

Virtual High Level Forum on UN-GGIM
2 June 2020

The IGF: Strategic Pathways 1, 2, 3

Governance for National Leadership in Geospatial Information Management

Tim Trainor

President, International Cartographic Association



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

Governance Agenda

- General information on governance
- Governance as an influencer
- SP1 – Governance and Institutions
- SP2 – Policy and Legal
- SP3 – Financial
- Summary



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

Why Governance?

- Governance is essential to achieving integrated geospatial information management for a successfully sustainable program or project. It includes:
 - Institutional arrangements
 - Policy and legal requirements
 - Financial responsibilities
- Governance is the solar power that guides the other SPs to accomplishment.



Benefits of Governance

- One goal is transformational change. How does governance enable transformations?
 - What does transformational change look like without governance?
- Governance is needed for bridging the geospatial digital divide.
- Governance supports efforts toward sustainable solutions for economic, social, and environmental development.



Examples of Empowerment through Governance

- Helps manage the integration of other meaningful data together with geospatial information.
- Serves as a roadmap for expanding the value of NSDI while utilizing the benefits of each Strategic Pathway.
- Supports basic functions of collection, maintenance, integration and dissemination of geospatial information.
- Aligns with national priorities, national needs, and national circumstances while influencing transformational changes.



Governance and Part 1 of the **IGIF** – Close Connection

- Governance and Institutions align more closely with Part 1 of the IGIF than most other Strategic Pathways.
 - From Part 1 of the **IGIF**, leaders understand more clearly the importance and underlying role of geospatial information in managing their responsibilities



Interlinkages – Ingredients for Governance

- Interlinkages between the 9 Strategic Pathways are important.
- An example list of ingredients for governance includes:
 - One part glue – to join the SPs in a common approach for success;
 - One part rules – to guide the process through consistency and understanding;
 - One part traffic cop - to monitor application of the rules;
 - One part judge – to make decisions for new influences and at key points, and to resolve impacts when rules are not followed.



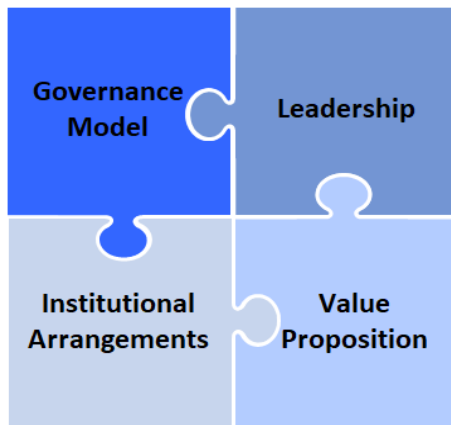
Governance: From General to Specific

- Form the leadership structure and create the organization including rules of engagement
- Develop an execution plan for the IGIF
 - Key milestones with associated schedule
- Apply sound principles of project management at every level.
 - Responsibilities include change management, risk management and mitigation, project schedules, budget and resource allocations, and performance indicators and performance monitoring



Governance and Institutions - Policy and Legal - Financial

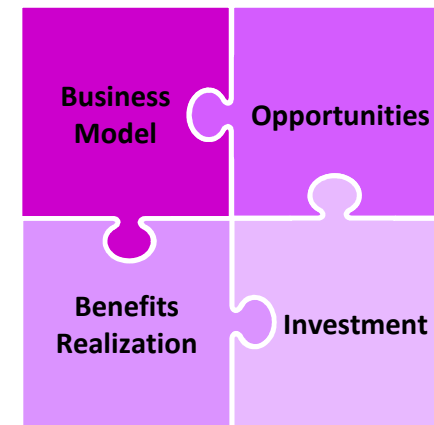
Governance and Institutions



Policy and Legal



Financial



Governance and Institutions - Objective

- Attain political endorsement
- Strengthen institutional mandates
- Build a cooperative data sharing environment through a shared vision and understanding of the value of an Integrated Geospatial Information Framework, and the roles and responsibilities to achieve the vision.



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

Governance and Institutions: A Path Forward

- **Framework:** Cooperative governance frameworks
- **Leadership:** Strong leadership that penetrates across sectors and through all levels of government
- **Institutions:** Collaboratively working together
 - Sharing information
 - Working together towards common strategic priorities and goals
 - Enabling community and business participation



Governance and Institutions: Key Elements

- **Governance Model:**

- Develop and implement a governance model based on a geospatial strategy for the nation
- Facilitated by governing bodies responsible for aligning and supporting policies and laws affecting:
 - Acquisition, creation, management, use, and dissemination of geospatial information
- Directs the level of coordination across government – and with all levels of government – through partnerships



Governance and Institutions: Key Elements

- **Leadership:**

- Formulate and sustain a *strategy* for national geospatial information management
- Formulate a *vision* and accomplish that vision via positive actions
- Develop a *Country-level Action Plan* for implementing the IGIF
- Create a *governance process* for assuring effective management responsibilities for the enterprise
- Serve as a *champion* to government, industry, academia and society



Governance and Institutions: Key Elements

- **Value Proposition:**

- Demonstrates the value of geospatial information as a government asset
- Key to achieving political and management buy-in, financial support, human resource commitment, and program sustainability.
- Measures, monitors, and communicates the economic benefit and public good of integrated geospatial information to national priorities, national needs, and national circumstances including citizen and societal benefits



Governance and Institutions: Key Elements

- **Institutional Arrangements:**

- Formal and informal
- Defines roles and responsibilities across government
 - For tasks associated with all aspects of geospatial information management, including appropriate coordination, management and oversight for meeting national priorities.
- Defines roles and responsibilities between government and private sector
- Strengthens institutional arrangements through sound policies and legal mechanisms



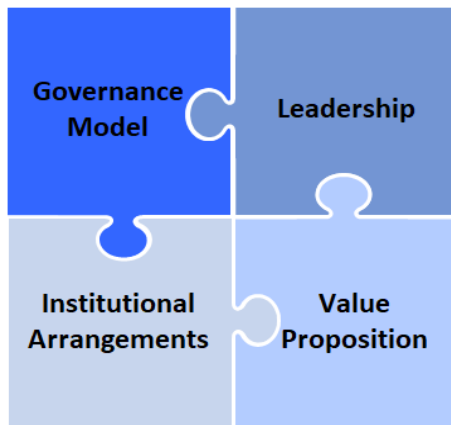
Governance and Institutions: Outcome Goals

- Good governance and cooperative institutional arrangements are a priority in any geospatial information reform agenda.
 - Enables geospatial information challenges to be met head-on
 - Provides flexibility to accommodate the rapidly changing environment
 - Strengthens ability to embrace community and business participation within a culture of digital reform and transformation.



Governance and Institutions - Policy and Legal - Financial

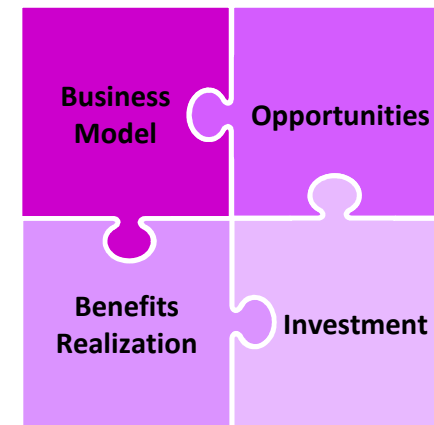
Governance and Institutions



Policy and Legal



Financial



Policy and Legal Pathway

- Defined governance responsibilities of authority, decision-making and accountability are needed
 - At all levels of government
 - Complemented by a policy and legal framework that supports information access, dissemination, and reuse
- Periodic review of the legal and policy framework for advances in the geospatial information ecosystem



Policy and Legal Considerations

- Binding and non-binding
- Direct and indirect implications
- Can impact
 - Collection, use, storage and distribution of geospatial information
- Sometimes influenced by other policies or legislation
- Steps to consider:
 - Foster policy development that lead to policy and legal frameworks
- To protect against potential business and security risks



Policy and Legal - Key Elements

- **Legislation** – laws and regulations
 - provide the legal framework in which geospatial policies operate
 - may be specific to geospatial information or closely related topics
- **Policies, Norms and Guides** – typically aspirational and relatively easy to develop and adopt
 - include proven practices that provide good direction for strengthening geospatial information management.



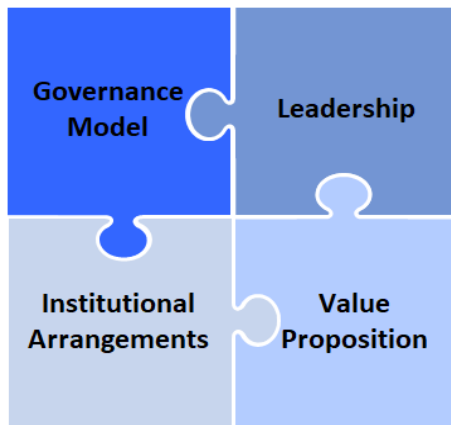
Policy and Legal - Key Elements

- **Data Protection, Licensing and Sharing** – used to address complex legal issues with data including:
 - risks and safeguards
 - sharing and dissemination
 - and licensing issues that impact availability, accessibility and application of geospatial information
- **Governance and Accountability** – the policy and legal limits
 - effective management and use of geospatial information for good governance, effective implementation and accountability.



Governance and Institutions - Policy and Legal - Financial

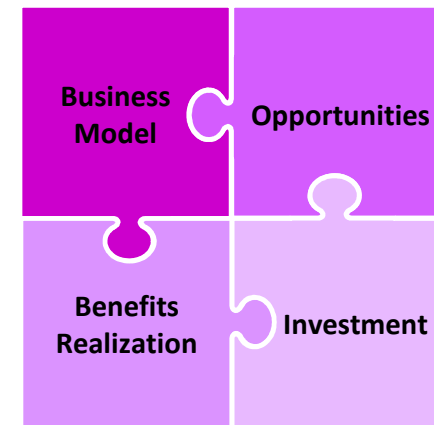
Governance and Institutions



Policy and Legal



Financial



Financial Pathway

- Financial governance, planning, management and investment are required to achieve **sustainable** integrated geospatial information management



The Business Case – Reasons for Financing

- The business case provides arguments for the following:
 - Why is this investment activity important?
 - What benefits does the country derive from its implementation?
 - What problem or challenge is solved with this investment?



Financial - Key Elements

- **Business Model** facilitates the wider use of integrated geospatial information, is compatible with the government's fiscal policy and funding approaches, and is implemented through a financial plan.
- **Opportunities** are the techniques and methods for aligning integrated geospatial use cases with national strategic and policy objectives to identify opportunities, partnerships, investment priorities and benefits



Financial - Key Elements

- **Investment** - the business case that justifies funding and investment including:
 - strategic case (why now)
 - economic case (quantified benefits)
 - commercial case (customers and partners)
 - financial case (funding sources)
 - financial management strategy for implementing the investment and resources required.



Financial - Key Elements

- **Benefits Realization** - a plan to evaluate, measure and monitor the complete life cycle of the implementation of the IGIF, including the key performance indicators that form the basis for impact assessment and quantification



Summary

- Success in implementing a nation's IGIF is improved with a well-organized and structured governance plan. Strategic Pathway 1: Governance and Leadership, notes that “Good governance and cooperative institutional arrangements are the first priority in the geospatial information reform agenda.”
- A nationally integrated geospatial information program requires a significant investment but has benefits in advancing the priorities and circumstances of a nation. Given its importance, having appropriate and constructive oversight is recommended.

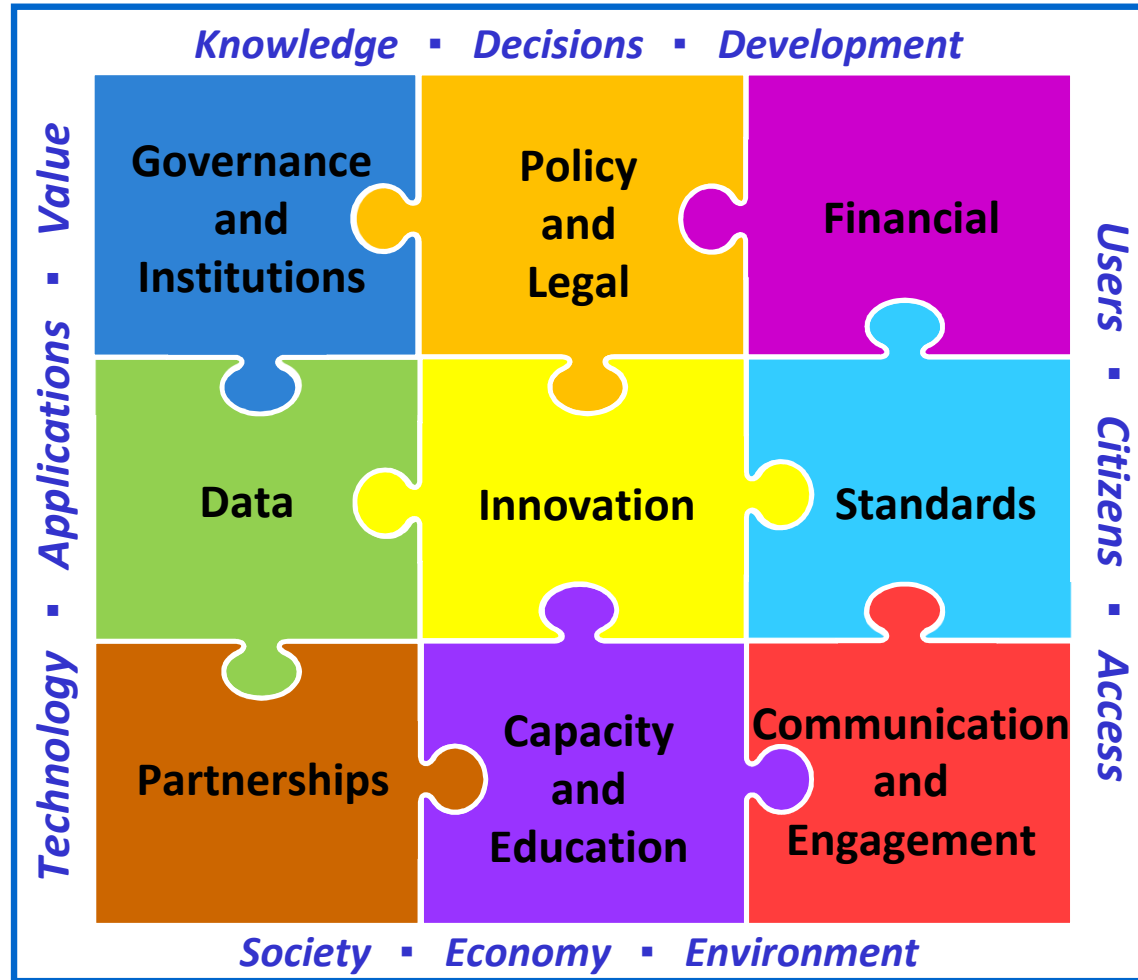


9 Strategic Pathways

Governance →

Technology →

People →



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.



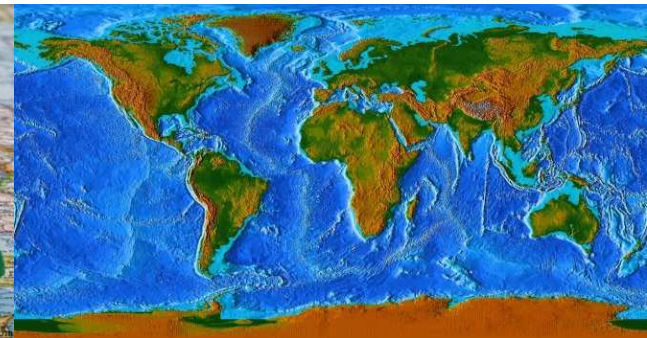
UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

Transforming our world -
The 2030 Agenda for
Sustainable Development



Virtual High Level Forum on UN-GGIM
2 June 2020

The Integrated Geospatial Information Framework: Strengthening the Geospatial Landscape

Thank You 😊



UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org