JOINT UN-GGIM: EUROPE – ESS MEETING ON THE INTEGRATION OF STATISTICAL AND GEOSPATIAL INFORMATION LUXEMBOURG 11 MARCH 2016

Work Group A « Core Data » Report and Update

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Plan

- Work and progress
 - January 2016 WGA workshop to select core data themes
- Next Actions







13 – 14 January 2016 WGA workshop to select core data themes



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January 2016 WGA workshop to select core data themes Methodology - Bottom-up approach

- Identify the SDG targets that "consume" GI
- For each selected SDG target
 - Identify use cases to analyse, achieve and monitor SDG target
 - Identify the required geographic data
- For each INSPIRE data theme
 - Make a summary of use cases
 - →Use case "maps"

GGIM: FUROPF

INFORMATION MANAGEMEN



| To make OI | OI Source 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,) | communication Background 2D map | monitoring | | | |
| Find relevant activity on given area (species) | 3D models (risk, projects) | Protection of landscapes (visibility) | | | |

January 2016 WGA workshop to select core data themes Methodology - Top-down method (UK)

- Several projects around the world
 - Tried to define core/base/reference/fundamental/data
 - Substantial agreement about the most important themes
- Use the findings of these earlier studies

 To help validate the conclusions of the bottomup process



Candidate core data themes

Core data requirements: candidate data themes

| Category | Theme | 1994 US NSDI | 1997 EC GI-BASE | 2007 INSPIRE | 2007 UNECA | 2008 UK Location | 2013 ELF | 2014 ANZLIC | 2015 UN-GGIM NIA | 2015 ESS T/F Cat 1 | Count |
|----------------|--|------------------------|---------------------------|-----------------|---------------|---------------------|-------------|-----------------------|----------------------------|-----------------------|-------|
| Administrative | Cadastral parcels / site boundaries | Yes | Yes | Yes | Tenure | Yes | Yes | Yes | Yes | Yes | 9 |
| Infrastructure | Transport networks (road, rail, water) |) Yes | Yes | Yes | Yes | Streets | Yes | Yes | Yes | Yes | 9 |
| Physical | Hydrography | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 9 |
| Physical | Height/elevation/depth | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 9 |
| Administrative | Administrative boundaries | Yes | Yes | Yes | Yes | Yes | | Yes | Yes | Yes | 8 |
| Physical | Imagery | Yes | | Yes | Yes | | Yes | Yes | Yes | Yes | 7 |
| Administrative | Geographic names | | | Yes | Yes | | Yes | Yes | Yes | | 5 |
| Control | Geodetic framework | Yes | | Yes | Yes | Yes | | Yes | | | 5 |
| Physical | Land cover | | Yes | Yes | (Yes) | | | Yes | Yes | | 5 |
| Administrative | Addresses | | | Yes | | Yes | | Yes | | Yes | 4 |
| Infrastructure | Buildings | | Yes | Yes | | | Yes | | | | 3 |
| Infrastructure | Utility networks | | Yes | Yes | Yes | | | | | | 3 |
| Physical | Topography | | Yes | | | Yes | Yes | | | | 3 |
| Physical | Hydrology | | Yes | | Yes | Yes | | | | | 3 |
| Administrative | Statistical units | | | Yes | | Yes | | | | Yes | 3 |
| Administrative | Sea regions | | | Yes | | | Yes | | | | 2 |
| Administrative | Protected sites | | | Yes | (Yes) | | | | | | 2 |
| Administrative | Regulated areas | | | Yes | (Yes) | | | | | | 2 |
| Physical | Land use | | Yes | Yes | | | | | | | 2 |
| Physical | Geology and soils | | Yes | Yes | | | | | | | 2 |
| Statistical | Demographics | | Yes | Yes | | | | | | | 2 |
| Administrative | Postal boundaries | | Yes | | | | | | | | 1 |
| Administrative | Health & Safety | | | Yes | | | | | | | 1 |
| Infrastructure | Environmental monitoring facilities | | | Yes | | | | | | | 1 |
| Infrastructure | Production and industrial facilities | | | Yes | | | | | | | 1 |
| Infrastructure | Agricultural facilities | | | Yes | | | | | | | 1 |
| Physical | Natural risk zones | | | Yes | | | | | | | 1 |
| Statistical | Geographical grids | | | Yes | | | | | | | 1 |
| | Points of interest | | Yes | | | | | | | | 1 |
| | Atmospheric conditions | | | Yes | | | | | | | 1 |
| | Meteorology | | | Yes | | | | | | | 1 |
| | Oceanography | | | Yes | | | | | | | 1 |
| | Ecological regions | | | Yes | | | | | | | 1 |
| | Habitats | | | Yes | | | | | | | 1 |
| | Species distribution | | | Yes | | | | | | | 1 |
| | Energy resources | | | Yes | | | | | | | 1 |
| | Mineral resources | | | Yes | | | | | | | 1 |
| Infrastructure | Settlements | | | | | | | | Yes | | |
| | | | | | | | | | | | |



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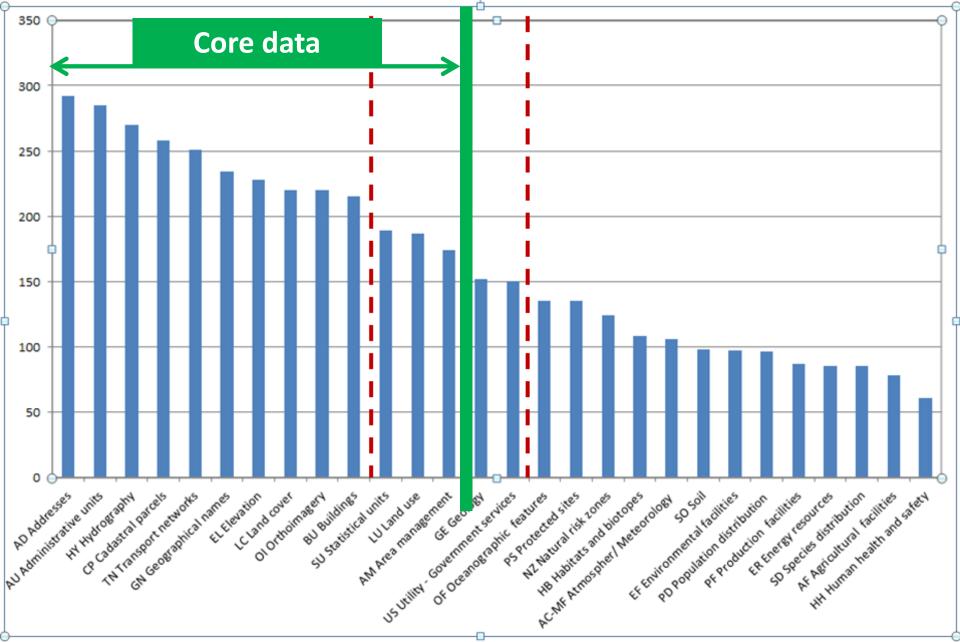
GLOBAL GEOSPATIAL

January 2016 WGA workshop to select core data themes Methodology – Selection Process

- Discussion about each INSPIRE theme
 Based on its summary of use cases
- Each country or observer (incl. WGB) ranked the themes
 - Criterion: geospatial data the most required by SDG use cases, either directly or indirectly (as framework)
- Final rank: average



January 2016 WGA workshop to select core data themes Final Themes Histogram



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**

| | <u>Annex III</u> |
|-----------------|---|
| | Statistical units |
| cted | Buildings |
| es | Soil |
| -3 | 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 |
| <u>Annex II</u> | Oceanographic geographical features |
| Elevation | Sea regions |
| Lievation | Bio-geographical regions |
| Land Cover | Habitats and biotopes |
| Ortholmagery | Species distribution |
| - · · | Energy resources |
| Geology | Mineral resources |

European dimension of selected core data

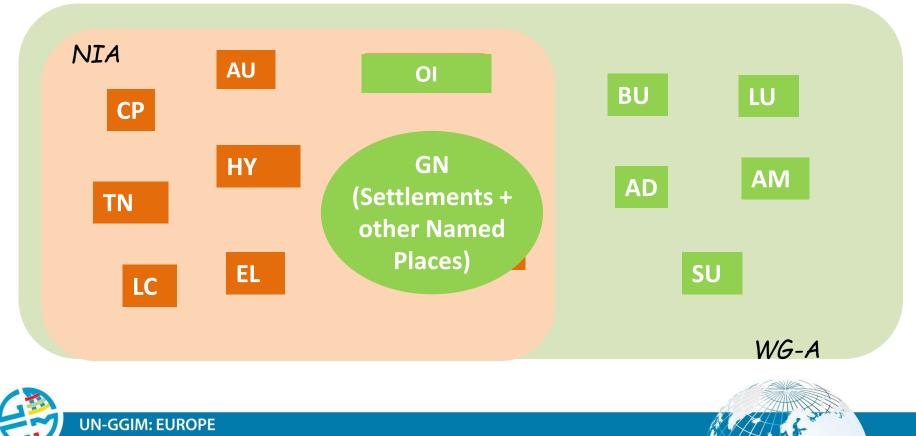
- User requirements
 - SDG: global
 - INSPIRE use cases among main source
 - Reporting for European Directives in some use cases
- INSPIRE nomenclature used
 - List of INSPIRE themes as work basis for selecting themes
 - Work basis for future specifications work





Global dimension of selected core data

Comparison with the list of core themes selected by the NIA (National Institutional Arrangements) WG



Next Actions



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Identifying **users** and their needs and **requirements for core data**

- Well advanced
- Achievement expected End of March with delivery of `core data scope' report







Providing a **description** and **technical specifications for core data**

- Carry out first investigation of selected themes by studying INSPIRE specifications, user requirements, etc.
- Propose draft work plan per theme to be presented during next WGA meeting
- Main work will be to make appropriate decisions about core data content
 - Feature types, attributes
 - Level of detail, quality requirements



INFORMATION MANAGEMENT

SDG Indicators and Core Data

- Considered in the use case maps of INSPIRE themes
 - Draft version (without "metadata")
 - Only the indicators that obviously consume GI
 - Examples :
 - "share of the rural population who lives within 2 km of an all seasons road"
 - "coverage of protected areas"
- WGA interested to contribute to UN-GGIM work on indicators
 - To provide our expertise to the group
 - To take into account the requirements related to SDG indicators in core data specifications



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| TN monitoring | |
|-----------------------------------|--|
| Accessibility indicators (SDG) | |

Thank you for your attention



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