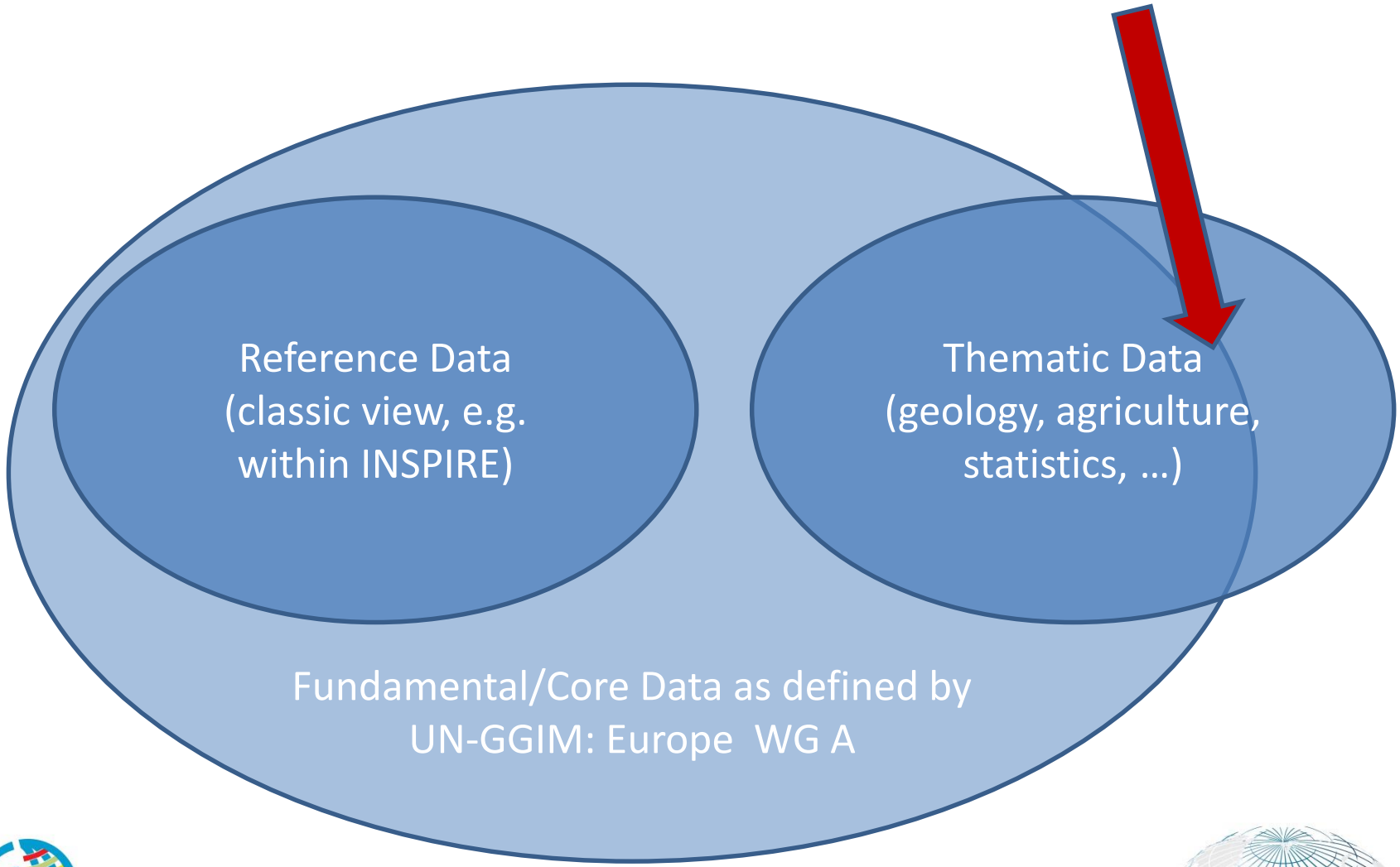
Habitats and biotopes

Species distribution

Energy resources

Mineral resources

“Boundary” to be defined between relevant thematic data and non-relevant thematic data



Issue 2 of this core data list: Includes non-NMCA data

- Some authorities
  - difficult to coordinate
  - different organisation depending on countries

- European Directives
  - Oblige EU member states to collect and report these thematic data

- NMCAs role
  - May be pivot role to ensure the consistency of these thematic data

Proposed actions

- WGA Plenary Meeting
  - Consolidate the core data list
  - **Argue on user requirements** to decide what core data theme to retain or to remove

- Circulate the core data list to other departments and organisations
  - Actions for WGA members and national UN-GGIM representatives within their respective countries

Deliverables

- Planned for the next six months:
  - Consolidated core data scope and core data list
- Delayed to 2016:
  - Specifications of core data

Thank you for your attention

UN-GGIM: EUROPE

UNITED NATIONS INITIATIVE ON

GLOBAL GEOSPATIAL

INFORMATION MANAGEMENT