A roadmap for implementing the high-level plan for Working group 1

Tomaž Petek
member of UN-GGIM Europe ExComm

5th UNGGIM Arab States Plenary, Muscat, Sultanate of Oman, 19th to the 21st February 2018.

UN-GGIM
UNITED NATIONS INITIATIVE ON
GLOBAL GEOSPATIAL INFORMATION MANAGEMENT

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5th UNGGIM Arab States Plenary, Muscat, Sultanate of Oman, 19th to the 21st February 2018.
Content of presentation:

• Introduction
• UN GGIM and geospatial data management
• UN GGIM and institutional arrangements
• A roadmap for implementing the high-level plan for Working group 1
• Topics for plenary discussion
• Conclusions
48 European UN Member States
10 observers

http://un-ggim-europe.org/content/member-states
Fundamental datasets

Overview: UN-GGIM Fundamental Data Themes

Geographical Names

Population distribution

Addresses

Land Cover and Use

Functional Areas

Geology/Soils

Buildings / Settlements

Physical infrastructure / service delivery points

Land parcels

Water

Transport Networks

Ortho-imagery

Elevation and depth

Descriptions of these data themes can be found in Annex 3.
Figure 1.2: Illustration of Framework for Interoperability

Source: Brodeur & Badard, 2008
Sustainable Development
UN Sustainable Development Agenda 2030

The 2030 Agenda: What do we hope to achieve?

Declaration
Vision and shared principles for people, planet, prosperity, peace and partnership

Results Framework
17 integrated and indivisible goals and 169 aspirational targets

2030 Agenda for Sustainable Development

Follow-up and Review
Global indicators underpin an integrated follow-up and review framework

Means of Implementation
Governments, civil society, industry, the UN system, science and technology

Positioning geospatial information to address global challenges

UN-GGIM
United Nations Secretariat
Global Geospatial Information Management

ggim.un.org
High quality, timely and reliable data

Geodetic
Elevation
Water/Ocean
Land use/cover
Transport
Cadastre
Population
Infrastructure
Settlements
Admin. Bdys.
Imagery
Geology/soils
Observations etc.

SOCIAL
Society
Poverty
Education
Health
Population
Employment
Water
Sanitation
Equity
Gender
Governance

ECONOMIC
Well-being
Cities
Water
Energy
Infrastructure
Industry
Sanitation
Economy

ENVIRONMENT
Water
Seas/oceans
Land use/cover
Ecosystems
Forests
Agriculture
Climate
Biodiversity
Natural hazards
Pollution

Positioning geospatial information to address global challenges

UN-GGIM | United Nations Secretariat
Global Geospatial Information Management

ggim.un.org
From local to regional and global level

Leveraging the ‘data ecosystem’ as a conduit to enable integrated national information systems, particularly for developing countries.

How do we evolve this local to global ‘data ecosystem’ over the next decade?
<table>
<thead>
<tr>
<th>Goal</th>
<th>1/3 geospatial (Eurostat)</th>
<th>2/3 no geospatial relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. NO POVERTY</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. ZERO HUNGER</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. GOOD HEALTH AND WELL-BEING</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. QUALITY EDUCATION</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. QUALITY WORK AND FULL ECONOMIC GROWTH</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. SUSTAINABLE CITY AND COMMUNITIES</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. RESPONSIBLE CONSUMPTION AND PRODUCTION</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. REDUCED INEQUALITIES</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9. LIFE Below WATER</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10. LIFE ON LAND</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11. LIFE ON LAND</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. LIFE ON LAND</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13. LIFE ON LAND</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14. LIFE ON LAND</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15. LIFE ON LAND</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16. LIFE ON LAND</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. PARTNERSHIP FOR THE GOALS</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
UN-GGIM Expert and Working Groups

- IAEG-SDGs Working Group on Geospatial Information
- EG: Integration of Statistical and Geospatial Information
- EG: Land Administration and Management
- WG: Global Geodetic Reference Frame (Sub-Committee)
- WG: Geospatial Information and Services for Disasters
- WG: Trends in National Institutional Arrangements
- WG: Fundamental Data Themes
UN-GGIM Working Group on Trends in National Institutional Arrangements in Geospatial Information Management

- Identification of best practices, sets of institutional models and legal frameworks for national geospatial information management and interoperability between different systems and institutions responsible for its management, while ensuring uniformity and standardization. The institutional models should provide Governments with options on how best to create national geospatial entities
  - TG1: production systems of geospatial information (GI)
  - TG2: funding systems, dissemination and data policy of GI
  - TG3: the role of citizens as users and producers of volunteered geographic information (VGI) and its impact on GI systems.
National Institutional Arrangements (NIA) for Geospatial Information Management (GIM)

• formal and informal cooperation structures
• support and link public and private institutions and or organizations
• establish the legal, organizational and productive creation, updating and dissemination, an authoritative, reliable and sustainable geospatial information base for all users.
WG1 work program

WORKING GROUP 1
»Institutional Arrangements, Legal and Policy Issues, Awareness and Capacity Building« - work program

2017 - 2019

This work plan contains key information regarding how the goals and objectives will be implemented within UN GGIM Arab States in the area of Institutional Arrangements, Legal and Policy Issues and Awareness Raising and Capacity Building.

Four long-term strategic objectives were identified for the UN GGIM Arab States WG 1 work program. In accordance with Article 17 of UN GGIM Arab States Statutes, Working Group 1 determines their operational programs and assigns them their activities. Long-term objectives of UN GGIM Arab States Working Group 1 are:

- Objective 1. Institutional Arrangements
- Objective 2. Legal and Policy Issues
- Objective 3. Awareness Raising and Capacity Building
- Objective 4. Communications

Working group 1 for Institutional Arrangements, Legal and Policy Issues, Awareness and Capacity Building will create cooperational structure for public, private and academia for work together on legal, organisational, data and services level – for sustainable geospatial data management.
Objectives of WG1

• Goal(s) and objectives
  • Objective 1. Institutional Arrangements
  • Objective 2. Legal and Policy Issues
  • Objective 3. Awareness Raising and Capacity Building
  • Objective 4. Communications
Objective 1. Institutional Arrangements

The **anticipated outcomes** for this objective are:

- Identify the NMA or other NGIM agencies from the member states
- Initiate dialogue to find out their willingness and preparedness to take up UN-GGIM responsibilities
- Facilitate institution building
- Provide expert knowledge and access to resources
- Continue engaging for UN-GGIM expansion
- Understanding of the primary UN GGIM Arab States users and stakeholders, their needs and role in the UN GGIM Arab States, and
- Evaluation and prioritization of available, relevant datasets and services for inclusion into the UN GGIM Arab States.
Objective 2. Legal and Policy Issues

Anticipated Outcomes

- Every member state should take stock of the legal and policy documents pertaining to their country
  - Privacy
  - Data quality
  - Licensing / open data
  - Intellectual property rights
  - National security
- Provide technical support for states in modifying the necessary legal and policy documents (Legal Issues and Economic Policy)
- Operational policies that provide guidance supplementing development of Information Management Policies
Objective 3. Awareness Raising and Capacity Building

Awareness raising
- Awareness campaigns among various sections of the society
  - People working with geospatial data
  - People using geospatial data
  - Prospective users / public
  - Student community
- Organize awareness campaigns

Capacity building
- Identify the target group to be provided with training
- Perform a skill gap analysis
- Determine the level of training to be provided to different set of people.
- Provide training and obtain feedback
- Continue monitoring their performance and report to impart more training.
Objective 4. Communications

The **anticipated outcome** for this objective:

- to have a communication strategy and outreach plan to promote the benefits of UN GGIM Arab States,
- to explain the operation, organization and governance,
- to communicate data standards and availability along with the goals of the Strategic Plan.
Introduction

This action plan is a detailed plan outlining actions needed to reach one or more goals defined within WG1 work program.

Producing an action plan is beneficial not only for individual stakeholders within UB GGIM Arab States, but also for entire region. For example, it allows project managers to monitor their progress and take each task step-by-step, therefore allowing them to handle the efficiently.

The advantage of doing this, it allows you to execute a structured plan for the end goal you intend to achieve.

Firstly in this action plan is outline what UN GGIM Arab States want to achieve at the area of Institutional Arrangements and Legal and Policy Issues. After this the specific roles are allocated ensuring sufficient amount of Awareness and Capacity building resources.

The next stage allows members to analyse the progress by outlining milestones, solving any issues and making any necessary changes.

There is a draft action plan prepared based on WG1 work program with activities which could be performed in year 2018.

Working Group 1 for Institutional Arrangements, Legal and Policy Issues, Awareness and Capacity Building will create cooperative structure for public, private and academia for work together on legal, organisational, data and services level – for sustainable geospatial data management.
### Action plan for WG1

<table>
<thead>
<tr>
<th>Objective 1. Institutional Arrangements</th>
<th>WHAT</th>
<th>HOW</th>
<th>WHO</th>
<th>WHEN</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of data providers</td>
<td>Fill in questionaires’ where each country fill in spreadsheet with data about datasets and data providers</td>
<td>All 22 members</td>
<td>January 2018</td>
<td>See appendix 2</td>
<td></td>
</tr>
<tr>
<td>Identification of other stakeholders of SDI</td>
<td>Fill in questionaires’ where each country describes data about SDI stakeholders. The same data are used also for prepare country report</td>
<td>All 22 members</td>
<td>January 2018</td>
<td>See appendix 2</td>
<td></td>
</tr>
<tr>
<td>Country reports</td>
<td>Fill in questionaires’ and prepare country reports from responses</td>
<td>NCP</td>
<td>March 2018</td>
<td>See appendix 2</td>
<td></td>
</tr>
<tr>
<td>Establishing data catalogue and Repository</td>
<td>Develop a SW for catalogue or use some of existing SW and fill in all collected data from questioner and country reports</td>
<td>Secretariat</td>
<td>April 2019</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Objective 2. Legal and Policy Issues

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW</th>
<th>WHO</th>
<th>WHEN</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of current data policy in the region</td>
<td>Fill in questionaires’</td>
<td>All 22 members</td>
<td>January 2018</td>
<td>See appendix 2</td>
</tr>
</tbody>
</table>

### Objective 3. Awareness Raising and Capacity Building

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW</th>
<th>WHO</th>
<th>WHEN</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training courses on regional SDI, portal/platform and application</td>
<td>Prepare a draft of training programs, based on user needs expressed in questionaries’</td>
<td>Secretariat</td>
<td>March 2018</td>
<td></td>
</tr>
<tr>
<td>Workshops, seminars co-organized with other International organizations</td>
<td>Prepared a first draft of proposed WS and seminars organised by international organisations</td>
<td>Secretariat</td>
<td>September 2018</td>
<td></td>
</tr>
<tr>
<td>Promote Network of academic stakeholders</td>
<td>Establishing network of academia stakeholders</td>
<td>With NCP coordination</td>
<td>October 2018</td>
<td></td>
</tr>
</tbody>
</table>

### Objective 4. Communications

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW</th>
<th>WHO</th>
<th>WHEN</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create external technical presentation to be used in multiple settings</td>
<td>Fill in template from UN GGIM</td>
<td>All 22 members</td>
<td>September 2018</td>
<td></td>
</tr>
<tr>
<td>Coordinate development of information and key messages</td>
<td>Update UN GGIM AS web page with communication channels</td>
<td>Secretariat</td>
<td>May 2018</td>
<td></td>
</tr>
<tr>
<td>Maintain the Calendar of Events</td>
<td>Prepare draft of calendar and ask NCP for updated</td>
<td>Secretariat</td>
<td>May 2018</td>
<td></td>
</tr>
<tr>
<td>Identify and coordinate representation in international forums</td>
<td>Collect data from questionaries’ and set up an draft list of events</td>
<td>Secretariat</td>
<td>May 2018</td>
<td>See appendix 2</td>
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</tbody>
</table>
APPENDIX 2

Template of questionnaire’s and spread sheet:

<table>
<thead>
<tr>
<th>Questionary</th>
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<tbody>
<tr>
<td>UN-GGIM MEMBER STATE - PROFILE (COUNTRY NAME):</td>
</tr>
<tr>
<td>Region: Arab States:</td>
</tr>
<tr>
<td>UN-GGIM Regional Body e.g. (UN-GGIM Arab states):</td>
</tr>
<tr>
<td>Participation Active or Not active Mapping/UN GGIM Organisation:</td>
</tr>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>Contact Name:</td>
</tr>
<tr>
<td>Position:</td>
</tr>
<tr>
<td>E-mail:</td>
</tr>
<tr>
<td>Telephone:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
</tbody>
</table>

INSTITUTIONAL ARRANGEMENTS:

NSDI stakeholders:

<table>
<thead>
<tr>
<th>Define the stakeholders and describe</th>
</tr>
</thead>
<tbody>
<tr>
<td>which are the sectors of stakeholders that, according to your evidence, are still raising to contribute to the implementation of NSDI;</td>
</tr>
<tr>
<td>the involvement of national representatives and other relevant stakeholders related to environmental activities (monitoring, reporting, assessments);</td>
</tr>
<tr>
<td>the involvement of the private sector in the implementation of the NSDI in your country (e.g. as data producers, service providers, coordinating bodies, users).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INSTITUTION</th>
<th>Address</th>
<th>Contact person</th>
<th>e-mail</th>
<th>Telephone</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

Coordination bodies:

<table>
<thead>
<tr>
<th>Please identify if there exist an national coordination body or organisation and describe:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- the role and responsibilities of the coordinating body;</td>
</tr>
<tr>
<td>- its organisational chart;</td>
</tr>
<tr>
<td>- links with national representatives related to environmental activities such as reporting, assessments etc.;</td>
</tr>
<tr>
<td>- activities undertaken to ensure cross-border coordination activities;</td>
</tr>
<tr>
<td>- relations to international organisations or bodies using, managing or producing spatial data;</td>
</tr>
<tr>
<td>- how the local administration is involved.</td>
</tr>
</tbody>
</table>

DATA AND STANDARDS

<table>
<thead>
<tr>
<th>Please identify spatial data sets and services with relation to spatial objects or location in your country.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATASET / SPATIAL DATA SERVICE</td>
</tr>
<tr>
<td>---------------------------------</td>
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<tr>
<td></td>
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</tbody>
</table>

DATA POLICY

| Please describe also the main types of the sharing arrangements between the public authorities: framework agreements, contracts, licence agreements (e.g. Creative Commons, government licence, open data licence, etc.) and provide some examples. |

LEGAL FRAMEWORK AND STRATEGICAL DOCUMENT

| Please collect the names of existing laws and strategical document regarding NSDI in your country. |

PROJECTS and USE CASES

<table>
<thead>
<tr>
<th>Please identify any relevant projects or use cases with relation of data sharing and dissemination between stakeholders in your country.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT / USE CASE</td>
</tr>
<tr>
<td>---------------------</td>
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</tr>
</tbody>
</table>
Conclusions

Spatial data infrastructure at local, national and regional level:

- **Datasets** - FRAMEWORK / THEMATIC DATA
- **Spatial data Services, portals** - TECHNOLOGIES
- **Interoperability & Harmonisation** - STANDARDS
- **Coordination of stakeholders & capacity building, legal framework** - INSTITUTIONAL ARRANGEMENTS
- **Data policy & relation with SDG** - POLICIES
- .........
Unleashing the power of ‘Where’ ....

THANK YOU!
more info at: www.un-ggim-europe.org

... to make the world a better place.