

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

Busan, Republic of Korea
7 – 9 March 2019

Agenda Item #5

*Strengthening National Geospatial Information Management
The United Nations Integrated Geospatial Information Framework*

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United Nations
Framework Convention on
Climate Change

UNITED NATIONS
**PARIS CLIMATE
AGREEMENT**
SIGNING CEREMONY
— 22 APRIL 2016 —



**Sendai Framework
for Disaster Risk Reduction
2015 - 2030**



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)

**NEW
URBAN
AGENDA**

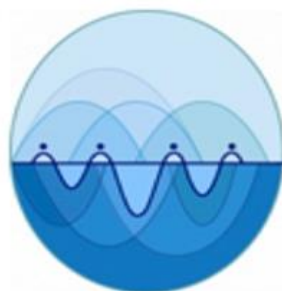
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TRANSFORMING OUR WORLD:

**THE 2030 AGENDA FOR
SUSTAINABLE DEVELOPMENT**



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



**ISLAND
VOICES**
GLOBAL
CHOICES

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

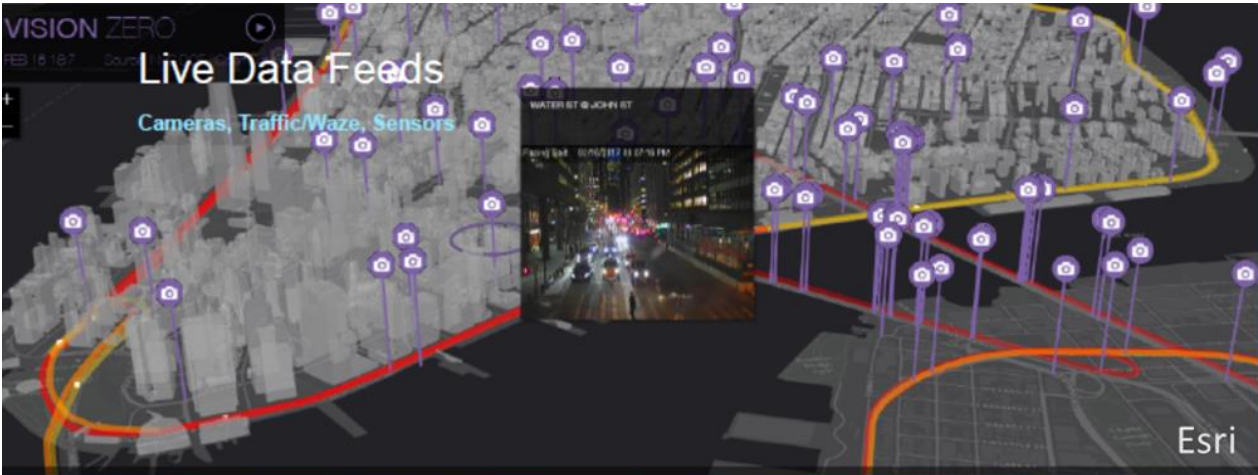


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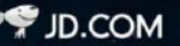
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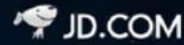
What is Smart Society?



Smarter City

Information
Communication
IoT

What is Smart Society?



Smarter Society

AI
Big Data
Cloud
IoT



Esri



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Everything that happens ... happens somewhere.

We are now able to locate, view, relate, record, collect, measure, analyze, model and monitor what happens when, why, how, and where.

We can do this more today than ever before ... which is far less than what we will do tomorrow.

“Everything happens somewhere...”

(Nancy Tosta, June 2001)



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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.

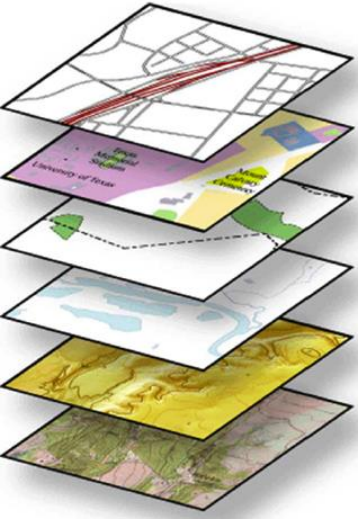


While 'data' is still the primary information currency, the many disruptive technology enablers and applications are challenging the norm for the mission of national geospatial information authorities.



Geospatial information 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.





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.

- provides the integrative platform for all digital data that has a location dimension to it
 - needed by all countries and all sectors for national development and decision-making
 - forming a new and emerging “data ecosystem” for sustainable development where collaborative information systems, that are comprehensive and coordinated, able to provide evidence on the state of a place, people, events and activities, and to deliver timely information necessary for citizens, organizations and governments to build accountable actions and make informed and evidenced-based decisions
- need to significantly support, particularly developing countries, to work towards national integrated information systems

Committee of Experts Decision 8/113:

.. .. the 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; (E/2018/46)



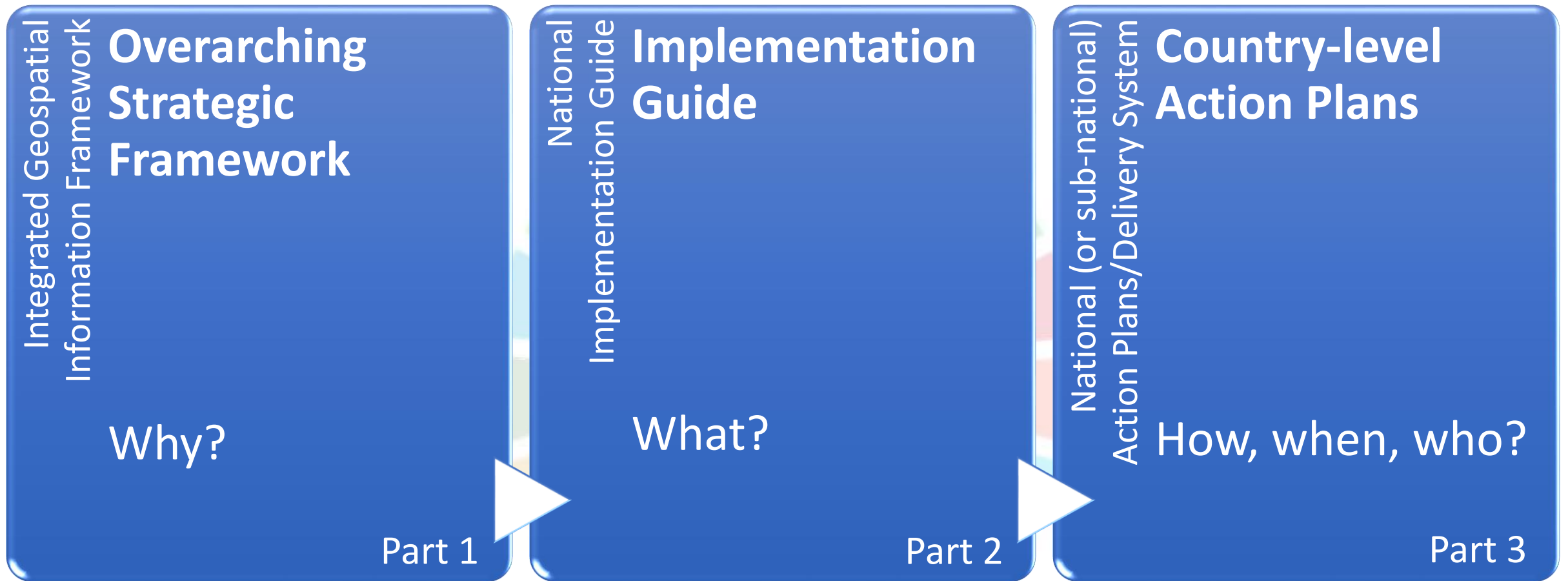
The **Integrated Geospatial Information Framework**, an overarching strategic framework that was adopted at the eighth session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM). The Integrated Geospatial Information Framework provides a much needed basis, a reference and a mechanism for Member States when developing and strengthening their national and sub-national arrangements in geospatial information management and related infrastructures. The Framework translates high level policy concepts into practical implementation guidance for use by Member States, and does this by leveraging **seven (7) underpinning principles, eight (8) goals and nine (9) strategic pathways** as a means for governments to establish more effective geospatial information management arrangements.

The nine strategic pathways guide governments towards implementing integrated geospatial information systems in a way that will *“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)



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.





The **Integrated Geospatial Information Framework** comprises 3 separate, but connected, documents. The **Overarching Strategic Framework** has been completed and adopted by UN-GGIM in August 2018. The structure and main elements of the **Implementation Guide** have ‘in-principle’ approval by UN-GGIM and being developed. **Country-level Action Plans** are work in progress.



Overarching Strategic Framework

- A forward-looking Framework built on national needs and circumstances.
- Provides the overarching strategic messages and more expansive and integrated national framework, particularly 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.
- It does 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.



The Strategic Framework is a mechanism for articulating and demonstrating national leadership, cultivating champions, and developing the capacity to take positive steps.



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

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



The seven Principles are the key characteristics and values that provide the compass for implementing the Framework, and allow for methods to be tailored to individual country needs and circumstances.




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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 eight 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.



Overarching Strategic Framework: Strategic Pathways

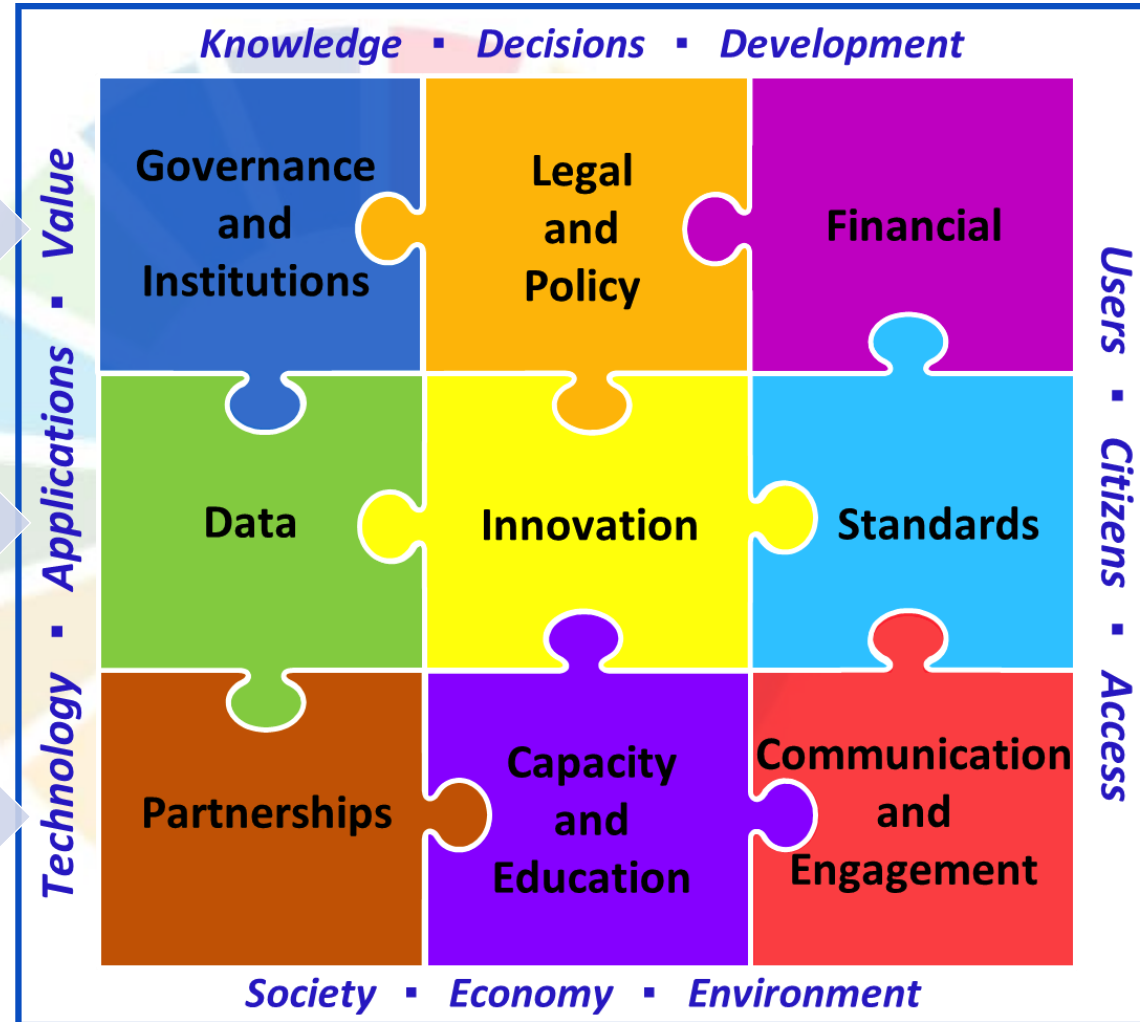
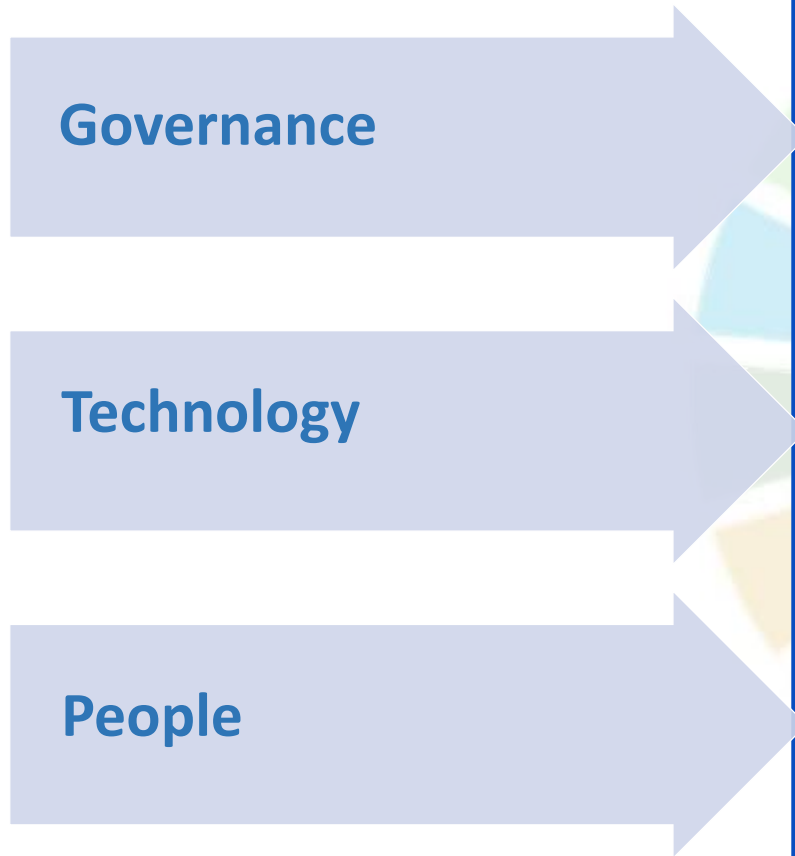
- The Framework is anchored by 9 Strategic Pathways in 3 main areas of influence: Governance; Technology; and People.
- The objective of the Strategic Pathways is to guide governments towards implementing integrated geospatial information systems in a way that will deliver a vision for sustainable social, economic and environmental development.
- Each Strategic Pathway is augmented by specific objectives to assist countries in achieving the required results.
- The Strategic Pathways are presented as separate pieces of a jigsaw puzzle in recognition that there are many aspects and dimensions to each individual pathway, and that when joined together, the Framework is connected, integrated and implemented.
- Each of the 9 Strategic Pathways are explained in more detail, along with specific guidance, in Part 2: Implementation Guide.



There needs to be more institutional collaboration, coordination, interoperability and integration across the various national data information systems and platforms.



Overarching Strategic Framework: Key Influences



There needs to be more institutional collaboration, coordination, interoperability and integration across the various national data information systems and platforms.





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.

GOALS									
Effective Geospatial Information Management		Increased Capacity, Capability and Knowledge Transfer		Integrated Geospatial Information Systems and Services			Economic Return on Investment		
Sustainable Education and Training Programs		International Cooperation and Partnerships Leveraged		Enhanced National Engagement and Communication			Enriched Societal Value and Benefits		
STRATEGIC PATHWAYS									
Governance and Institutions	Legal and Policy	Financial	Data	Innovation	Standards	Partnerships	Capacity and Education	Communication and Engagement	
Governance model Institutional structures Leadership Value proposition	Legislation Implementation and accountability Norms, policies and guides Data protection and licensing	Business model Investment Partnerships and opportunities Benefits realization	Fundamental data themes Data supply chain interlinkages Custodianship, acquisition and management Data curation and delivery	Technological advances Promoting innovation and creativity Process improvement Bridging the digital divide	Legal interoperability Semantic interoperability Data interoperability Technical interoperability	Cross-sector and interdisciplinary cooperation Community participation Industry partnerships and joint ventures International collaboration	Awareness raising Entrepreneurship Formal education Professional workplace training	Stakeholder identification Planning and execution Integrated engagement strategies Monitoring and evaluation	
Knowledge Decisions Development Society Economy Environment Users Citizens Access Technology Applications Value									

The efficient use of geospatial information

To promote and sustainably integrated geospatial information

National Development Expectations • Multi-stakeholder New Urban Agenda • Small Island Developing States • Climate Change

Strategic Enablement

Effective Geospatial Information Management

Sustainable Education and Training Programs



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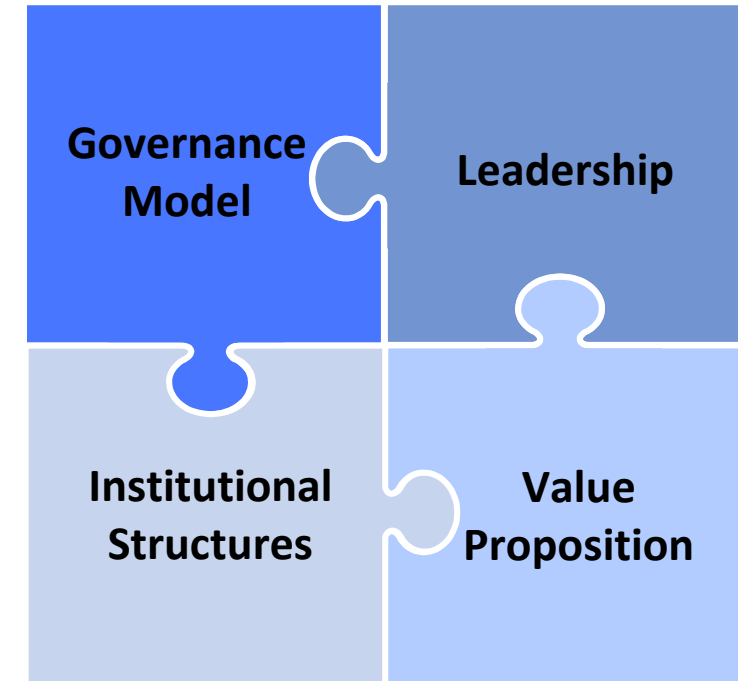
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Governance and Institutions

Establishes the leadership, governance model, institutional arrangements and a clear value proposition as a means to strengthen multi-disciplinary and multi-sectoral participation and a commitment to achieving an Integrated Geospatial Information Framework.

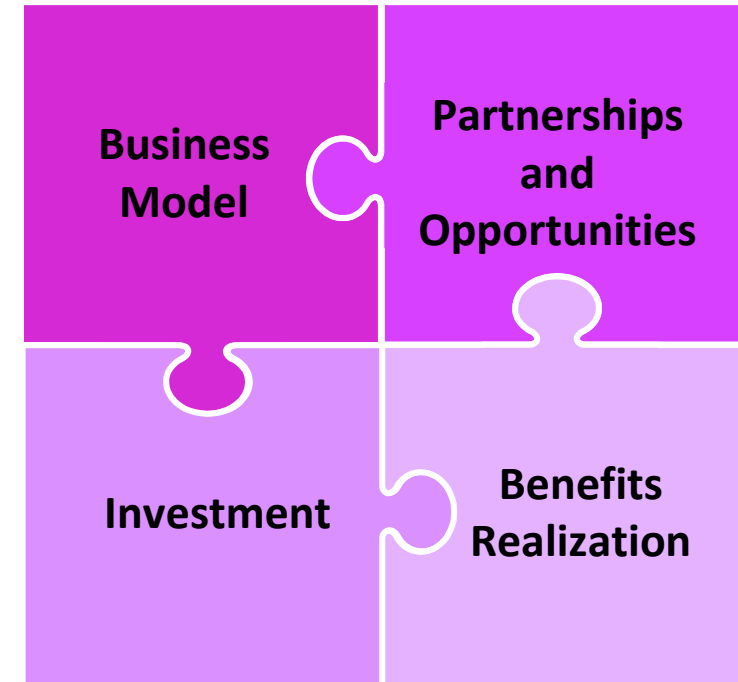
Objective is to attain political endorsement, strengthen institutional mandates and build a cooperative data sharing environment through a shared understanding of the value of an Integrated Geospatial Information Framework, and the roles and responsibilities to achieve the vision.





Establishes the business model, develops financial partnerships, and identifies the investment needs and funding sources for delivering integrated geospatial information management, as well as recognizing the benefits realization milestones that will achieve and maintain momentum.

Objective is to achieve an understanding of the implementation costs and ongoing financial commitment necessary to deliver integrated geospatial information management that can be sustained and maintained in the longer term.

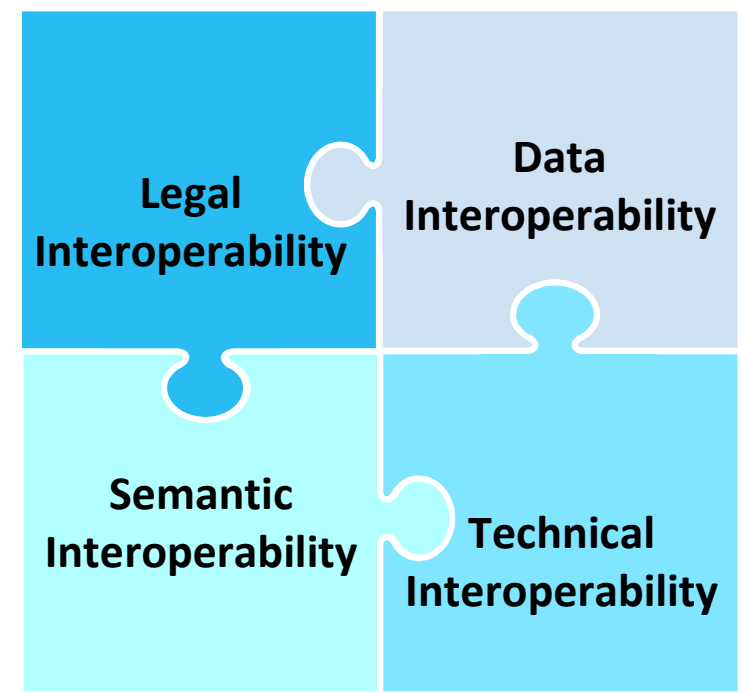




Standards

Establishes, and ensures the adoption of, best practice standards and compliance mechanisms that enable legal, data, semantic and technical interoperability, which are fundamental to delivering integrated geospatial information and knowledge creation.

Objective is to enable different information systems to communicate and exchange data, enable knowledge discovery and inferencing between systems using unambiguous meaning, and provide users with lawful access to and reuse of geospatial information.



Strengthening National Geospatial Information Management



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

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



THANK YOU



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