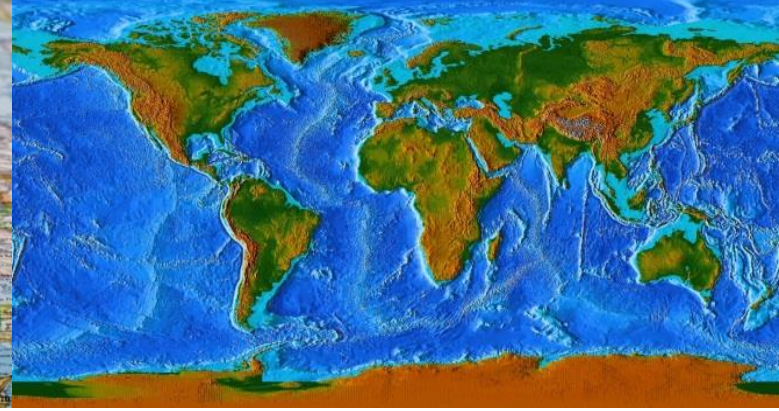


4th Plenary of UN-GGIM: Europe

UN-GGIM: Strengthening the Global Data Ecosystem

Greg Scott

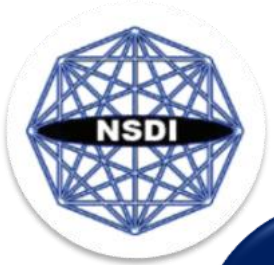
Global Geospatial Information Management
United Nations Statistics Division
Department of Economic and Social Affairs
United Nations, New York

REQUIRES COURAGE TO COMMIT
STRENGTH IS IN THE IMPLEMENTATION

Strengthening the Global Data Ecosystem

ECOSOC Resolution 2016/27

- Acknowledged the considerable achievements and progress made by the Committee of Experts in the area of global geospatial information management, its contribution to the strengthening of geospatial information management capacities and utilization in developing countries, and recognized the relevance of geospatial information for the various United Nations policy agendas.
- Stressed the need to strengthen the coordination and coherence of global geospatial information management, in capacity-building, norm-setting, data collection, dissemination and sharing, among others, through appropriate coordination mechanisms, including in the broader United Nations system, building on the work of the Committee.
- Item on the Council's agenda changed from 'Cartography' to 'Geospatial information, and ***invited the Committee to report on all matters relating to geography, geospatial information and related topics; and to report back to the Council within five years on the implementation of the present resolution***.



Digital Evolution

Digital Earth

Global Data Ecosystem

Digital Transformation

Implementing Nationally Integrated Information Systems

Digital Maturity

Digital Divide

Global development policy framework

United Nations
Framework Convention on
Climate Change

UNITED NATIONS
PARIS CLIMATE
AGREEMENT
SIGNING CEREMONY
22 APRIL 2016

THIRD INTERNATIONAL CONFERENCE
FINANCING FOR DEVELOPMENT
13-16 JULY 2015 · ADDIS ABABA · ETHIOPIA

Addis Ababa Action Agenda
of the Third International Conference on
Financing for Development
(Addis Ababa Action Agenda)

UNITED NATIONS
SUSTAINABLE
DEVELOPMENT
SUMMIT 2015
25 - 27 SEPTEMBER

TRANSFORMING OUR WORLD:

THE 2030 AGENDA FOR
SUSTAINABLE DEVELOPMENT

THE
OCEAN
CONFERENCE
UNITED NATIONS, NEW YORK, 5-9 JUNE 2017

HABITAT III
2016

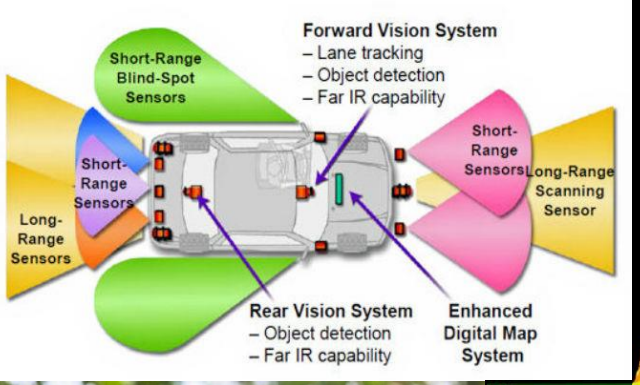
Sendai Framework
for Disaster Risk Reduction
2015 - 2030

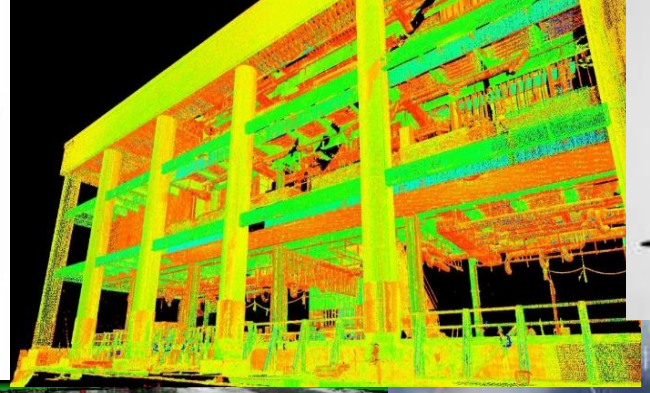
ISLAND
VOICES
GLOBAL
CHOICES

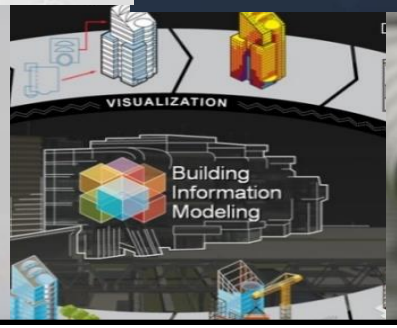
UN Conference on
Small Island
Developing States
Apia, Samoa | 2014

SUSTAINABLE DEVELOPMENT GOALS

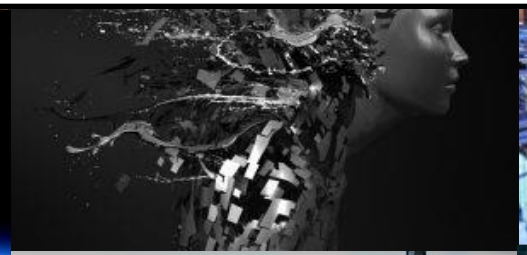
1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS



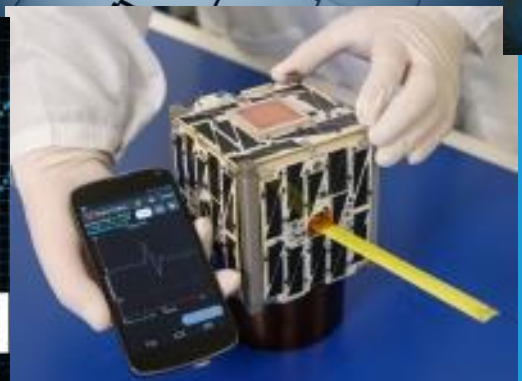




Technology and society are driving digital transformation, but are we yet leveraging this new '*data ecosystem*' effectively?



Robotics



11 SUSTAINABLE CITIES AND COMMUNITIES
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
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17 PARTNERSHIPS FOR THE GOALS
8 DECENT WORK AND ECONOMIC GROWTH
1 NO POVERTY
4 QUALITY EDUCATION
Do we really understand the scale of the problems, where they are, whom they impact, what are the causes, and how they can be remedied?
10 REDUCED INEQUALITIES
13 CLIMATE ACTION
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
5 GENDER EQUALITY

Do we have the data for development??

Can we make it 'production ready' information for all?

GLOBAL DEVELOPMENT POLICY FRAMEWORK

The 2030 Agenda for Sustainable Development	Sendai Framework for Disaster Risk Reduction 2015-2030	SIDS Accelerated Modalities of Action (SAMOA) Pathway	Paris Agreement on Climate Change	HABITAT III Urban Agenda

How does Digital Transformation enable the 'data ecosystem' to achieve Sustainable Development?

How do we bridge the Digital Divide?

2030 Agenda: Goals, targets, indicators

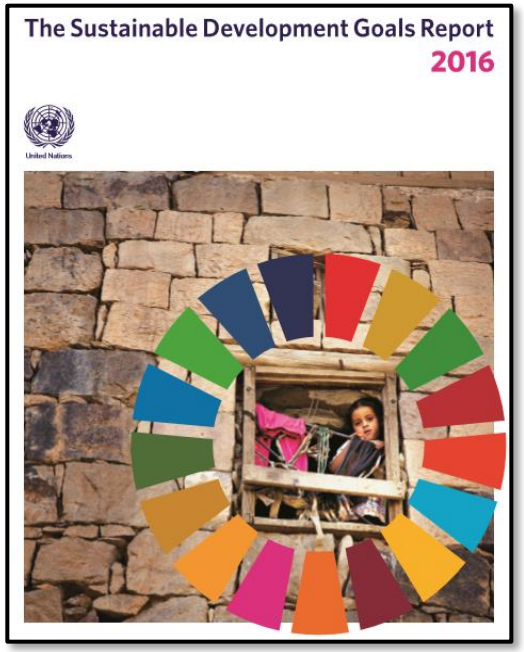
17 SDGs

169 Targets

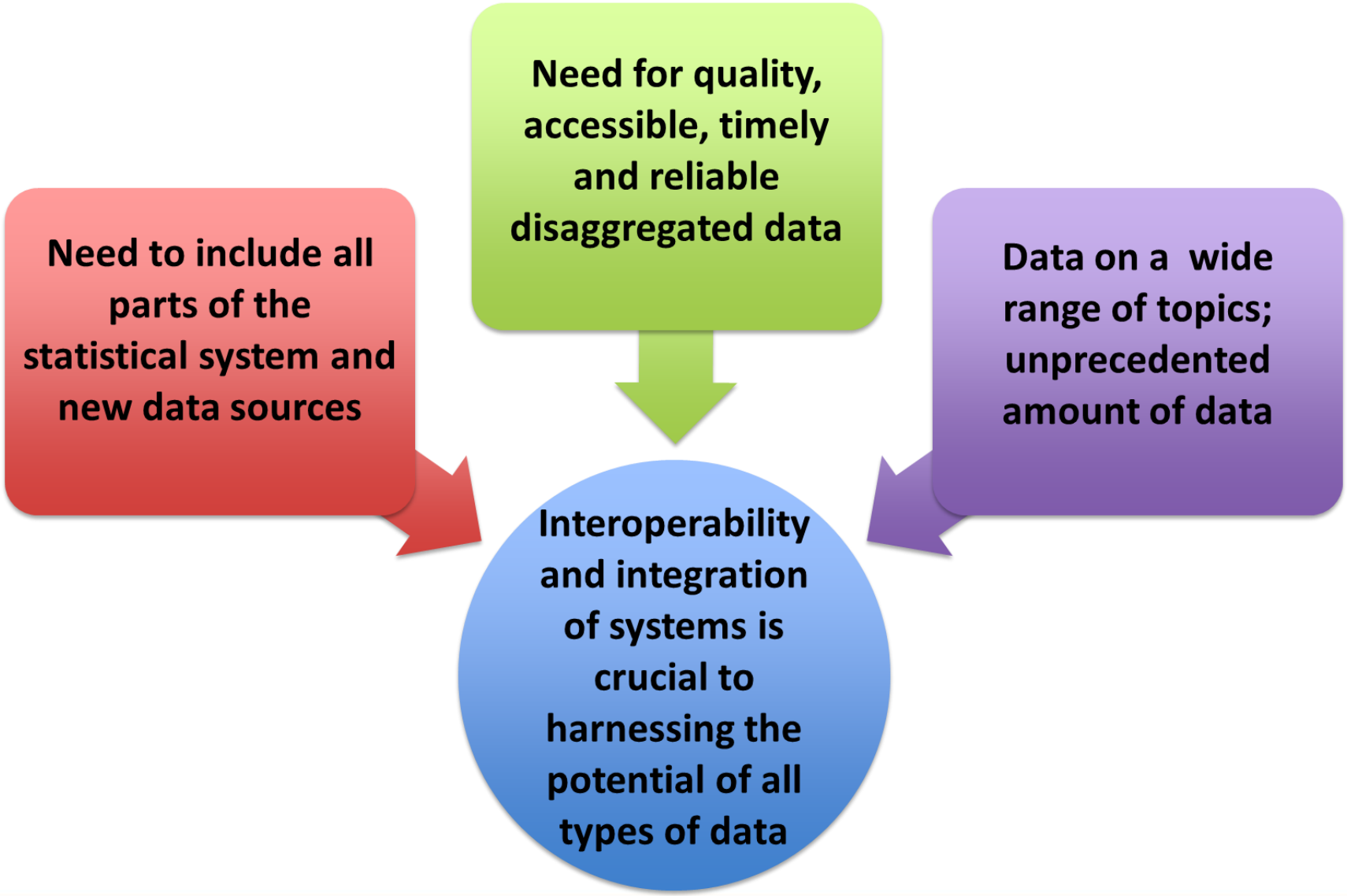
232 global indicators
to follow-up and review progress

Implementation via national planning processes, policies, strategies and frameworks

Measuring and monitoring: Statistics, geospatial information, Earth observations and other Big Data



Addressing the data needs for the 2030 Agenda



Addressing the data needs for the 2030 Agenda

- The scope of the 2030 Agenda requires high-quality and disaggregated data that are timely, open, accessible, understandable and easy to use for a large range of users, including for decision making at all levels.
- There is a need for a reporting system on the SDGs that would have benefit from the sub-national (local) to the national level; and allow for global reporting that builds directly on the data shared by countries.
- Important to create an opportunity for countries to directly contribute to the global reporting. While the challenges are immense, the digital technology that is available today allows the necessary transformation.
- An aspiration is to strengthen countries' national geospatial and statistical information systems to facilitate and enable a '***data ecosystem***' that leverages an accessible, integrative and interoperable local to global system-of-systems.

Strengthening the Global Data Ecosystem

UN-GGIM: 2011-2016 – Develop the global understanding of geospatial information

UN-GGIM: 2017-2021 – Coordination, coherence and implementation

- Facilitate the strengthening and normative capacity building of global geospatial information management in support of the implementation of the 2030 Agenda.
- Efforts include promoting the use of geospatial information systems and services for modern mapping; methodological development; national and regional capacity-building; standards-setting; data collection, dissemination and sharing; and better integration of geospatial and statistical information systems for Member States.
- Regional Commissions provide relevant support, upon request and as appropriate, to the work of the regional committees of UN-GGIM, and that the outcomes and benefits of the activities be equally disseminated to all Member States in each region.

Strengthening the Global Data Ecosystem

UN-GGIM: 2017-2021 – Coordination, coherence and implementation

1. Maturity: Moving from "GGIM 1.0 to GGIM 2.0" – determining our value proposition to ECOSOC in the next 2-3 year horizon.
2. Strategy and roadmap on the ECOSOC resolution and how we implement the new and strengthened mandate.
3. A new Strategic Plan for UN-GGIM that considers 2020 and beyond in 5 year time steps.
4. Raising more awareness, including political, of UN-GGIM and connecting the political - technical levels within Member States.
5. Connecting more to the activities of the regional committees, Regional Commissions, and relevant statistical bodies.
6. Ensuring effective coordination and linkages across global/regional Expert & Working Groups.
7. Seek extra-budgetary and funding options, including ways of implementation.
8. More capacity development for countries in next 5 years – developing guides, standards, methods and norms.

Strengthening the Global Data Ecosystem

UN-GGIM

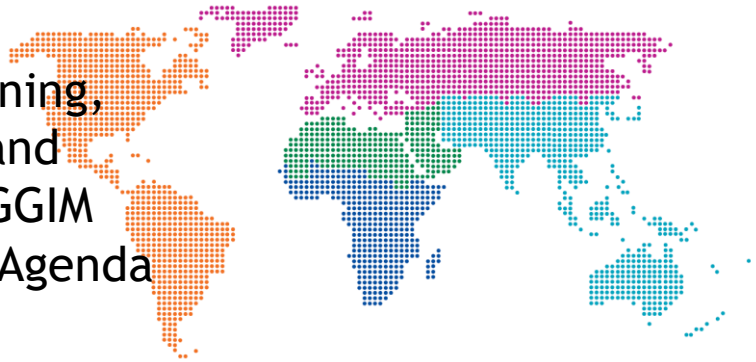
2017-2021 Strategic Framework

CONTEXT	VISION	***Positioning geospatial information to address global challenges***				
	MISSION	***Operating within agreed policies and institutional arrangements, and as an interconnected global community of practice, the Committee of Experts will ensure that geospatial information and resources are coordinated, maintained, accessible, and able to be used effectively and efficiently by Member States and society to address key global challenges in a timely manner***				
	MANDATED STRATEGIC OBJECTIVES	Provide leadership in setting the agenda for the development of global geospatial information and to promote its use to address key global challenges	Provide a forum for coordination and dialogue with and among Member States and relevant international organizations on enhanced cooperation	Provide a platform for the development of effective strategies to build and strengthen national capacity and capability concerning geospatial information, especially in developing countries	Propose work-plans, frameworks and guidelines to promote common principles, policies, methods, standards and mechanisms for the interoperability and use of geospatial data and services	Make joint decisions and set the direction for the production and use of geospatial information within and across national, regional and global policy frameworks

REQUIREMENTS	**GLOBAL POLICY FRAMEWORK**	**Transforming our World: The 2030 Agenda for Sustainable Development**					
		Sendai Framework for Disaster Risk Reduction 2015-2030	**SIDS Accelerated Modalities of Action (SAMOA) Pathway**	**Addis Ababa Action Agenda**	**Paris Agreement on Climate Change**	**HABITAT III Urban Agenda**	
	GEOSPATIAL CHALLENGES & DRIVERS	Environmental management, Disaster management, Sustainable development, Population, Urban planning, Humanitarian assistance, Food security, Education, National security, Land management, Climate change, Water scarcity, Oceans & marine, Institutional governance, Legal & policy, Health & welfare, Poverty reduction, Sustainable cities, Socio-economic metrics					
	DIRECT NATIONAL BENEFITS & EFFICIENCIES	• Reduced duplication of effort in the capture, management, and delivery of fundamental geospatial information • Authoritative, reliable and maintained geospatial data available nationally, regionally, and globally • Increased return on investment through better coordination, use and reuse of data, information and systems • Better evidence-based decision making, supported by good data, science and policy • More open, accountable, responsive and efficient governments • Presentation and delivery of timely and 'fit for purpose' data in times of need • Increased collaboration and integration of national data and information systems across all levels of government • Best practices and use cases for enriching national processes on geospatial information management					
	OPERATING PRINCIPLES	Sound Nat. Policies, Legal Frameworks & Institutional Arrangements	Provision of Fundamental Authoritative Data and Information	Agreed Standards, Methods, Guides and Frameworks	Principles on Geospatial Information and Open Data	Integration and Interoperability of National Information Systems	Information Sharing and Knowledge Transfer	Building Local to Global Capacity & Capability
DELIVERABLES	**WORKING ACTIVITIES AND OUTPUTS**	• Geospatial Information for Sustainable Development: 2030 Agenda, Sendai Framework, etc. • Integration of Geospatial & Statistical Information: Implement the Global Statistical Geospatial Framework • Geospatial Information and Services for Disasters: Implement Strategic Framework • Global Geodetic Reference Frame: Roadmap to Implement • Determination of global fundamental data themes • Marine geospatial information • Land administration and management • Legal and policy frameworks • National institutional arrangements • Implementation and adoption of standards for the global geospatial information community • National geospatial data and information systems					

Frameworks, guides, norms, standards and methodological development

Normative strengthening, capacity building and implementation of GGIM in support of the 2030 Agenda



UN-GGIM: Strengthening the Global Data Ecosystem

The activities and efforts that contribute to the unique local-to-global value of UN-GGIM for Member States

- Strengthening global geospatial information management
- Contribution of regional committees, thematic groups and networks
- Legal and policy frameworks and issues related to authoritative data
- Trends in national institutional arrangements
- Adoption of standards and technical specifications
- Strengthening collaboration with UNGEGN
- United Nations activities in geospatial information management
- Secretariat programme management

- Global geodetic reference frame
- Global fundamental geospatial data themes
- Integration of geospatial, statistical and other information
- Geospatial information and services for disasters
- Land administration and management
- Geospatial information for sustainable development
- National geospatial data and information systems
- Marine geospatial information

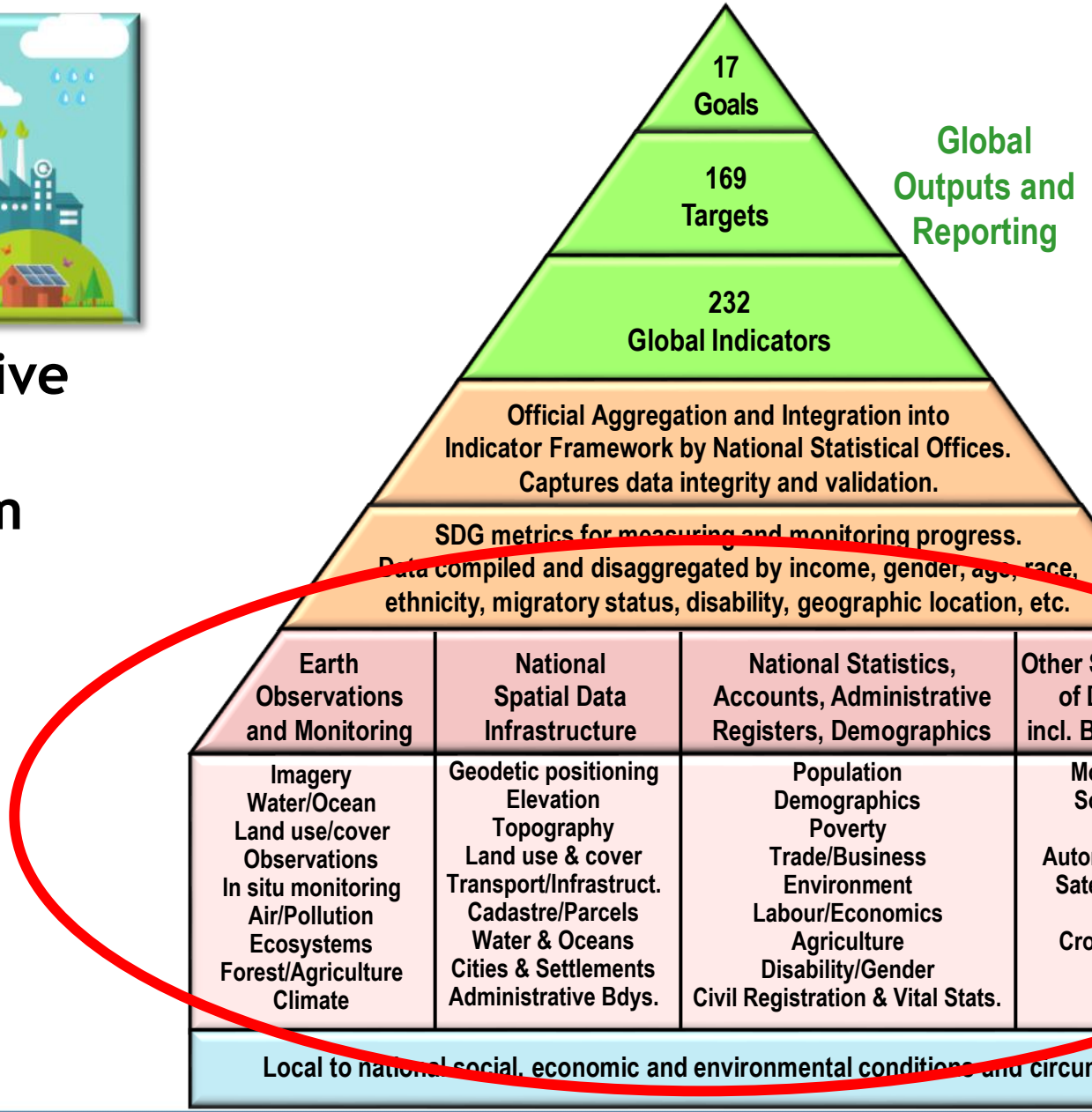
Strengthening the Global Data Ecosystem

- Strategic Framework is presented as a starting point for discussion towards a strategic plan and road map that will enable the Committee to be better supported by the regional committee architecture and the Regional Commissions.
- Continue to work on global policies for geospatial information management in tandem with producing tangible outputs such as norms, handbooks, methodologies, standards and guidelines.
- Need for closer synergies with the activities of the regional committees and working groups, Regional Commissions, and relevant statistical bodies.
- Substantively improve and strengthen the national geospatial information management capacities of developing countries towards implementing the 2030 Agenda and other global policies.

Strengthening the Global Data Ecosystem

- Effort by UNSD and the World Bank to explore and develop possible mechanisms for geospatial data, infrastructure and policies to be embedded more holistically within concessional financing, technical assistance and knowledge-sharing services and their subsequent implementation in developing countries.
- Recognizes the need for collaboration in developing an overarching geospatial framework that countries could reference when using geospatial information to develop national systems tailored to their own situations.
- The framework would include an action plan and road map on means for implementation, as well as elements such as the economic impact and value of geospatial information systems, investment needs and associated principles, tools, guides and good practices.

An integrative data ecosystem



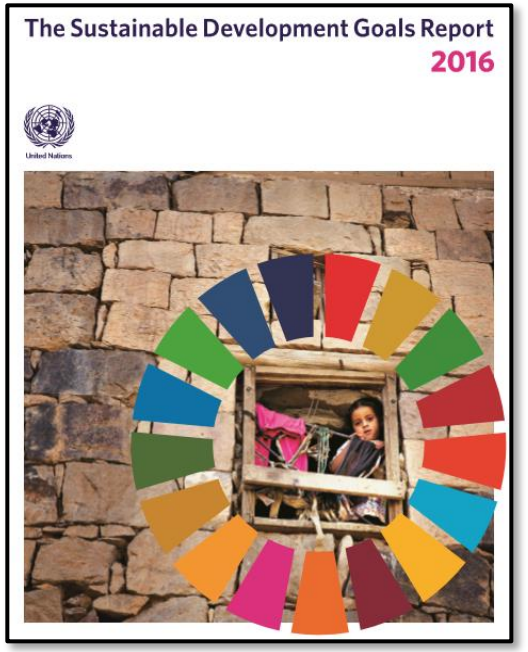
Global Outputs and Reporting

National Sustainable Development Indicators

National Information Systems

Data Inputs

Fundamental baseline data and new data sources



The fact is that no species has ever had such wholesale control over everything on earth, living or dead, as we now have. That lays upon us, whether we like it or not, an awesome responsibility. In our hands now lies not only our own future, but that of all other living creatures with whom we share the earth.

David Attenborough