## First Expert Meeting of the United Nations Working Group on Marine Geospatial Information

Busan, Republic of Korea 7 – 9 March 2019

Agenda Item #2

United Nations Committee of Experts on Global Geospatial Information Management – Strengthening National Geospatial Information Management



### UN-GGIM

UNITED NATIONS COMMITTEE OF EXPERTS ON GLOBAL GEOSPATIAL INFORMATION MANAGEMENT http://ggim.un.org/



#### **TEO** CheeHai



United Nations Global Geospatial Information Section Statistics Division, Department of Economic and Social Affairs

United Nations Secretariat Global Geospatial Information Management

"Your dedication, expertise and guidance - in geospatial data, methods, frameworks, tools, and platforms - is urgently needed. The data needs for the SDGs are great, and time is not on our side. Reliable, timely, accessible and disaggregated geospatial information must be brought to bear to measure progress, inform decision-making and ensure effective and inclusive national and sub-national programs that will chart the path towards the 'Geospatial Way to a Better World', to assist in the implementation of the SDGs, and transform our world for the better."

#### **António Guterres**

Secretary-General of the United Nations (video message to the United Nations World Geospatial Information Congress) 19 November 2018



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The participating ministers, in their ministerial statements at the United Nations World Geospatial Information Congress, stressed the importance of working together across borders, highlighted the benefits of partnerships and cooperation in sharing of good practices and transfer of technologies in order to meet the growing national, regional and global demand for geospatial information.



WORLD GEOSPATIAL INFORMATION CONGRESS



19 – 21 November 2018 Deqing, Zhejiang Province China http://ggim.un.org/unwgic

Promoting comprehensive dialogue with all relevant actors (ECOSOC 2011/24) The Moganshan Declaration issued on behalf of all participants at the conclusion of the UNWGIC resolved to work together to build a human data and geography community for a shared and better future, and to keep the promise to leave no one behind by fostering effective crosssector and interdisciplinary international, regional and local collaboration and partnerships, and to support national development priorities.

### "The Geospatial Way to a Better World"



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"By 2020, enhance capacity-building support to developing countries, including for LDCs and SIDS, to <u>increase significantly the availability of high-quality,</u> <u>timely and reliable data</u> disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics..."



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



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**Global Geospatial Information Management** 

### Addressing the data needs for the 2030 Agenda for Sustainable Development

#### **General Assembly Resolution A/RES/70/1**

Para. 76; Follow up and Review We will support developing countries, particularly African countries, LDCs, SIDS and LLDCs, in strengthening the capacity of national statistical offices and data systems to ensure access to high quality, timely, reliable and disaggregated data. We will promote transparent and accountable scaling-up of appropriate public-private cooperation to exploit the contribution to be made by a wide range of data, *including earth observation and* geospatial information, while ensuring national ownership in supporting and tracking progress.

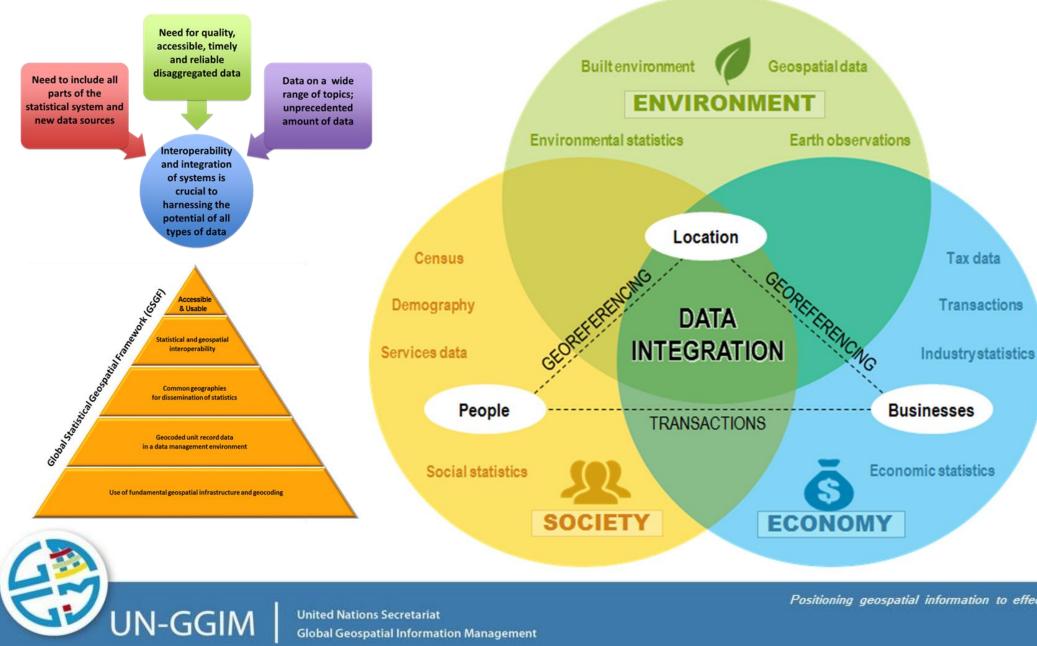
Need to include all parts of the statistical system and new data sources Need for quality, accessible, timely and reliable disaggregated data

Interoperability and integration of systems is crucial to harnessing the potential of all types of data Data on a wide range of topics; unprecedented amount of data

helping Member States to implement national strategic and development priorities, make decisions, and measure and monitor outcomes

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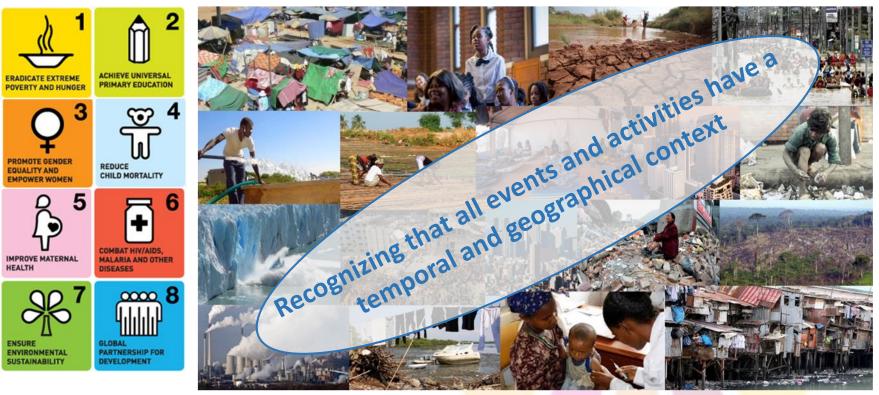
### .... bridging the three domains



Geospatial information is a critical component of the national infrastructure and knowledge economy; a blueprint of what happens where, and the means to integrate a wide variety of government services.

**United Nations Secretariat Global Geospatial Information Management**  Positioning geospatial information to effectively address global challenges

### Positioning geospatial information to effectively address global challenges .. ..



"Knowing <u>where</u> people and things are and their relationship to each other is essential for informed decision-making. Comprehensive locationbased information is helping Governments to develop strategic priorities, make decisions, and measure and monitor outcomes."



United Nations Secretariat Global Geospatial Information Management The Millennium Development Goals Report 2015









While 'data' is still the primary information currency, the many disruptive technology enablers and applications are challenging the norm for the mission of national geospatial information authorities. Geospatial information, technologies and services, a crucial component of any national data and information systems, have become critical tools to support national development, social wellbeing, environmental management and economic growth.

Improved evidence-based policy formulation and decision-making have enhanced the ability of governments to analyse, monitor and report social, environmental and economic development challenges and progress. This include data and information for the national implementation of the 2030 Agenda for Sustainable Development.



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United Nations Committee of Experts on Global Geospatial Information Management

#### **UN-GGIM Bureau:**

- Co-Chairs: Cameroon, China, Netherlands
- Rapporteur: Chile

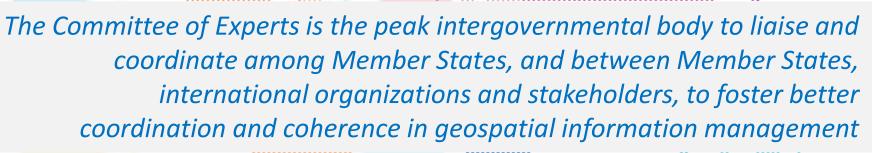
#### **UN-GGIM Regional Committees & Chairs:**

- Africa: Senegal
- Americas: Mexico
- Arab States: Saudi Arabia
- Asia-Pacific: Australia
- Europe: Slovenia

#### **UN-GGIM International Networks:**

- Academic Network
   Private Sector Network
- Geospatial Societies
   United Nations System Network

International Standards Development Organizations





Positioning geospatial information to effectively address global challenges

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### ECOSOC Resolution 2016/27

strengthening institutional arrangement in global geospatial information management

### UN-GGIM Decision 7/101:

.. .. Suggested that efforts to implement the framework should be maximized through the support of the regional committees, thematic groups and other relevant stakeholders;

### UN-GGIM Strategic Framework 2018 – 2022

### UN-GGIM Decision 8/101:

.. Noted the updated 2018 – 2022 Strategic Framework ..
.. as a reference point for coordination, coherence and prioritizing the work programmes and activities of the Committee;



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	VISION	Positioning geospatial information to effectively address global challenges								
CONTEXT	MISSION	Operating within agreed policies and institutional arrangements, and as an interconnected global community of practice, provide leadership to ensure that geospatial information and resources are coordinated, maintained, accessible, and able to be leveraged by Member States and society to find sustainable solutions for social, economic and environmental development								
	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	in setting the agenda for the development of global geospatial formation and to romote its use to ddress key global		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	
		Transforming our World: The 2030 Agenda for Sustainable Development								
REQUIREMENTS	global Policy Framework	Sendai Framewor for Disaster Risk Reduction 2015- 2030	k SIDS Accele Modalitie	erated Add es of Actio MOA)	lis Ababa on Agenda	Agre	Paris ement on ate Change	New Urba Agenda	n	Our Ocean, Our Future: all for Action
	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	<ul> <li>Effective geospatial information management</li> <li>Reduced duplication of effort in the capture, management, and delivery of fundamental geospatial information</li> <li>Authoritative, reliable and maintained geospatial data available nationally, regionally, and globally</li> <li>Increased return on investment through better coordination, use and reuse of data, information and systems</li> <li>Better evidence-based decision making, supported by good data, science and policy</li> <li>More open, accountable, responsive and efficient governments</li> <li>Presentation and delivery of timely and 'fit for purpose' data intimes of need</li> <li>Integration of national information systems and services across all levels of government</li> <li>Best practices and use cases for enriching national processes on geospatial information management</li> <li>Enhanced stakeholder engagement and communication</li> </ul>								
	OPERATING PRINCIPLES	Sound Nat. Policies, Legal Frameworks & Institutional	Provision of Fundamental Authoritative Data and	Agreed Standards, Methods, Guides and	Principles of Geospatia Information and Oper	al I on	Integration an Interoperabili of National Information	ty Sharir	ig and ledge	Building Local to Global Capacity &

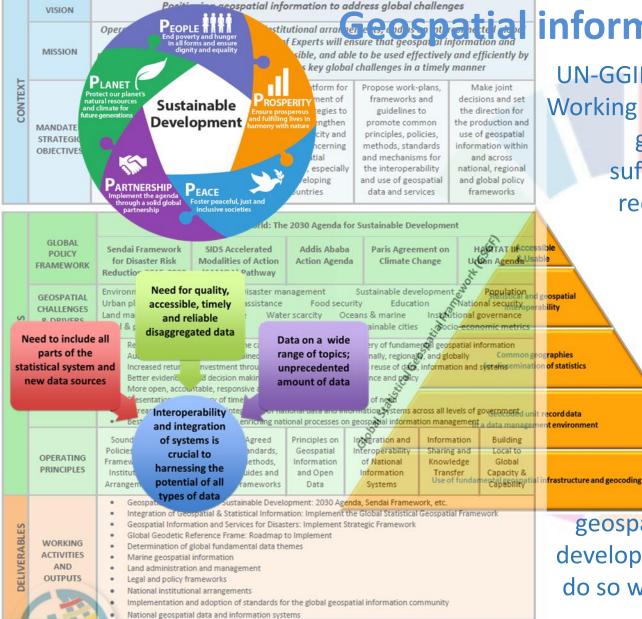
	Arrangements	Information	Frameworks	Data	Systems		Capability
WORKING ACTIVITIES AND OUTPUTS	Integration     Geospatial     Global Geo     Global Fun     Marine geo     Land admin     Legal and p     National in	of Geospatial & S Information and S odetic Reference Fr damental Geospat ospatial informatio nistration and man policy frameworks istitutional arrange	tatistical Informa ervices for Disas ame: Roadmap ial Data Themes n agement ements	ation: Implement ters: Implement ( to Implementation : Implementation		Geospatial Frame	:work

### **UN-GGIM Strategic Framework 2018 – 2022**

	GLOBAL POLICY	address key global challenges	enhanced cooperation	especially in develo	ping	interoperabi of geospati serv	lity and use al data and ices	policy frameworks		
Y	STRATEGIC			national capacity capability concern geospatial informa especially in develo	build and strengthen common national capacity and policies capability concerning stand eospatial information, mechan specially in developing interoper- countries of geospa		al data and	and use of geospatia information within and across national regional and global policy frameworks		
ONTEXT	MANDATED	Provide leadership in setting the agenda for the	Provide a forum for coordination and dialogue with and	Provide a platform the development effective strategie	of	Propose w framewo guidelines t	orks and	Make joint decision and set the direction for the production		
Т	MISSION	Operating within agreed policies and institutional arrangements, and as an interconnected global community of practice, provide leadership to ensure that geospatial information and resources are coordinated, maintained, accessible, and able to be leveraged by Member States and society to find sustainable solutions for social, economic and environmental development								
	VISION	Positioni	ng geospatial inf	ormation to eff	ective	ely address	global ch	allenges		

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#### utional array and ress global challenges transformation to address global challenges transformation and information for sustainable development

UN-GGIM at its eighth session in August 2018 concurred with the Working Group on Geospatial Information and acknowledged that geospatial information and earth observations are not yet sufficiently leveraged in the statistical production processes, requested that the Working Group continue to develop and provide expert advice and guidance on the application of

#### Measuring the planet

Through geodesy, we measure and define the Earth's shape, rotation and gravitational field and changes to these.

Geodesy is fundamental for monitoring changes to the Earth including the continents, ice caps, oceans and the atmosphere. Geodesy is also fundamental for mapping, navigation and universal timing.

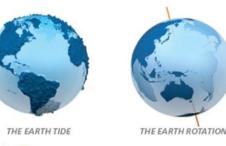








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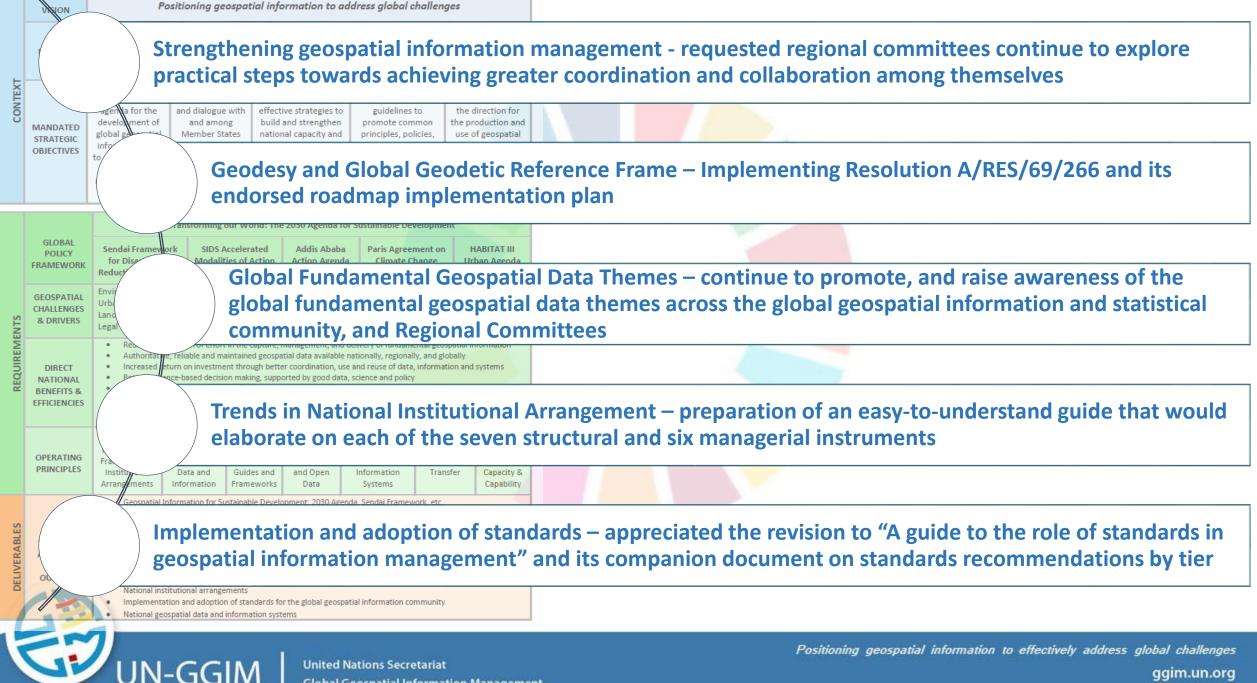
GLOBAL MASS TRANSPORT

geospatial information and its management to achieve national development priorities and the global targets of the SDGs, and to do so with a degree of urgency whilst ensuring the robustness of the advice and guidance provided

Positioning geospatial information to effectively address global challenges

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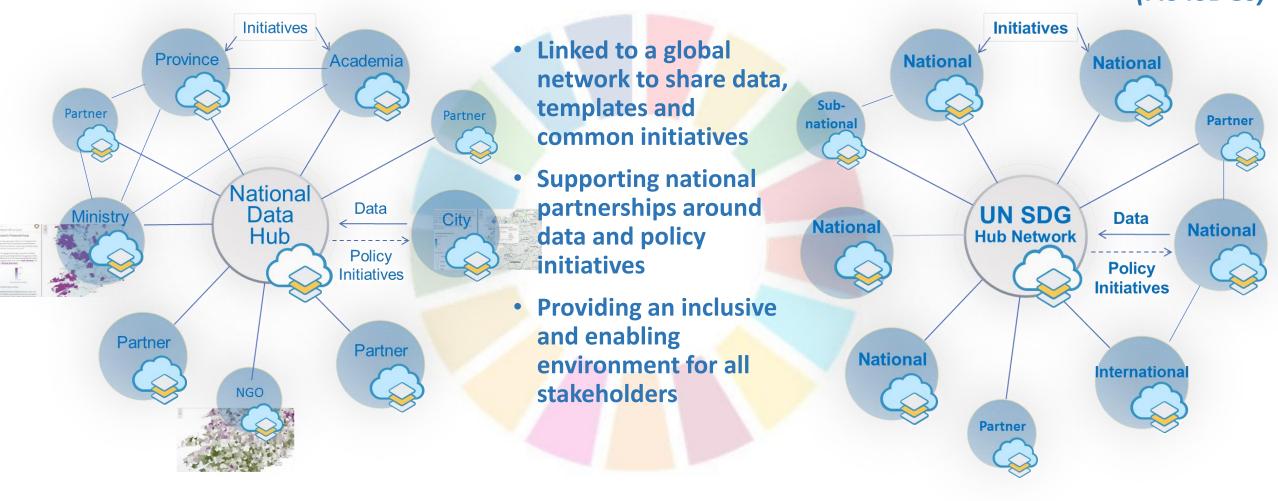
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**Global Geospatial Information Management** 

	VINON	Positioning geospatial information to address global challenges
CONTEXT	D	Integration of statistical, geospatial and other information – elaborating the five guiding principles of the Global Statistical Geospatial Information Framework as a means to create, disseminate and utilize
		geospatially enabled statistics
	MANDATED STRATEGIC OBJECTIVES	and dialogue with diffective strategies to guidelines to the direction for the and among build and strengthen promote common the production and use of geospatial use of geospatial
		Land administration and management – considering and developing an overarching policy guidance with regard to effective and efficient land administration and management systems
	010001	ansionning our world: The 2030 Agenda for Sustainable Development
	GLOBAL POLICY FRAMEWORK	Sendai Framework SIDS Accelerated Addis Ababa Paris Agreement on HABITAT III for Disan ECOSOC adopted resolution 2018/14 of 2 July 2018 entitled "Strategic Framework on Geospatial
	PRAMEWORK	
	GEOSPATIAL CHALLENGES	Information and Services for Disasters" as a guide for Member States to ensure the availability and
ENTS	& DRIVERS	accessibility of quality geospatial information and services across all phases of disaster risk reduction
REM		Rec.     and management     Authoritative, reliable and maintained geospatial data available nationally, regionally, and globally
EQUI	DIRECT NATIONAL BENEFITS & EFFICIENCIES	<ul> <li>Increased ritum on investment through better coordination, use and reuse of data, information and systems</li> <li>But acce-based decision making, supported by good data, science and policy</li> </ul>
~		Marine geospatial information – to consider a use-case study on data availability and interoperability,
		and linkages to national geospatial information infrastructure that relates to inland water bodies and
	OPERATING	waterways, coastal zones, seas and oceans and to consider good practices and exemplars
	PRINCIPLES	Institut Data and Guides and and Open Information Transfer Capacity & Arrangements Information Frameworks Data Systems Capability
		Geospatial Information for Sustainable Development: 2030 Agenda, Sendai Framework, etc.
ES		
RABL	A	Endorsed the terms of reference of the United Nations system network
DELIVERA	OU	
-	110	National institutional arrangements     Implementation and adoption of standards for the global geospatial information community
	9 - 0	National geospatial data and information systems
1		Positioning geospatial information to effectively address global challenges United Nations Secretariat Global Geospatial Information Management Global Geospatial Information Management
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### Federated Information System for SDGs (FIS4SDGs)



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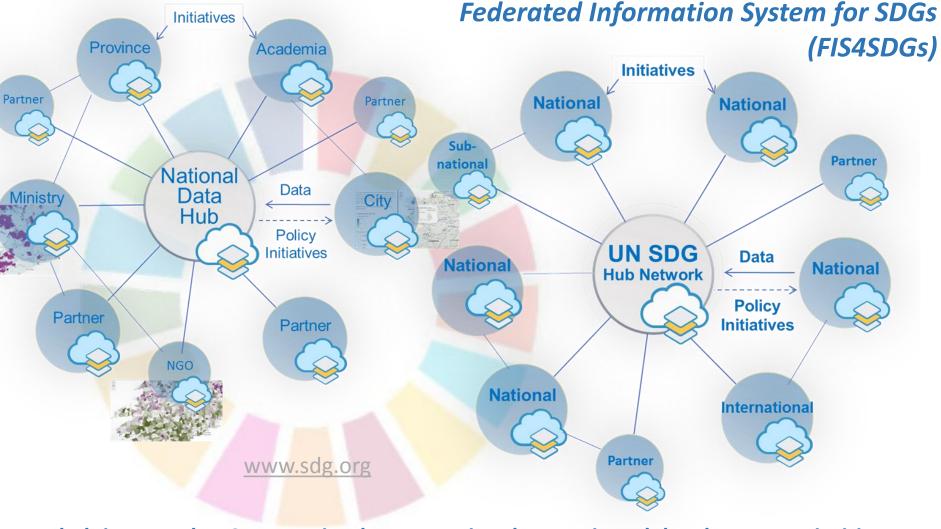
Vision:

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Implementing the 2030 Agenda through the effective dissemination and use of integrated statistical and geospatial data, enabled by technologies that facilitate data sharing, interoperability and collaboration to report on the SDGs across local, national and global data hubs.

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helping Member States to implement national strategic and development priorities, the 2030 Agenda for Sustainable Development, make decisions, and measure and monitor outcomes



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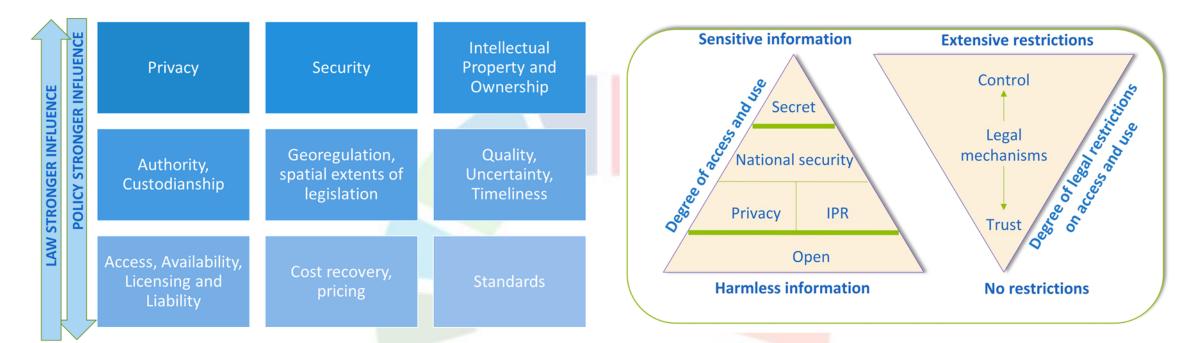
General Assembly Resolution entitled "A global geodetic reference frame for sustainable development", A/RES/69/266

Standards Guides (updated August 2018) A Guide to the Role of Standards in Geospatial Information Management Companion document on Standards Recommendations by Tier Introduction

**Future Trends in Geospatial Information Management: the five to ten year vision** Second Edition Report - <u>Final</u>

Trends in National Institutional Arrangements for Geospatial Information Strategic Framework on Geospatial Information and Services for Disasters

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#### Legal and Policy Frameworks for Geospatial Information Management

<u>Compendium on Licensing of Geospatial Information (English)</u> <u>Compendium on Licensing of Geospatial Information (Spanish)</u>



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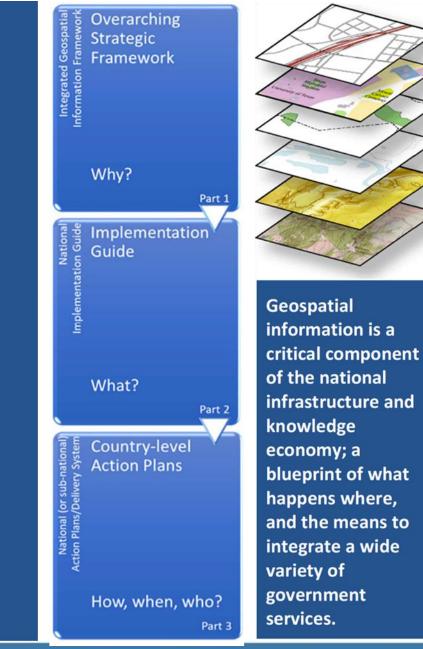


### INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK

A STRATEGIC GUIDE TO DEVELOP AND STRENGTHEN NATIONAL GEOSPATIAL INFORMATION MANAGEMENT comprises a three-part document set as separate, but connected, documents. The **Overarching Strategic Framework** is fully developed following a global consultation. The **Implementation Guide,** approved in-principle by UN-GGIM is being developed. The **Country-Ievel Action Plans** are work in progress.

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The Integrated Geospatial Information Framework provides a basis and guide for developing, integrating and strengthening geospatial information management.



### **Strengthening National Geospatial Information Management**



Strengthening national geospatial information management to support Member States implementing national strategic priorities for the wellbeing people, planet and prosperity, and to keep the promise to leave no one behind



The 9th session of the United Nations Committee of Experts on Global Geospatial Information Management, is scheduled to be held from 7 – 9 August 2019 at UNHQ New York

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# THANK YOU

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