



An
Phríomh-Oifig
Staidrimh

Central
Statistics
Office



SDGs
GEOSPATIAL
ROADMAP

Stocktaking the Working Group on Geospatial Information

The IAEG-SDGs Working Group on Geospatial Information

Mr Kevin McCormack, Central Statistics Office, Ireland (co-Chair)

Ms Paloma Merodio, INEGI, Mexico (co-Chair)

Highlights:

- The SDGs Geospatial Roadmap
- The SDGs Assessment Matrix
- Work Plan for 2022

Reviewing the Work Plan 2020 - 2021

- At the Mexico City meeting of the WGGI, it agreed a Work Plan for the 2020 – 2021 period
- The WGGI has worked diligently to this work plan, and has broadly accomplished its aims in this regard
- The WGGI divided its work into **immediate** and long term activities

#	Item	Status
Immediate Activities		
1	Review the ‘shortlist’ of SDG Indicators where geospatial information, including Earth observations can contribute to the production of the indicator or its disaggregation	The Shortlist and the entire Global Indicator Framework was reviewed, producing a “Long List of Indicators” . This “Long List” identifies indicators which can be disaggregated by geographic location or where geospatial information, Earth observations can be used to directly or inform the production, measurement and monitoring of SDG indicators.
2	Develop and provide guidance to the IAEG-SDGs regarding the outcomes of this review, towards developing a “long list” of SDG indicators	
3	Strengthen communication and coordination within the international statistical and geospatial information communities and the IAEG-SDGs	The WGGI has developed the SDGs Assessment Matrix and has established a Wiki for its members and those of the IAEG-SDGs. This wiki is the platform that collates, reviews and documents types of processes and methodologies that provide real world examples and proven practices in applying geospatial information and Earth observations to produce indicators.
4	Capability Inventory	

Reviewing the Work Plan 2020 - 2021

- At the Mexico City meeting of the WGGI, it agreed a Work Plan for the 2020 – 2021 period
- The WGGI has worked diligently to this work plan, and has broadly accomplished its aims in this regard
- The WGGI divided its work into immediate and **long term** activities

Longer-Term Activities

5	WGGI SDGs Geospatial Roadmap	An advanced draft of the Roadmap (pending editorial and design refinements) is submitted to the IAEG-SDGs at this 12 th meeting. Follows extensive review from the WGGI, IAEG-SDGs and UN Committee of Experts on Global Geospatial Information Management (UN-GGIM). The SDGs Geospatial Roadmap provides simple and actionable guidance to the IAEG-SDGs, UN Member States, and UN Custodian Agencies to realise the innovation potential that using geospatial information and its associated technologies can bring to the SDGs.
6	Interlinkages among relevant groups	The WGGI has invited representatives of other groups, inclusive of other IAEG-SDG members, the Global Working Group on Big Data for Official Statistics, UN-GGIM: Europe, GEO (EO4SDGs) and others, to strengthen its work.
7	Toolkits and methodologies	Guidance and recommendations are encapsulated within the SDGs Geospatial Roadmap. The WGGI's wiki contains several examples of how geospatial information informs the production, monitoring and measurement of SDG indicators.
8	Guidance and recommendations	

Towards a new Work Plan

- At the last virtual meeting on 30 September, the WGGI was requested to provide input on a proposed work plan, based on requests from the IAEG-SDGs and emergent needs.
- The co-Chairs suggest a longer (virtual) meeting to elaborate actions on this work plan in Q1 2022; this would include helping identify members responsible – helping put the *‘how’* to the work plan’s *‘what’* with a ranked **Priority**

#	Item	Start	Finish
1	Promoting the SDGs Geospatial Roadmap Conduct promotion efforts among SDG Custodian Agencies and Member States of the SDGs Geospatial Roadmap	Q4 2021	Q4 2022
2	Support the IAEG-SDG with further guidance on Disaggregation by Geographic Location Produce a guidance note on Disaggregation by Geographic Location	Q4 2021	Q1 2022
3	Collating use cases of how countries have validated the outputs of Earth Observations and incorporated these outputs into their national SDG ecosystem Produce a guidance note, accompanied by national case studies, of how countries validate the outputs of earth observations in the production, measurement and monitoring of SDGs	Q4 2021	Q2 2022
4	Promoting the awareness and implementation of: <ul style="list-style-type: none"> • The “List of Indicators” • The SDGs Assessment Matrix Develop Storymaps and other interactive tools to present and communicate the work of the WGGI	Q1 2022	Q3 2022
5	Communication and Outreach Collate Storymaps and other materiel from members to strengthen the communication of the potential of Geospatial Information for the SDGs.		Ongoing
6	Liaising with the IAEG-SDGs and responding to emergent requests Responding to emergent requests from the IAEG-SDGs		Ongoing

The SDGs Assessment Matrix

Enables Countries Assess National Capacity and Usage of Geospatial Information for Indicators

The SDGs Assessment Matrix provides a framework for countries to identify:

- *The national agencies responsible for the indicator*
- *The current and needed level of geographic disaggregation*
- *The frequency of data collection and indicator production*
- *Whether its production is assisted by UN Custodian Agencies*
- *How Geospatial Information is currently used to support the production of the indicator*

The SDGs Geospatial Roadmap

Grounding the SDGs Geospatial Roadmap



Statistical Commission Decision 51/101

(i) “Encouraged further work on a better integration of geospatial and statistical information to better monitor the 2030 Agenda through the working group on geospatial information”

The Perspective of the IAEG-SDGs

In its 2021 Report to this Statistical Commission:

[The IAEG-SDGs WGGI] is now focusing on its longer-term activities and is developing the SDGs Geospatial Roadmap, as a document that can ‘build the bridge’ between the statistical and geospatial actors working on the SDGs. The Roadmap aims to realise the as-yet untapped transformational potential that geospatial information can bring to the SDGs and complement the existing work of the Commission on the global indicator framework”.

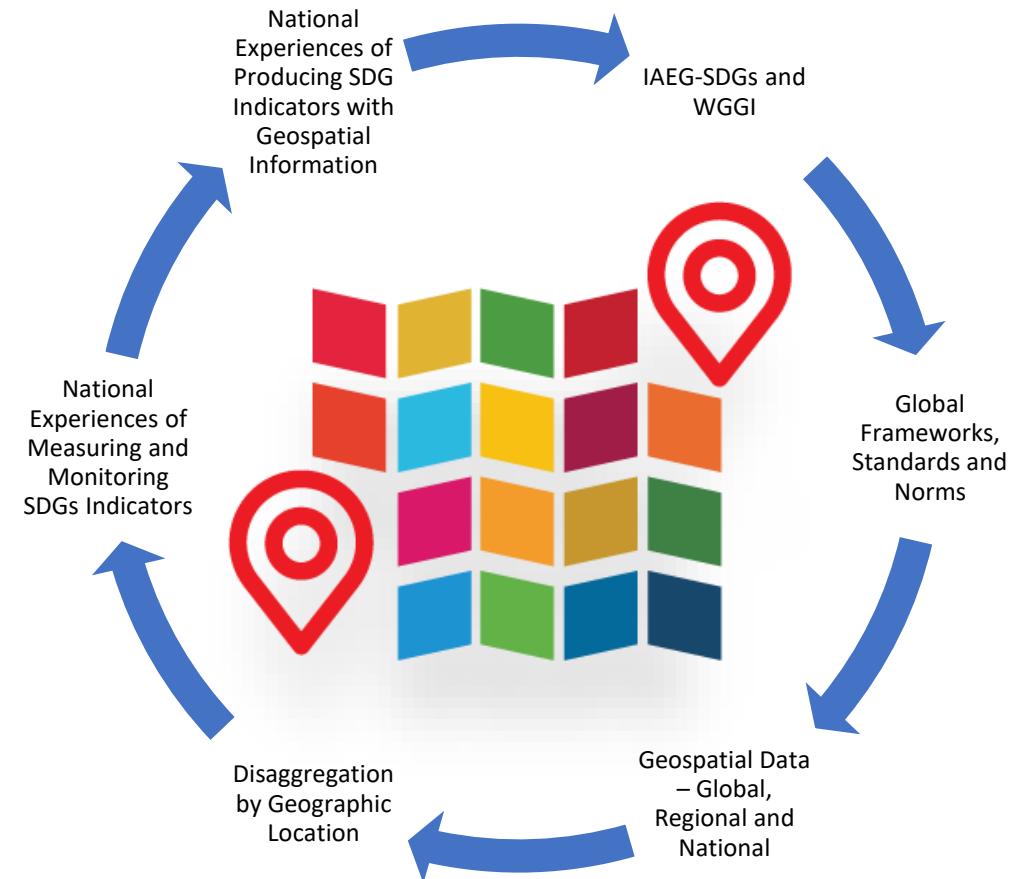
The SDGs Geospatial Roadmap

Grounding the SDGs Geospatial Roadmap

Broader Context and Considerations – Where do we find ourselves today, where will we be tomorrow?

*Twenty years on from the inception of the Millennium Development Goals and five years into the SDGs, regardless of the present global situation, **the transformational vision and new data requirements called for to realise the 2030 Agenda has only been partially realised.** The extent of this challenge has been underestimated and is further amplified by geospatial data, leadership, knowledge, and innovation primarily limited to some countries, the majority being the developed countries – **the geospatial digital divide.***

*While technologies are evolving at a rapid pace, **the commensurate capabilities, skills, and opportunities in the developing countries are not, and countries are being left behind.** This is a gap that must be bridged; accordingly, **the SDGs Geospatial Roadmap has been developed to provide simple and actionable guidance to the IAEG-SDGs, Member States and Custodian Agencies to bridge this gap.***



The SDGs Geospatial Roadmap

Its Vision and Purpose

Vision:

“To see geospatial and location-based information being recognized and accepted as official data for the SDGs and includes key strategic messages and facts”

Purpose:

*The Roadmap **communicates** the value of the support already provided to the IAEG-SDGs, UN custodian agencies, and Member States and elaborates on the vision **to see geospatial and location-based information being recognised and accepted as official data for the SDGs and their global indicators.***

How:

*The Roadmap **outlines how to ‘build the bridge’ between the statistical and geospatial actors working within the global indicator framework, through three phases:***

- 1. Prepare and Plan*
- 2. Design, Development and Testing*
- 3. Measuring, monitoring and reporting geospatially enabled SDG indicators*

For both **Users (ie. Countries)** and **Providers** (ie. Regional Commissions, SDG Custodian Agencies and other Experts) of the SDGs and their global indicators.

The SDGs Geospatial Roadmap

Phase 1: Prepare and Plan

Through the implementation of Phase 1, the basic data to measure, monitor and produce indicators is established and available to be integrated, disaggregated and disseminated to inform decision making.

Key Actions:

1. Establish governance structures to coordinate SDGs on national level
2. Identify national data capacity and highlight potential data gaps
3. Identify and assess relevant frameworks and standards
4. Assess available Skills and Technological capacity



Overarching Processes							
Specify needs	Design	Build	Collect	Process	Analyse	Disseminate	Evaluate
1.1 Identify needs	2.1 Design outputs	3.1 Reuse or build collection instruments	4.1 Create frame and select sample	5.1 Integrate data	6.1 Prepare draft outputs	7.1 Update output systems	8.1 Gather evaluation inputs
1.2 Consult and confirm needs	2.2 Design variable descriptions	3.2 Reuse or build processing and analysis components	4.2 Set up collection	5.2 Classify and code	6.2 Validate outputs	7.2 Produce dissemination products	8.2 Conduct evaluation
1.3 Establish output objectives	2.3 Design collection	3.3 Reuse or build dissemination components	4.3 Run collection	5.3 Review and validate	6.3 Interpret and explain outputs	7.3 Manage release of dissemination products	8.3 Agree an action plan
1.4 Identify concepts	2.4 Design frame and sample	3.4 Configure workflows	4.4 Finalise collection	5.4 Edit and impute	6.4 Apply disclosure control	7.4 Priorise dissemination products	
1.5 Check data availability	2.5 Design processing and analysis	3.5 Test production systems		5.5 Derive new variables and units	6.5 Finalise outputs	7.5 Manage user support	
1.6 Prepare and submit business case	2.6 Design production systems and workflow	3.6 Test statistical business process		5.6 Calculate weights			
		3.7 Finalise production systems		5.7 Calculate aggregates			
				5.8 Finalise data files			



The SDGs Geospatial Roadmap

Phase 2: Design, Development and Testing

Phase 2 of the Roadmap entails designing, developing, and testing that enables the implementation of the Roadmap. Developing a training program is crucial for providing technical training and support and for building organisational support and buy-in at all levels of Member States, the IAEG-SDGs and custodian agencies. I.e. ensure that the foundation established in Phase 1 is fully utilised, and further, able to integrate future, innovative data streams, as and when, they are available.

Key Actions:

- 1. Identify relevant data and appropriate methodologies to develop indicators*
- 2. Prioritise and identify what data is needed at the national level.*
- 3. Convene workshops - sharing of knowledge and experiences*
- 4. Identify appropriate data, develop methods and coordinate development support*
- 5. Collaborate with national and global entities to leverage available capacity*

The SDGs Geospatial Roadmap

Phase 3: Measuring, monitoring and reporting geospatially enabled SDG indicators

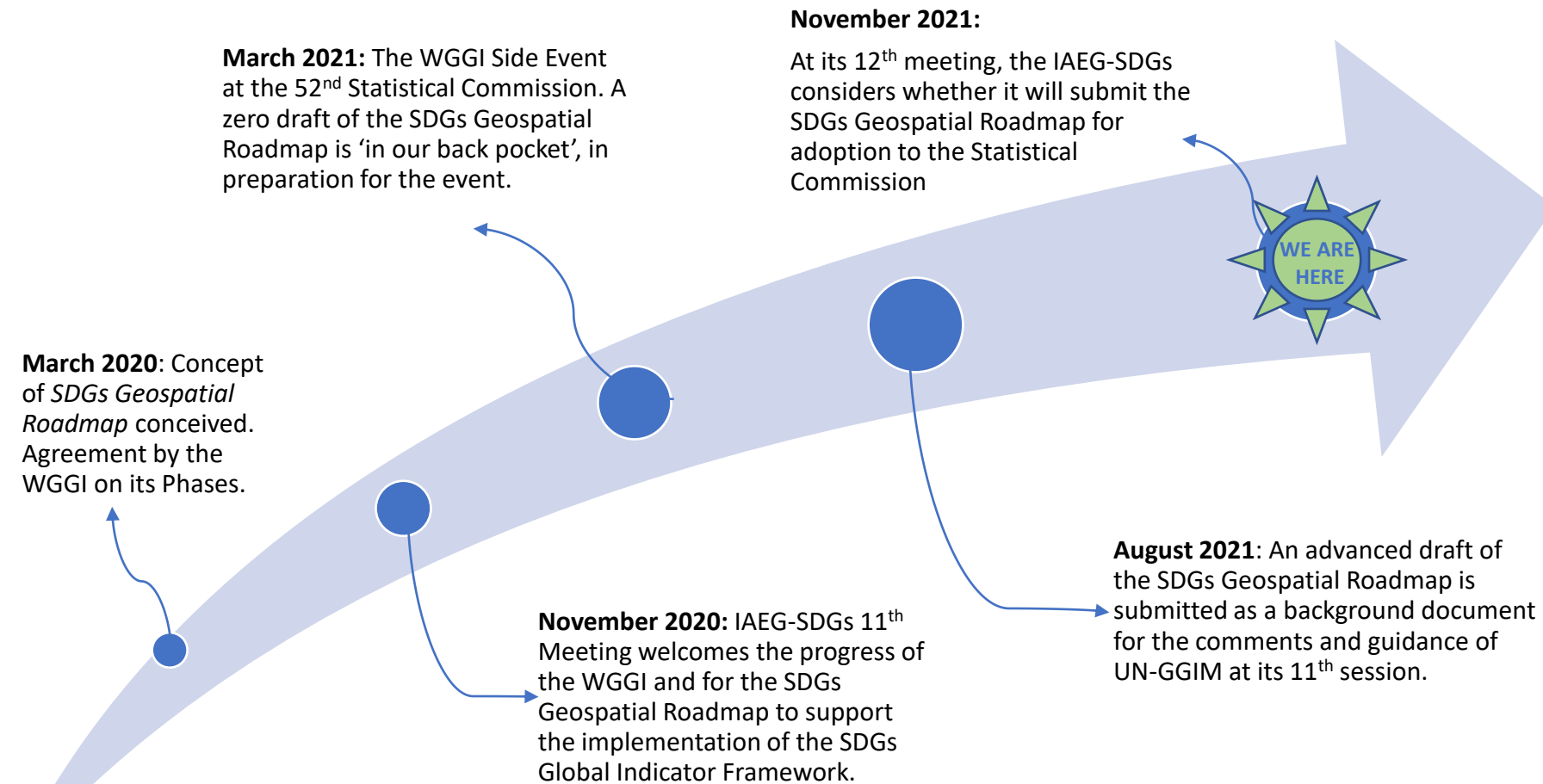
Phase 3 of the Roadmap demonstrates how and why the measurement, monitoring and reporting of geospatially enabled SDG indicators can be achieved. This will be done through highlighting examples of good practices and available tools. Should this also include a 'visioning' piece of what the future could hold?

Key Actions:

- 1. Produce indicators*
- 2. Implement a suitable data management and dissemination platform, identifying technological capacities and gaps.*
- 3. Promote a culture of storytelling with existing data and highlight existing data gaps*
- 4. Establish a publication calendar, identify institutional areas responsible for monitoring the indicators*
- 5. Publish metadata and continually update the list of prioritised indicators, including sources of information used*

The SDGs Geospatial Roadmap

The Timeline



March 2022:

The IAEG-SDGs submits the SDGs Geospatial Roadmap to the 53rd Statistical Commission for adoption.

By 17 January 2022

The SDGs Geospatial Roadmap

How did the WGGI develop the Roadmap?

#	Phase
1	<i>Prepare and Plan</i>
2	<i>Design, Development and Testing</i>
3	<i>Measuring, monitoring and reporting geospatially enabled SDG indicators</i>

Informal conversations with key stakeholders in the IAEG-SDGs and the WGGI, including Countries, SDG Custodian Agencies and other experts:

- **Users** (i.e. Countries) of Geospatial Information and Earth Observations:
 - Identify pain points, gaps and challenges that prevent the use of geospatial information and earth observations to measure, monitor and produce the SDGs
 - Identify and prioritise *needs, wants, and nice to haves* for each of the phases
 - Identify and cover what is missing within the guiding questions
- And with the **Providers** (i.e. SDG Custodian Agencies and Expert Orgs etc.) of Geospatial Information, Earth Observations on how tools and methods can support each of the Phases of the Roadmap.
 - Identify *where support is currently developed or being built and where it is not.*
 - Highlight areas for innovation and development

The SDGs Geospatial Roadmap

How did the WGGI develop the Roadmap?

- Consolidated inputs from the IAEG-SDGs and the WGGI into the SDGs Geospatial Roadmap.
- Supported the available and required disaggregation dimensions and categories for the global indicator framework – specifically for those indicators related to disaggregation by geographic location.
- Continued to collate and update the List of Indicators with national examples of how geospatial information and earth observations are being used to produce, measure, monitor the SDGs, Targets and Goals.
- Identified 4-5 cases studies where SDG indicators derived from geospatial information have been used to support policy and decision making (in supplements to the Roadmap).
- Undertook broad consultation and promotion (including at the 52nd Statistical Commission and the 11th session of UN-GGIM) of the outputs of the WGGI, while ensuring the needs of the IAEG-SDGs are being achieved and communicated.
- Communicated the outputs to the IAEG-SDGs and other relevant parties at a regular basis.

The SDGs Geospatial Roadmap

Some Final Thoughts

“If you can produce the indicators, you can produce many other statistics useful for national development priorities, COVID-19 etc”

“Geospatial information must be truly accepted as an input in the statistical production process”

- Inputs from the IAEG-SDGs and WGGI on the Roadmap to-date

To many, the true impact of this work has not yet been realised – this includes some of the outputs of the WGGI.

As such, the Roadmap aims to **communicate** the value of the support already provided to the IAEG-SDGs, UN custodian agencies, and Member States to elaborate on the vision **to see geospatial and location-based information being recognised and accepted as official data for the SDGs and their global indicators.**



The SDGs Geospatial Roadmap

The Roadmap's next steps

- Following the hopeful acceptance by the IAEG-SDGs, Mexico will reformat and edit the SDGs Geospatial Roadmap in preparation for its submission to the 53rd Statistical Commission as a background document to the IAEG-SDGs' report
- An interactive version is being developed. This highlights interactive resources from Colombia, Japan, Mexico, FAO and others – using the guidance on Storymaps already provided to the IAEG-SDGs
- Unofficial translations of the SDGs Geospatial Roadmap in **French and Spanish** are also provided to the IAEG-SDGs for their consideration (any 'final' designed version will include these translations)
- The WGGI seeks support from the IAEG-SDGs with translating the Roadmap into other languages

Thank You
Questions?



SDGs
GEOSPATIAL
ROADMAP