

Strengthening National Geospatial Information Management

positioning geospatial information to effectively address global challenges



UN-GGIM

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



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org



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: Japan
- Europe: Slovenia

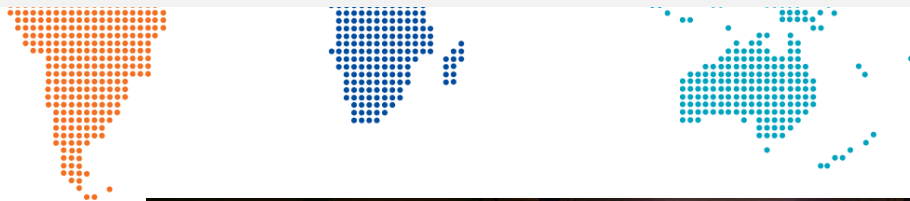


The Committee of Experts is the peak intergovernmental body to liaise and coordinate among Member States, and between Member States, international organizations and stakeholders, to foster better coordination and coherence in geospatial information management

UN-GGIM International Networks:

- Academic
- Geospatial Societies
- Private Sector

United Nations system



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org



Decision 8/109

Application of geospatial information related to land administration and management

The Committee of Experts on Global Geospatial Information Management:

- a) Welcomed the report of the Expert Group on Land Administration and Management and its continuing efforts to advocate and raise awareness on the merits and benefits of effective and efficient land administration and management by formulating an overarching policy guidance that can be referenced by Member States;
- b) Encouraged the Expert Group to consider within the overarching policy guidance: interoperability and sustainability; application of geospatial information; importance of existing internationally agreed standards; historical records; economic benefits; and value; of effective and efficient land administration and management systems;
- c) In this regard, asked the Expert Group to make use of existing appropriate globally accepted concepts and approaches, such as existing guidelines, best practices and standards, to effectively and efficiently link people to land, documenting, recording and recognizing people to land relationships in all their forms, and to secure land and property rights for all;
- d) Welcomed the Expert Group's next meeting on 26 and 29 September 2018, hosted by the Ministry of Natural Resources of China, in Deqing, Zhejiang Province, China, and convened in conjunction with the International Seminar on Effective Land Administration from 27 – 28 September 2018 at the same venue.



ECOSOC Resolution 2016/27

strengthening institutional arrangement in global geospatial information management

UN-GGIM Strategic Framework 2018 - 2022

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 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;

CONTEXT	VISION	Positioning geospatial information to effectively address global challenges				
	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	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	New Urban Agenda	Our Ocean, Our Future: Call for Action	
	GEOSPATIAL CHALLENGES & DRIVERS	Environmental management Urban planning Land management Legal & policy	Disaster management Humanitarian assistance Climate change Health & welfare	Food security Water scarcity Poverty reduction	Sustainable development Education Oceans & marine Sustainable cities	Population National security Institutional governance Socio-economic metrics		
	DIRECT NATIONAL BENEFITS & EFFICIENCIES	<ul style="list-style-type: none"> • Effective geospatial information management • 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 • Integration of national information systems and services across all levels of government • Best practices and use cases for enriching national processes on geospatial information management • Enhanced stakeholder engagement and communication 						
	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	<ul style="list-style-type: none"> • 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 Implementation • Global Fundamental Geospatial Data Themes: Implementation • 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
--------------	--------------------------------	---



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

UN-GGIM Strategic Framework 2018 – 2022

CONTEXT	VISION	<i>Positioning geospatial information to effectively address global challenges</i>				
	MISSION	<i>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</i>				
	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

Transforming our World: The 2030 Agenda for Sustainable Development						
GLOBAL POLICY FRAMEWORK	Sendai Framework for Disaster Risk Reduction 2015-2030	SIDS Accelerated Modalities of Action (SAMOA) Pathway	Addis Ababa Action Agenda	Paris Agreement on Climate Change	New Urban Agenda	Our Ocean, Our Future: Call for Action





INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK

A STRATEGIC GUIDE TO DEVELOP AND STRENGTHEN
NATIONAL GEOSPATIAL INFORMATION MANAGEMENT

.. .. Integrated Geospatial Information Framework as an overarching strategic policy guide for countries to reference when developing and strengthening their national and sub-national geospatial information systems and capabilities;

.. .. The Framework to be a living document, further refined as technologies, processes and knowledge evolves, and comprising three parts as separate, but connected documents;

.. .. Adopted the Part 1, Overarching Strategic Framework, as a forward-looking Framework that provides the overarching strategic messages Focusing on the policy, perspectives and key elements of geospatial information;

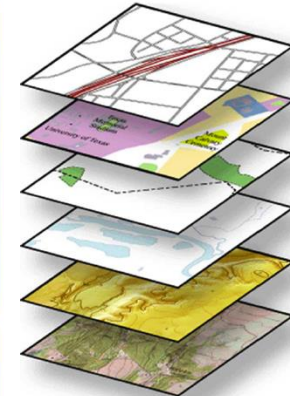




INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK

A STRATEGIC GUIDE TO DEVELOP AND STRENGTHEN
NATIONAL GEOSPATIAL INFORMATION MANAGEMENT

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



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.



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

Integrated Geospatial
Information Framework

Overarching Strategic Framework

Part 1

National
Implementation Guide

Implementation Guide

Part 2

National (or sub-national)
Action Plans/Delivery System

Country-level Action Plans

Part 3

The **Integrated Geospatial Information Framework** comprises a three-part document set as separate, but connected, documents. The **Overarching Strategic Framework** is fully developed following a global consultation. The structure and main elements of the **Implementation Guide** are developed and structure approved in-principle. The **Country-level Action Plans** are work in progress.



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org



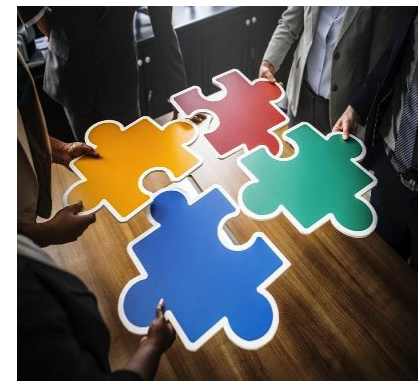
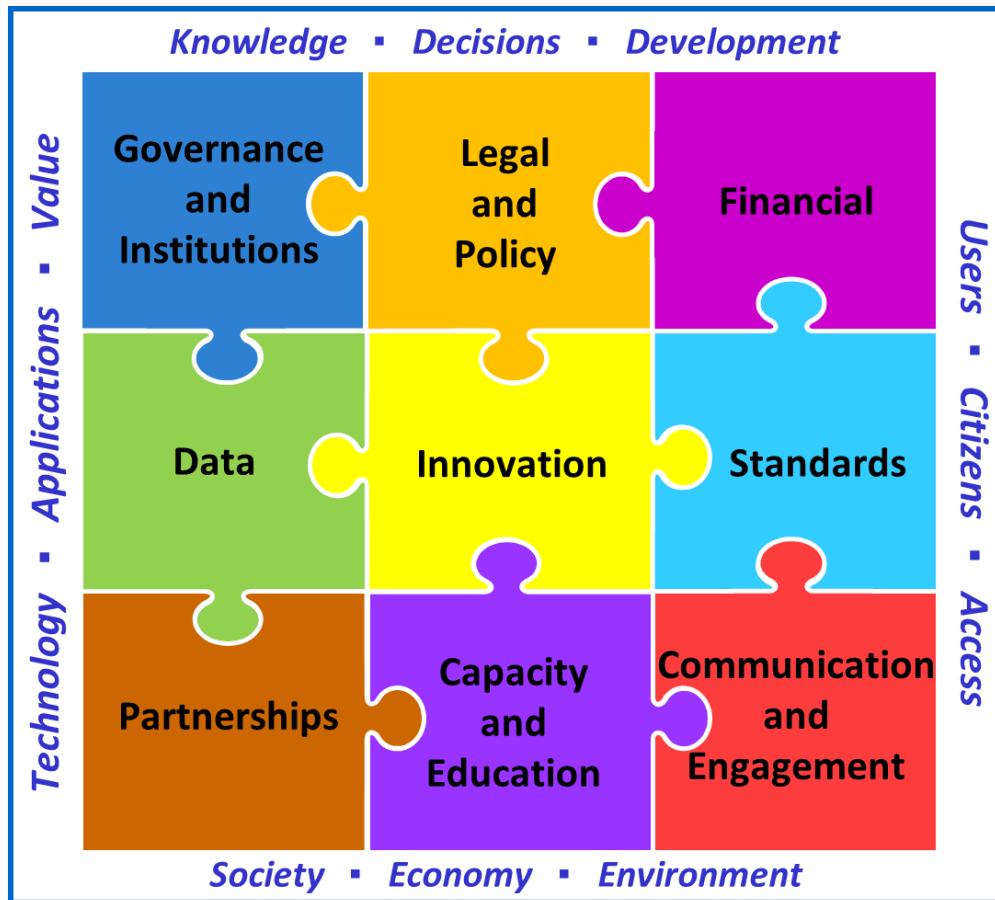
**INTEGRATED GEOSPATIAL
INFORMATION FRAMEWORK**

A STRATEGIC GUIDE TO DEVELOP AND STRENGTHEN
NATIONAL GEOSPATIAL INFORMATION MANAGEMENT

Governance →

Technology →

People →



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



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

The efficient use of geospatial information systems

To promote and support the use of geospatial information systems and integrated geospatial information systems

National Development Expectations • Multi-hazard Risk Reduction • New Urban Agenda • Island Developing States • Climate Change

Strategic Enablement

Trail
Acco

Effective Geospatial Information Management

Sustainable Education and Training Programs

GOALS

Effective Geospatial Information Management

Sustainable Education and Training Programs

Increased Capacity, Capability and Knowledge Transfer

International Cooperation and Partnerships Leveraged

Integrated Geospatial Information Systems and Services

Enhanced National Engagement and Communication

Economic Return on Investment

Enriched Societal Value and Benefits

STRATEGIC PATHWAYS

Governance and Institutions

Governance model
Institutional structures
Leadership
Value proposition

Legal and Policy

Legislation
Implementation and accountability
Norms, policies and guides
Data protection and licensing

Financial

Business model
Investment
Partnerships and opportunities
Benefits realization

Data

Fundamental data themes
Data supply chain interlinkages
Custodianship, acquisition and management
Data curation and delivery

Innovation

Technological advances
Promoting innovation and creativity
Process Improvement
Bridging the digital divide

Standards

Legal interoperability
Semantic interoperability
Data interoperability
Technical interoperability

Partnerships

Cross-sector and interdisciplinary cooperation
Community participation
Industry partnerships and joint ventures
International collaboration

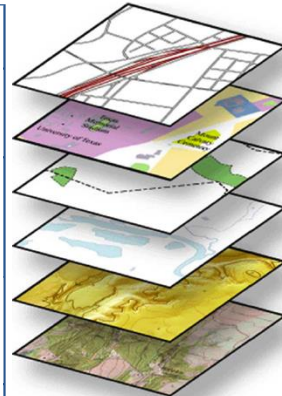
Capacity and Education

Awareness raising
Entrepreneurship
Formal education
Professional workplace training

Communication and Engagement

Stakeholder identification
Planning and execution
Integrated engagement strategies
Monitoring and evaluation

Knowledge | Decisions | Development | Society | Economy | Environment | Users | Citizens | Access | Technology | Applications | Value



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.



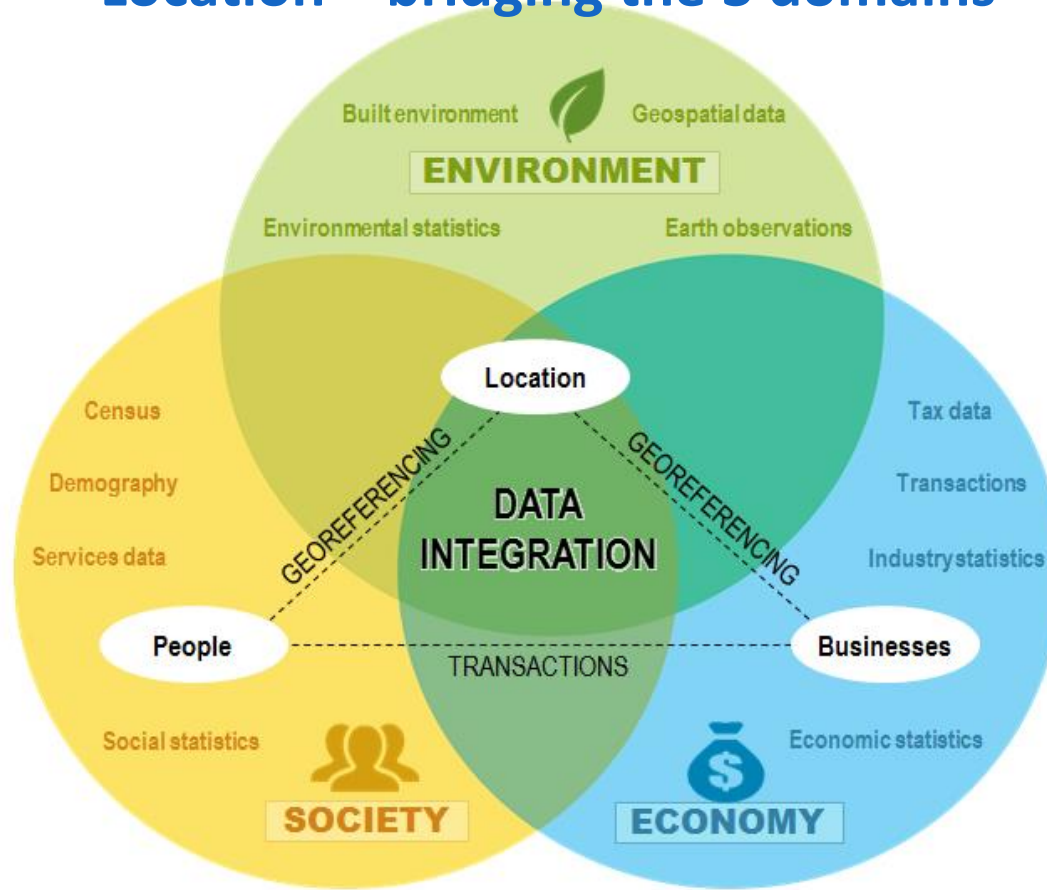
UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

Location – bridging the 3 domains



Bridging between two communities

Statistical Community



"The Global Statistical Geospatial Framework will provide:

- a common method for geospatially enabling statistical and administrative data,
- ensure that this data can be integrated with geospatial information."

Geospatial Community

Fundamental Geospatial Datasets

Elevation and Depth

Imagery

Positioning



Global Statistical Geospatial Framework (GSGF)

Accessible & Usable

Accessible and useable geospatially enabled statistics

Identification and development of policies, standards and guidelines to support the release and use of geospatially enabled information.

Statistical and geospatial interoperability

Statistical and geospatial interoperability

Greater interoperability to enhance the efficiency of creation, discovery, access and use of data

Common geographies for dissemination of statistics

Common geographies for dissemination of statistics

A common set of geographies for the display, reporting and analysis of statistics to enable comparisons across datasets – statistical and geospatial.

Geocoded unit record data in a data management environment

Geocoded unit record data in a data management environment

Storage of the unit record statistical data linked to a geocode within a data management environment will ensure flexibility over time and protect privacy and confidentiality.

Use of fundamental geospatial infrastructure and geocoding

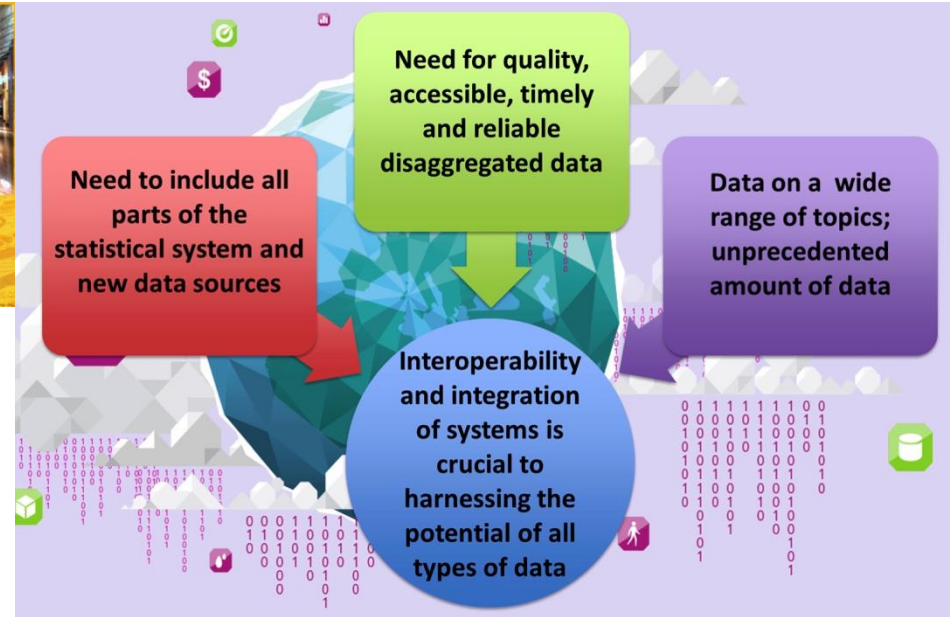
Use of fundamental geospatial infrastructure and geocoding

A common and consistent approach to establishing a location and temporal description of each unit in a dataset, using national fundamental datasets.

Foundational for the integration of statistical and geospatial information



Addressing the data needs for the 2030 Agenda



UN-GGIM

Decision 7/106:

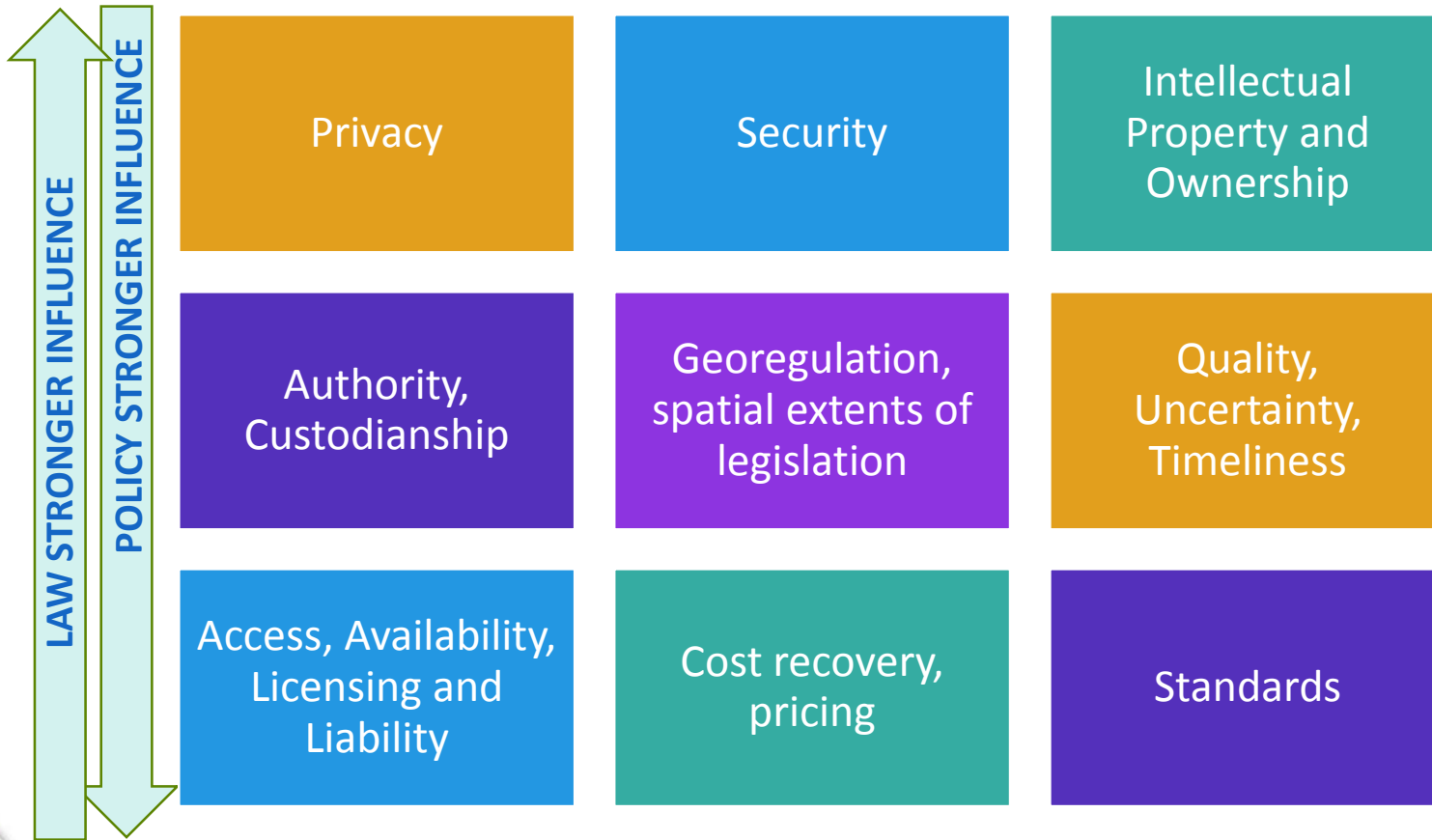
Legal and policy frameworks, including issues related to authoritative data

(c) Endorsed the establishment of the working group on legal and policy frameworks for geospatial information management, ..

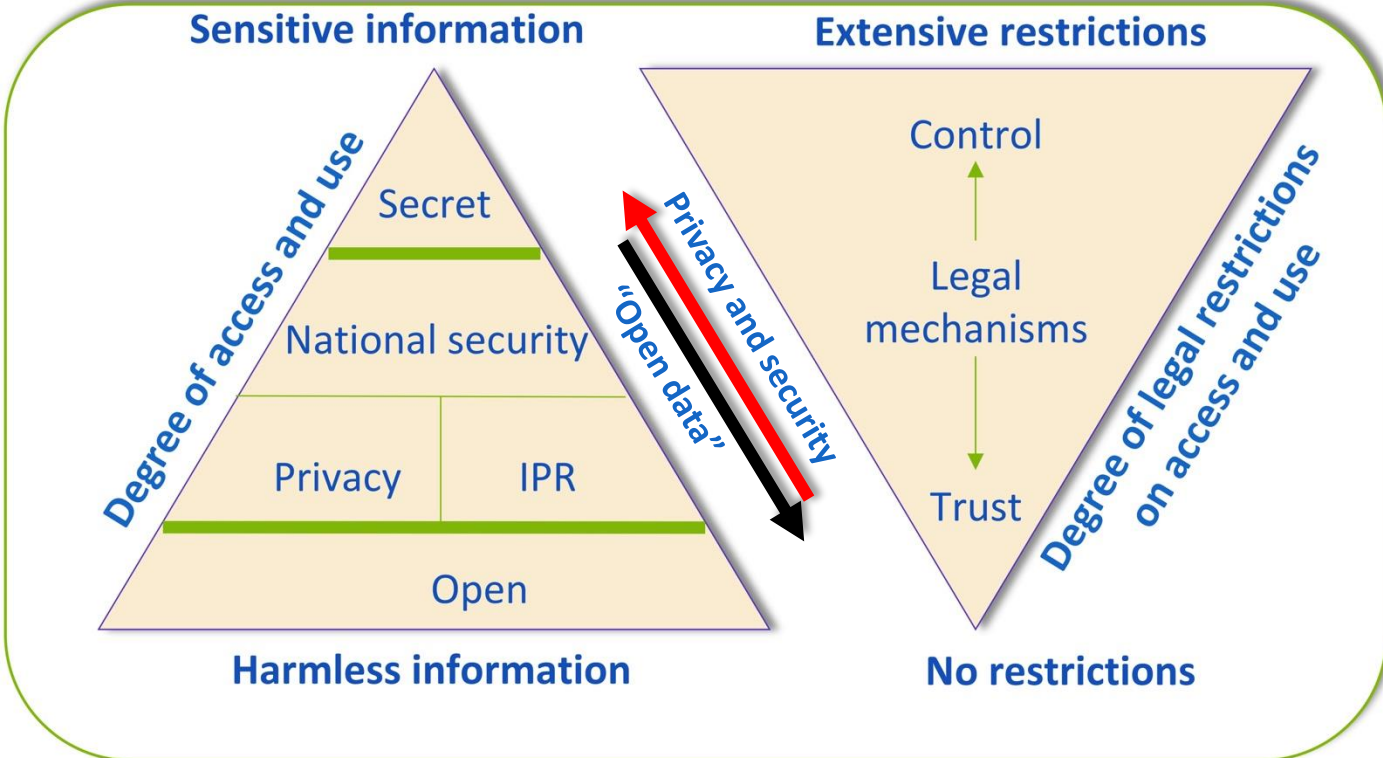
(g) to analyze a number of

complex issues regarding geospatial information including, definitions on open data, personal data, data privacy, data protection, data licensing and the security and misuse of data.





Impact on access, sharing and use of information



Global Fundamental Geospatial Data Themes



Global Geodetic Reference Frame



Geographical Names



Addresses



Functional Areas



Buildings and Settlements



Land Parcels



Transport Networks



Elevation and Depth



Population Distribution



Land Cover and Land Use



Geology and Soils



Physical Infrastructure



Water



Orthoimagery

Adopted by the Committee of Experts on Global Geospatial Information Management at its 7th Session (Decision 7/104), August 2017



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

“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.



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

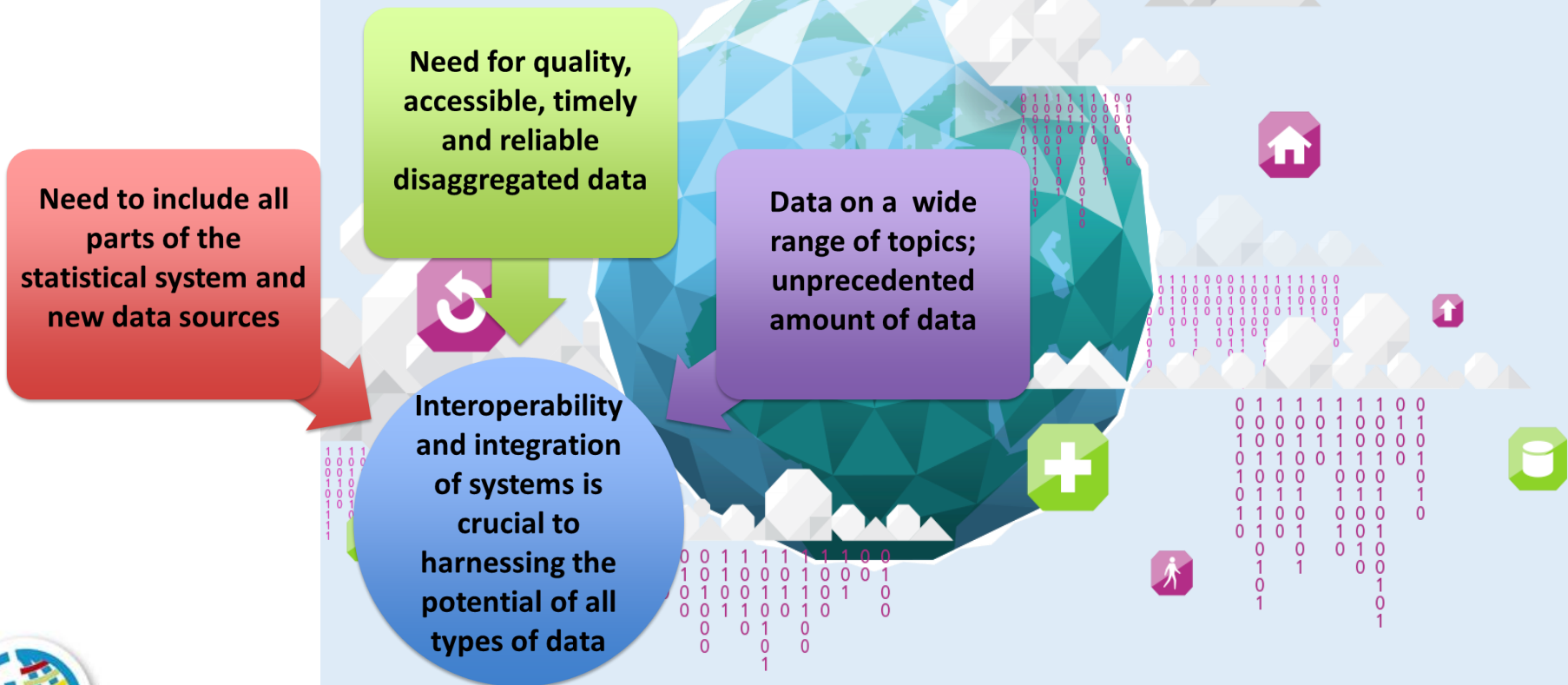
Positioning geospatial information to address global challenges

ggim.un.org

2030 Agenda: Goals, targets, indicators, measuring...



Addressing the data needs for the 2030 Agenda





UNITED NATIONS WORLD GEOSPATIAL INFORMATION CONGRESS



19 – 21 November 2018
Deqing, Zhejiang Province
China

*Promoting comprehensive dialogue with
all relevant actors (ECOSOC 2011/24)*



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org



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

Thank You



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to effectively address global challenges

ggim.un.org