

Session 1: UN SDGs & UN-GGIM @ EFGS 2016

UN-GGIM:Europe WG B on Data Integration
Support of better integration of geospatial information
and statistics and the UN SDG monitoring

Pier-Giorgio Zaccheddu, "International affairs" @ BKG



UN-GGIM
EUROPE

UNITED NATIONS
COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT



SUSTAINABLE
DEVELOPMENT

GOALS



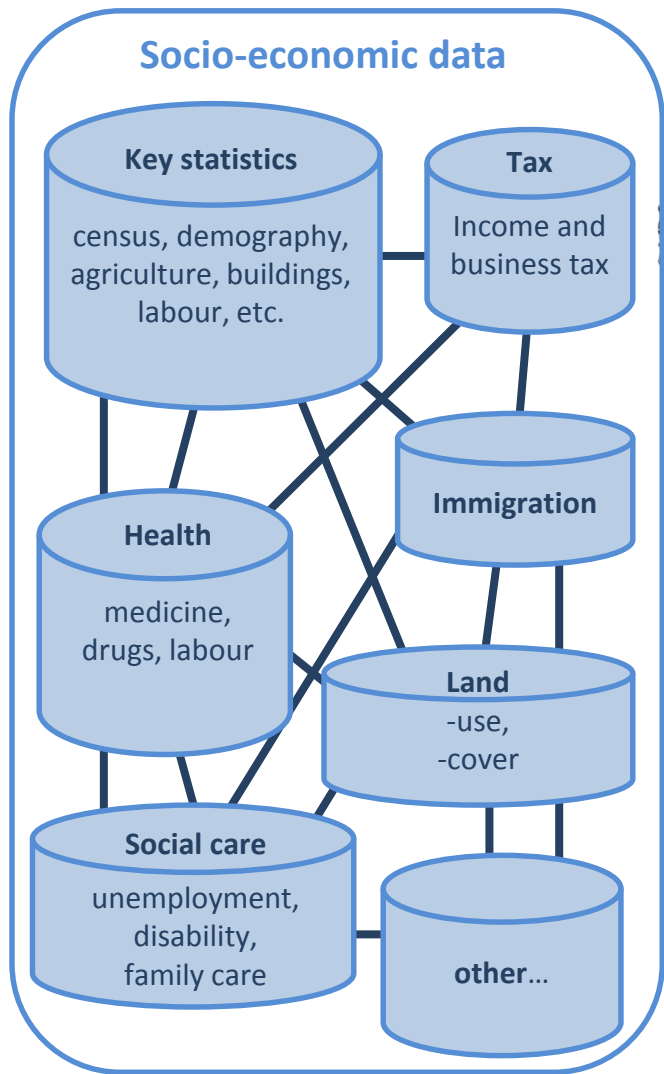
Content

- Connecting geospatial and statistical communities
– „Building bridges“
- UN-GGIM: Europe – WG Data Integration to support the global UN SDG monitoring using INSPIRE



Connecting geospatial and statistical communities

Statistical Community



Bridge
Between
Statistics
and
Geospatial

Source: Petri,
Eurostat

Geo Community

Spatial Data Infrastructure

– Quality, License, time stamps, ...

INSPIRE Annex I & II spatial data sets & services

Administrative Units

Addresses, geogr. Names

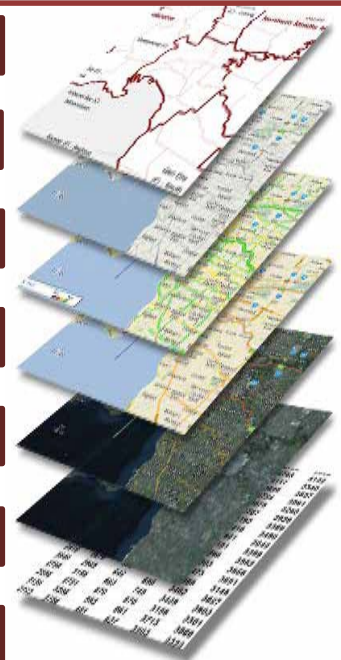
Transport, Hydrography

Land and Properties

Elevation

Orthophoto/Remote Sensing

Positioning



Connecting geospatial and statistical communities --- 2021 Round of Censuses ---

- “... undertaking a census can provide a *catalyst for the statistical and mapping agencies* to work together to the benefit of both agencies and the community. Even more importantly and at both the global and regional levels there is a continuing initiative to ensure a *complete integration of statistical and geospatial information* as a critical piece of national systems for providing comprehensive overview of many social, economic and environmental phenomena.”

**Principles and Recommendations for Population and Housing
Censuses: the 2020 Round** Rev 3, March 2015
Statistical Commission

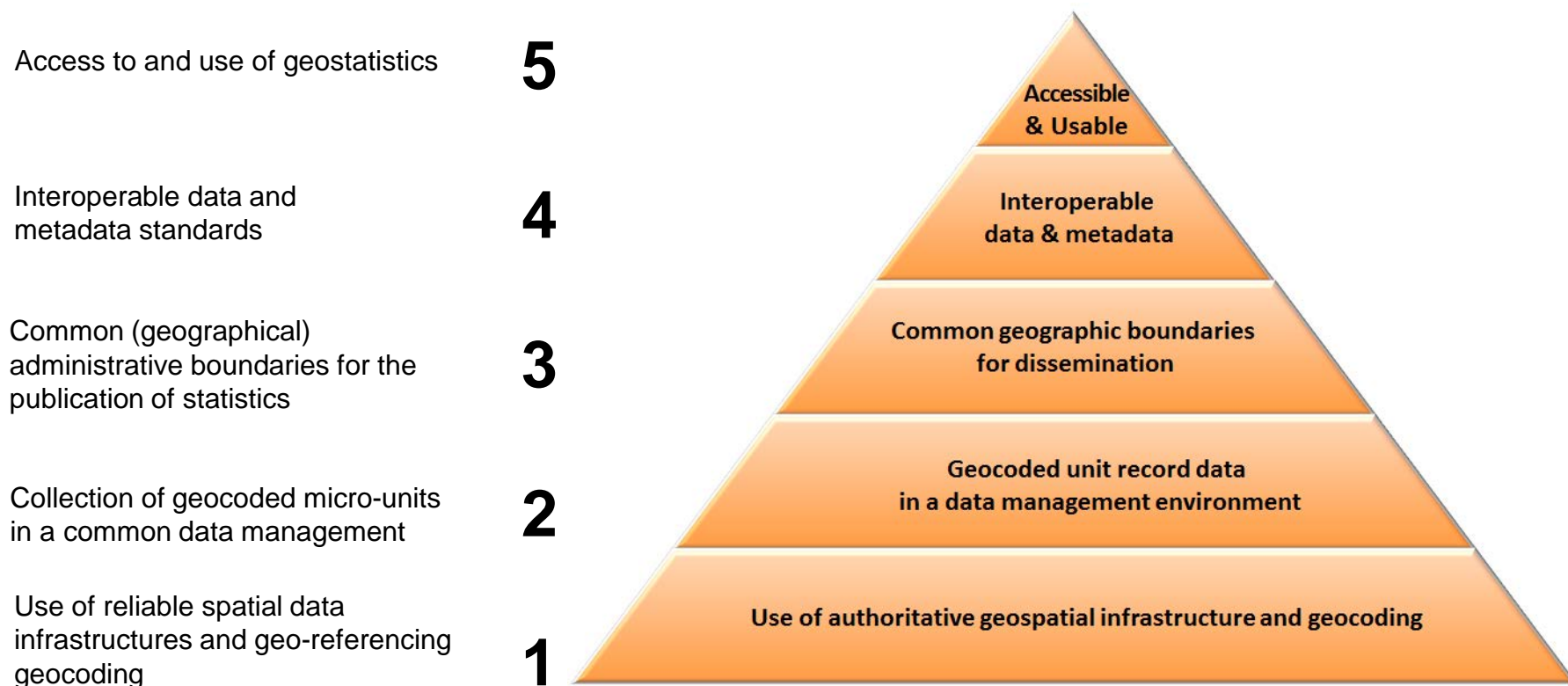
The 2021 round of censuses is an opportunity to address this issue:

- by collecting statistical and geospatial data at the same time
- collecting and geocoding at detailed capture levels of geography and aggregating to higher levels, geocoding and grid statistics
- global statistical and geospatial framework

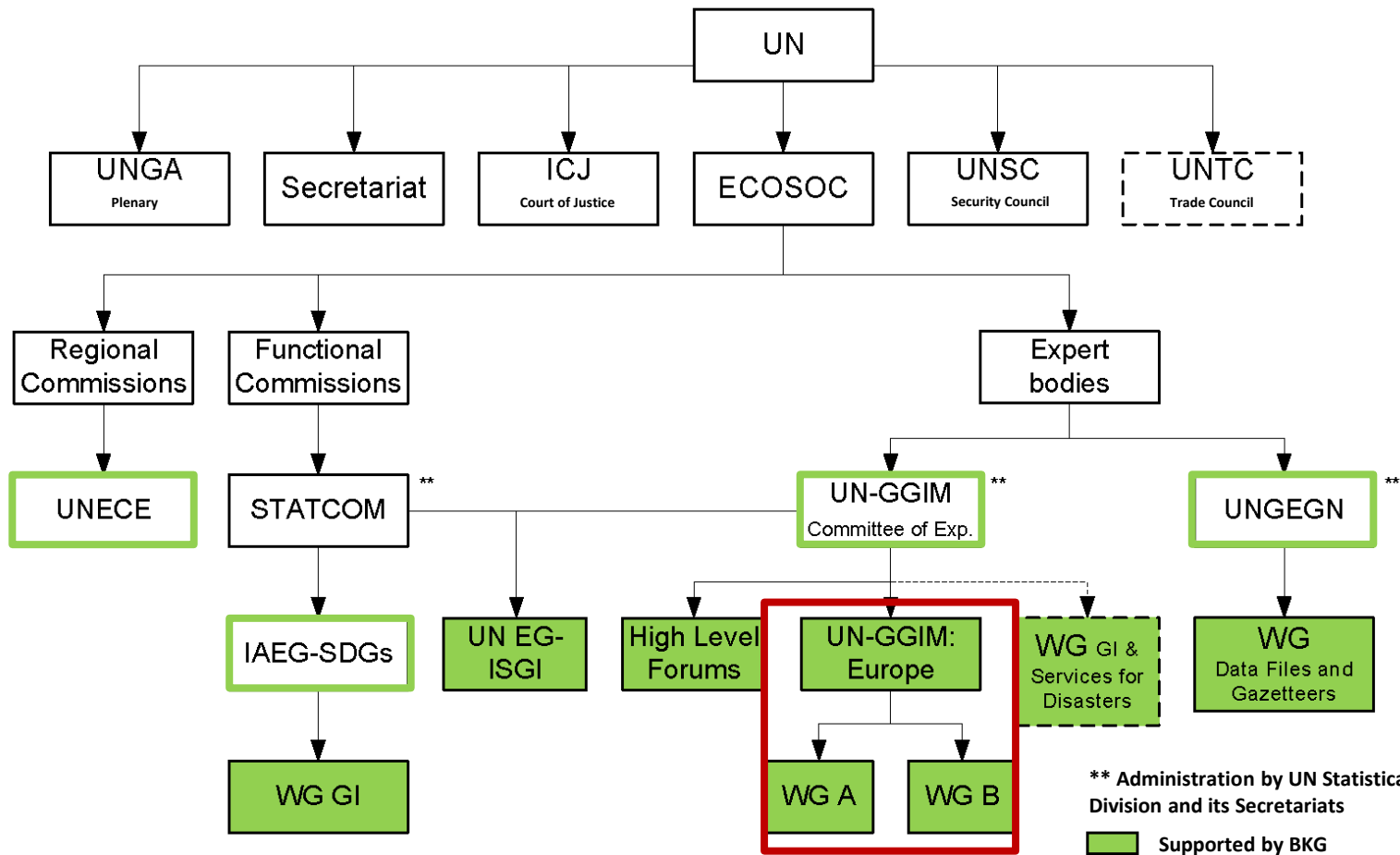


Connecting geospatial and statistical communities --- Statistical Geospatial Framework (SGF)

UN Expert Group on the integration of statistics and geospatial info. (UN EG-ISGI)



Connecting geospatial and statistical communities --- many players/initiatives are on!



UN-GGIM: Europe – Work Plan 2015-2018

The substantial part of the proposed Work Plan for 2015 – 2018 is the continuation of the Plan adopted in 2015:

Work Group A: Core Data

1. Specifications of core data (*End of 2016*)
2. Economic model for production & distribution of core data (*End 2017*)
3. Existing political & financial frameworks supporting core data availability (*Mid-2018*)

Work Group B: Data Integration

1. Definition of the priority user needs for data combinations (*accomplished*)
2. Recommendation for implementing prioritized combinations of data (*Mid-2016*)
→ To be completed in November/December 2016
3. Recommendation how to manage side-effects induced by data combinations (*accomplished*)

→ **Follow-up work plan 2017 – 2020:** “As a European contribution to the global process on developing a framework for monitoring UN SDG indicators, UN-GGIM: Europe will through the WG on “Data Integration”, ensure a two-way interaction with the IAEG-SDG Working Group on Geospatial Information.”



Report B1: “priority user needs ” accomplished mid-2015



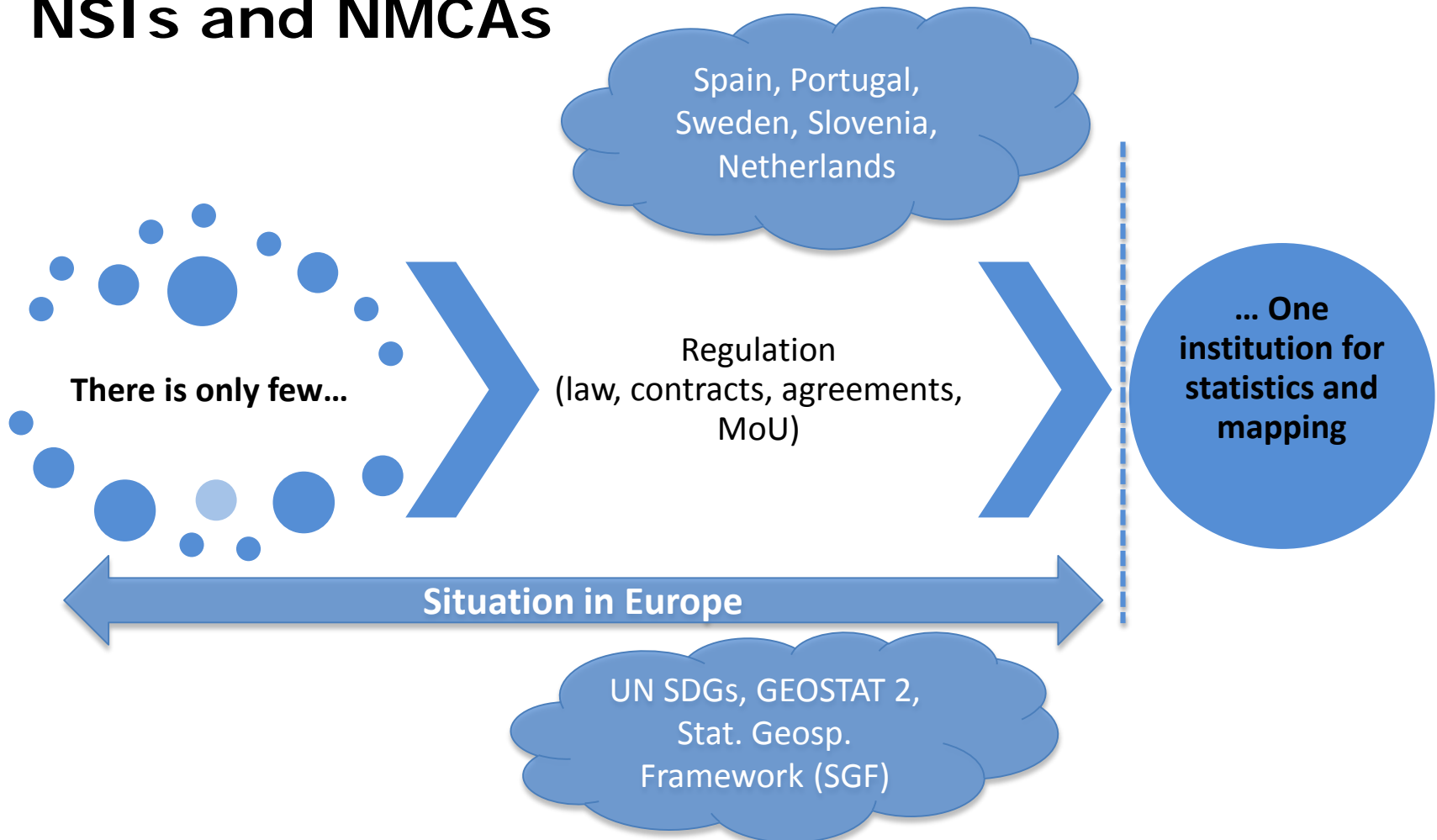
- Definition of the priority user needs for combinations of data (Mid-2015).

Title: “Definition of priority user needs for combinations of data”

- Collect policy relevant use cases, focus on evidence based decision making
- Elaborate use cases → derive user needs → recommendations
- 40+ Use cases were collected
- 5 Recommendations
- Report uploaded on the UN-GGIM: Europe website



Report B2: “methods” – Interaction between NSIs and NMCAAs



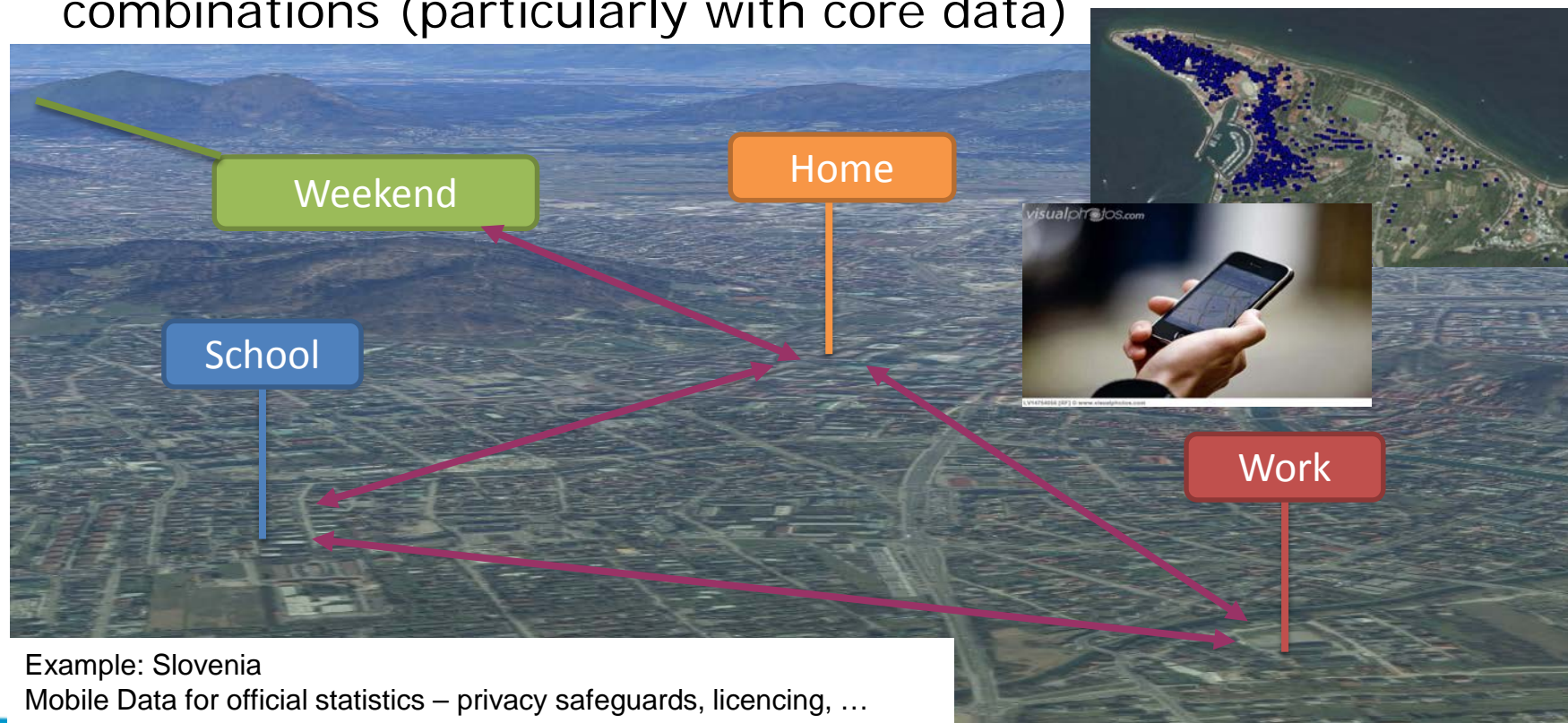
→ Recommendations for improving the interaction



Report B2: “methods” – Multiple sources

Review of the current use of data from multiple sources

- identify case studies and best practices relevant for data combinations (particularly with core data)



Report B3: “side-effects” – obstacles accomplished in October 2016



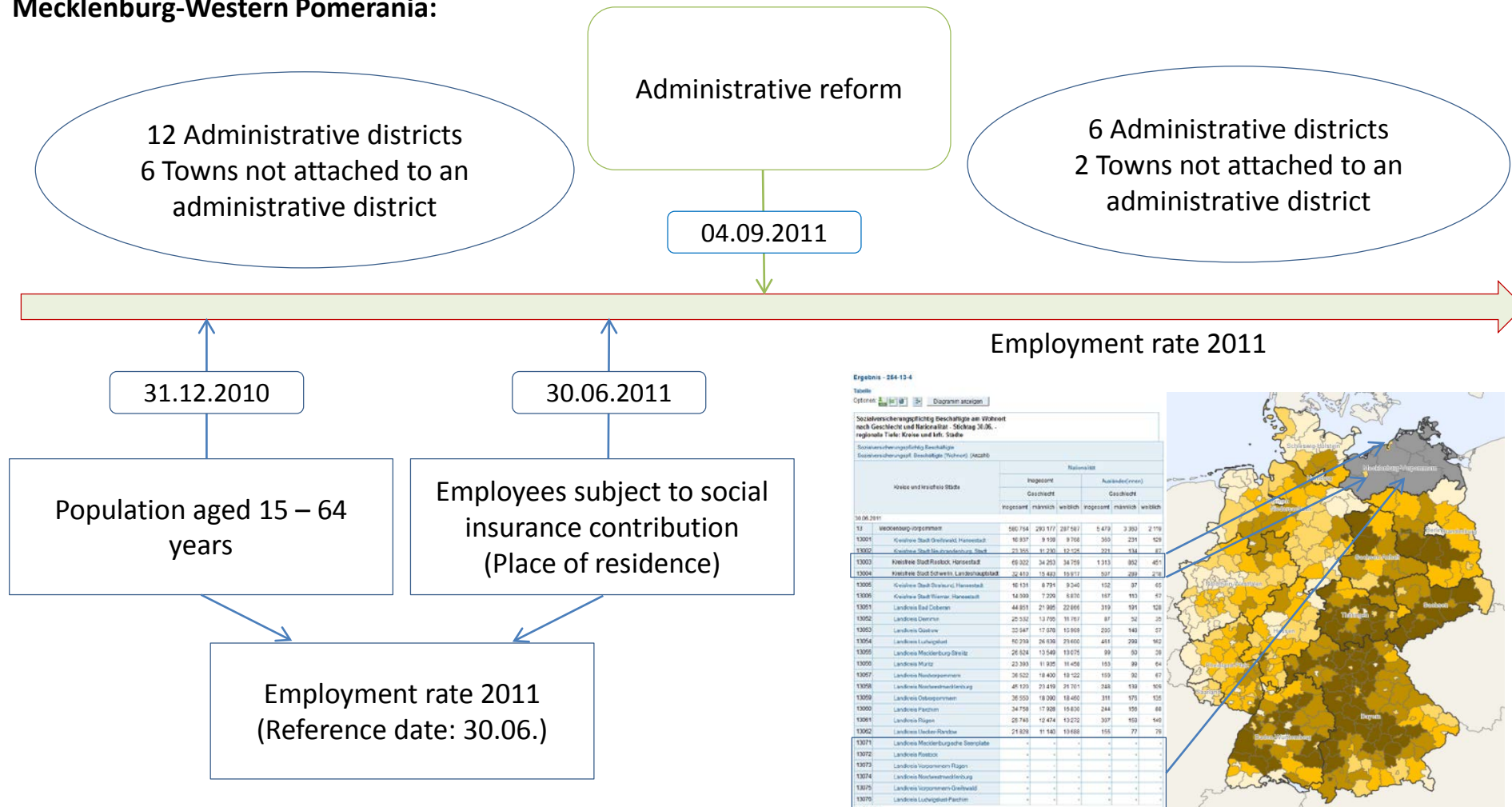
- What is a “side effect”?
 - “[...] is something that occurs unintendedly after the data combination and needs further effort to be removed, exploited or steered... maximize the positive effects and minimize the negative [...]”
 - Side effect classification
 - using the aspects of (interoperability) frameworks
 - Collection of side effect examples (description)
 - side effects in existing B1 examples and other Member States examples
 - How do side effects influence interoperability and usability?
- Comprises contributions from SE, DE, FI, PL, RS, ES




Report B3: “side-effects” – examples

a) Matching statistics with administrative boundaries

Mecklenburg-Western Pomerania:



Further information about UN-GGIM: Europe WG „Data Integration“ – Website



UN-GGIM: EUROPE | United Nations Initiative on
Global Geospatial Information Management

- ABOUT UN-GGIM: EUROPE
- ARTICLES AND RULES
- EXECUTIVE COMMITTEE
- EUROPEAN UN MEMBER STATES
- NMCAs AND NSIs IN EUROPEAN UN MEMBER STATES
- OBSERVER ORGANISATIONS
- WG A Core Data
- WG B Data Integration**
- OUR SOCIAL NETWORKS

Chair: Hansjörg Kutterer, Germany

Point of Contact: Pier-Giorgio.Zaccheddu – Pier-Giorgio.Zaccheddu (at) bkg.bund.de

UN-GGIM-Europe Report from SWG B1 on Priority User Needs ver 1.1

UN-GGIM-Europe Annex II_Report from SWG B1 on Priority User Needs ver 1.1

UN-GGIM: Europe Report from SWG3 – “Report of the Work Group Data Integration about how to manage side-effects induced by data combinations” Ver1.0

<http://un-ggim-europe.org/content/wg-b-data-integration>



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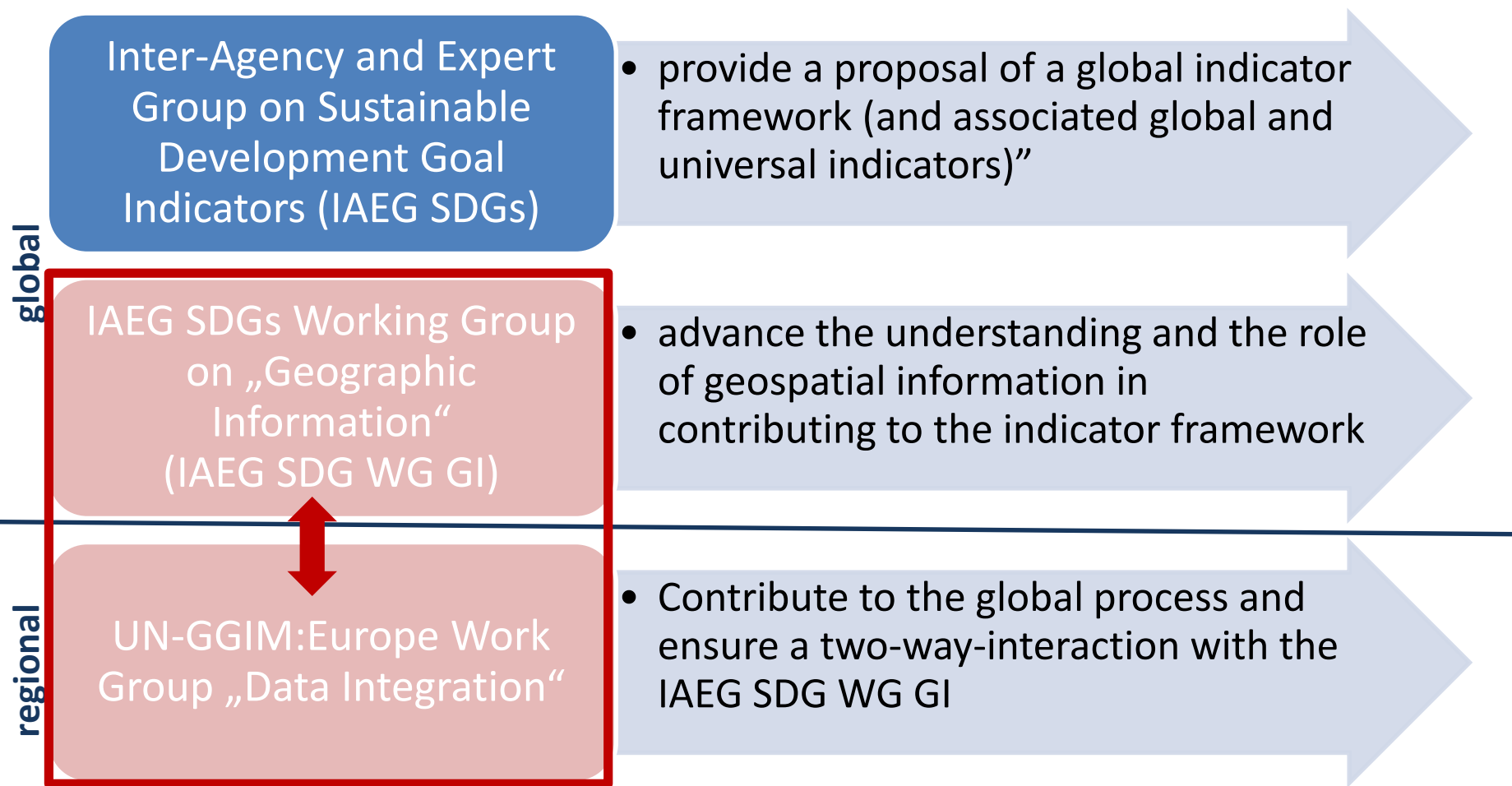
Work Group B: Data Integration

1. Definition of the priority user needs for data combinations (*accomplished*)
2. Recommendation for implementing prioritized combinations of data (*Mid-2016*)
→ To be completed in November/December 2016
3. Recommendation how to manage side-effects induced by data combinations (*accomplished*)

→ **Follow-up work plan 2017 – 2020:** “As a European contribution to the global process on developing a framework for monitoring UN SDG indicators, UN-GGIM: Europe will through the WG on “Data Integration”, ensure a two-way interaction with the IAEG-SDG Working Group on Geospatial Information.”



UN structure for the SDG monitoring



Support of „Task Team UN-GGIM“ for IAEG SDG (led by DK) 2016

2030 Agenda - Sustainable Development Goals	Geospatial context	Target	Indicator	Addresses	Administrative units	Built-up area polygons	Cadastral parcels	Geographical names	Habitats and biotopes	Transport networks	Additional geometry
Goal:												
Target:												
Indicator:												
Definition of the indicator: (State the definition of the indicator, including the disaggregation, disability, geographic location and other characteristics of the implementation of the SDGs).												
Indicator disaggregation: (List the indicator disaggregation, geographic location and other characteristics of the implementation of the SDGs).												
Current suggested use of geospatial data for the indicator: (Describe the use of geospatial data for the indicator, including the disaggregation, disability, geographic location and other characteristics of the implementation of the SDGs).												
Suggested geospatial data integration												
GAP analysis: (Describe what changes in use of geospatial data are suggested/current procedure for monitoring the indicator requirements - going from the "as-is" situation in the "to-be" situation).												
List required geospatial data: (Develop a list from the "to-be" situation of themes which are required to support the to-be situation).												
Data quality requirements: (List in general terms the relevant parameters: Resolution, completeness, location accuracy, etc. certain international standards should be followed, resolution and disaggregation).												
Data availability: (List the data availability: 1) geospatial data, 2) Source: Accessible through services, 3) or are there restriction on use).												
Data collection: (Describe how the geospatial data are collected, overcome - are there many sources to collect from).												
Data interpretation: (Describe which analysis, procedures and comparisons are needed to provide the results needed to support the reporting requirements ("to-be" situation)).												
Method of integration: (Describe how the geospatial data are envisaged to be integrated in the monitoring cycles).												

X

Using INSPIRE framework and structures...

X

X

X

X

"Open space" polygons



Tasks assigned to IAEG SDG WG GI supported by the UN-GGIM:Europe WG Data Integration 2016-2017

- Review the agreed global indicators through a 'geographic location' lens;
- Review the "metadata" compiled for the global indicators through a 'geographic location' lens;
- Consider and review the tier classifications for the agreed global indicator, their level of "maturity" and appropriateness from a 'geographic location' lens;
- Identify existing geospatial data gaps, geospatial methodological and measurement issues;
- Consider how geospatial information can contribute to the indicators and metadata;
- Propose means of addressing data gaps and issues



Tasks assigned to IAEG SDG WG GI supported by the UN-GGIM:Europe WG Data Integration **beyond 2017**

- Propose **strategies for undertaking methodological work** on specific areas for improving disaggregation by geographic location and in particular for national and sub-national reporting
 - And in this regard, to report to the High-Level Group, Statistical Commission and Committee of Experts on Global Geospatial Information Management; and
- Review options and provides guidance to IAEG-SDGs on the **role of National Statistical Offices** in considering and applying Earth observations and geospatial information primarily as a means to contribute to and validate data as part of official statistics.



Specific tasks for the UN-GGIM:Europe WG Data Integration

- Develop practical examples (best practice) on specific national implementations on how Geospatial Information can support in processes in achieving the SDGs and where the need shows to measure, monitor and mitigate challenges
- suggest links between communities: demographic, statistical and environmental data together with the Geospatial Location – ranging from the conceptual level to specific indicators.



Thank you for your kind attention!



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