The Kuala Lumpur International Seminar on UN-GGIM “Integrated Geospatial Information Framework”

in conjunction with the 21st International Surveyors Congress of the Royal Institution of Surveyors, Malaysia

Hotel Istana, Kuala Lumpur, Malaysia, 20 June 2019

The IGIF: Towards evidence-based policies and decisions for the wellbeing of people and planet

Greg Scott, UN-GGIM Secretariat

Environmental Statistics and Geospatial Information Branch
United Nations Statistics Division
Department of Economic and Social Affairs
United Nations, New York
“Local, regional and global issues and challenges in the 21st century are different from the past, and as responsible professionals, we should always ‘survey the future’ to understand the trends by continually monitoring internal and external events and drivers so that responsible, timely, evidence-based responses can be made”
Established in 2011, reports annually to ECOSOC, an intergovernmental United Nations Committee of Experts to:

• Discuss, enhance and coordinate Global Geospatial Information Management activities by involving Member States at the highest level.

• Work with Governments to make joint decisions and set directions on the use of geospatial information within national and global policy frameworks.

• Address global issues and contribute collective knowledge as a community with shared interests and concerns.

• Develop effective strategies to build geospatial capacity in developing countries.

• To make accurate, reliable and authoritative geospatial information readily available to support national, regional and global development.
“Everything happens somewhere...”
Nancy Tosta, June 2001

Everything that happens...happens somewhere.
We can locate, view, relate, record, collect, measure, analyze, model and monitor what happens where, when, why, and how.
We can do this more today than ever before....which is far less than what we will do tomorrow.
Global Development Agendas

Transforming our world: The 2030 Agenda for Sustainable Development

Sendai Framework for Disaster Risk Reduction
2015 - 2030

United Nations Secretariat
Global Geospatial Information Management

ggim.un.org
The 2030 Agenda is an Integrated Plan of Action structured in four main parts: (i) Vision and principles for transforming our world as set out in the Declaration; (ii) Results framework of 17 SDGs and 169 targets; (iii) Means of implementation through governments, society and global partnership; and (iv) Follow-up and review framework of global indicators.
2030 Agenda: Goals, targets, indicators… and data!!

Any national SDG implementations will be sub-optimal without strategies and frameworks to integrate statistics, geospatial information, Earth observations, and other new data into the measuring, monitoring and reporting processes.
“Without evidence of where we stand now we cannot confidently chart our path forward in realizing the SDGs. To that end, this Report reflects on the challenges faced in the collection, processing, analysis and dissemination of reliable, timely, accessible and sufficiently disaggregated data, and calls for better evidence-based policymaking.

Today’s technology makes it possible to collate the data we need to keep the promise to leave no one behind. But we need political leadership, resources and commitment to use the tools now available.”

António Guterres  
Secretary-General, United Nations
The disruptive nature of digital transformation, technology, innovation, and their exponential impacts, means that society’s expectations on how, and at what level of detail, we record what is happening where and when are changing at a rapid pace.
The disruptive nature of digital transformation
Surveying the ‘Geospatial’ Future in the 21st Century

What is geospatial information? Geography? Location data?
How mainstream is it?
How do we use it, best leverage it, communicate it, value it?
What does it mean? What is its identity? What is next?
Is it an industry in its own right? Or is it a data and technology enabler for many, or all, industries?

Geospatial information is not just data, software, hardware, applications, solutions...it is the instrument of geography; the ‘geography’ of data, software, applications, solutions...

Geospatial information is the integrative glue for everything else. Without it other things are often meaningless and/or without context.....let alone location.

The role of geospatial information is changing and evolving rapidly...

Geospatial information represents much more than the ‘digital map’ of a nation; it is the ‘digital currency’ for evidence-based decision-making. Geospatial information is a critical component of the national infrastructure; both a blueprint of what happens where, and the means to integrate a wide variety of data across multiple sectors.
Surveying the ‘Geospatial’ Future in the 21st Century

What is changing rapidly is the pace at which high fidelity data is being made available... combined with enabling technologies and sophisticated analytics... that are able to collect and manipulate the data. How do we keep up?

Change itself is not the problem... that is inevitable progress.

It is the pace of change that is so challenging. How to respond to this pace... and the many multidimensional aspects?

New technologies that drive the use, collection and storage of data are increasing the relevance and quality of geospatial information.

Better and more relevant geospatial data is providing new information and knowledge about a range of sectors, increasing the potential, value and productivity of the data... and the record of evidence.
The Integrated Geospatial Information Framework provides a basis and guide for developing, integrating and strengthening geospatial information management.

The Overarching Strategic Framework is a mechanism for articulating and demonstrating national leadership, cultivating champions, and developing the capacity to take positive steps.
The Integrated Geospatial Information Framework (IGIF) comprises 3 separate, but connected, documents. The Overarching Strategic Framework was completed and adopted by UN-GGIM in August 2018. The structure and main elements of the Implementation Guide were provided for discussion, and had ‘in-principle’ approval by UN-GGIM. The Country-level Action Plans were acknowledged as ‘work in progress’ and to be developed through case studies.
IGIF: Overarching Strategic Framework

- A forward-looking Framework built on national needs and circumstances.
- Provides the overarching strategic messages and integrated national framework, focusing on policy perspectives and elements of geospatial information.
- Sets the context of ‘why’ geospatial information management is a critical element of national social and economic development.
- **Vision** and **Mission** statements communicate the overarching aim of the Integrated Geospatial Information Framework.
- The Framework achieves this via **7 Underpinning Principles**, **8 Goals** and **9 Strategic Pathways** that lead to a national approach that takes account of national circumstances, priorities and perspectives.
- The **Overarching Strategic Framework** is intended for a wide range of stakeholders - these primarily being high-level policy and decision makers, institutions and organizations within and across government.
Overarching Strategic Framework: Vision and Mission

The Vision recognizes the responsibility for countries to plan for and provide better outcomes for future generations, and our collective aspiration to ‘leave no one behind’.

The Mission is designed to stimulate action towards bridging the geospatial digital divide; to find sustainable solutions for social, economic and environmental development; and to influence inclusive and transformative societal change for all citizens according to national priorities and circumstances.

Vision
The efficient use of geospatial information by all countries to effectively measure, monitor and achieve sustainable social, economic and environmental development - leaving no one behind.

Mission
To promote and support innovation and provide the leadership, coordination and standards necessary to deliver integrated geospatial information that can be leveraged to find sustainable solutions for social economic and environmental development.
Overarching Strategic Framework: Principles

Underpinning Principles:
PRINCIPLE 1: Strategic Enablement
PRINCIPLE 2: Transparent and Accountable
PRINCIPLE 3: Reliable, Accessible and Easily Used
PRINCIPLE 4: Collaboration and Cooperation
PRINCIPLE 5: Integrative Solution
PRINCIPLE 6: Sustainable and Valued
PRINCIPLE 7: Leadership and Commitment
Overarching Strategic Framework: Goals

GOAL 1: Effective Geospatial Information Management
GOAL 2: Increased Capacity, Capability, and Knowledge Transfer
GOAL 3: Integrated Geospatial Information Systems and Services
GOAL 4: Economic Return on Investment
GOAL 5: Sustainable Education and Training Programs
GOAL 6: International Cooperation and Partnerships Leveraged
GOAL 7: Enhanced National Engagement and Communication
GOAL 8: Enriched Societal Value and Benefits

The 8 Goals reflect a future state where countries have the capacity and skills to organize, manage, curate and leverage geospatial information to advance government policy and decision-making capabilities.
Positioning geospatial information to address global challenges

Anchored by 9 Strategic Pathways, the Framework is a mechanism for articulating and demonstrating national leadership in geospatial information, and the capacity to take positive steps.

9 Strategic Pathways

- Governance
- Technology
- People

Knowledge ▪ Decisions ▪ Development

- Governance and Institutions
- Policy and Legal
- Financial
- Data
- Innovation
- Standards
- Partnerships
- Capacity and Education
- Communication and Engagement

Society ▪ Economy ▪ Environment

Users ▪ Citizens ▪ Access
Positioning geospatial information to address global challenges

“The technology, policies, standards, human resources and related activities to acquire, process, distribute, use, maintain and preserve spatial data” (OMB 2002).
Positioning geospatial information to address global challenges

The Framework will augment and build upon existing NSDI arrangements, providing a holistic, integrated national information system-of-systems approach to the data life cycle.
Summary

The Integrated Geospatial Information Framework is a reference guide for developing and strengthening arrangements in national geospatial information management. It has been designed specifically for low to middle income countries and small island developing States. But, it is also being used to improve and coordinate activities to achieve alignment between and across existing national agency capabilities and infrastructures in developed countries.
Summary

The 21st Century Challenge:

• We function in times of disruption: rapidly increasing amounts of data, enabling technologies and associated analytics. New roles are emerging.
• Opportunity to apply these to the benefit of national priorities and economic development more holistically.
• This means moving up the value chain. No longer data collectors, but data connectors and integrators. The information is the currency for policy.
• Data realignment: Outcomes that are more definitive, diversified, integrated, accessible and dynamic.
• Data aggregation and disaggregation: National - local - national.
• Communicate: Link up with other government agencies...and industry!!
The Kuala Lumpur International Seminar on UN-GGIM “Integrated Geospatial Information Framework”
in conjunction with the 21st International Surveyors Congress of the Royal Institution of Surveyors, Malaysia
Hotel Istana, Kuala Lumpur, Malaysia, 20 June 2019

The IGIF: Towards evidence-based policies and decisions for the wellbeing of people and planet

Thank You