

# Integrated Geospatial Information Framework Developing the Implementation Guide January - October 2019

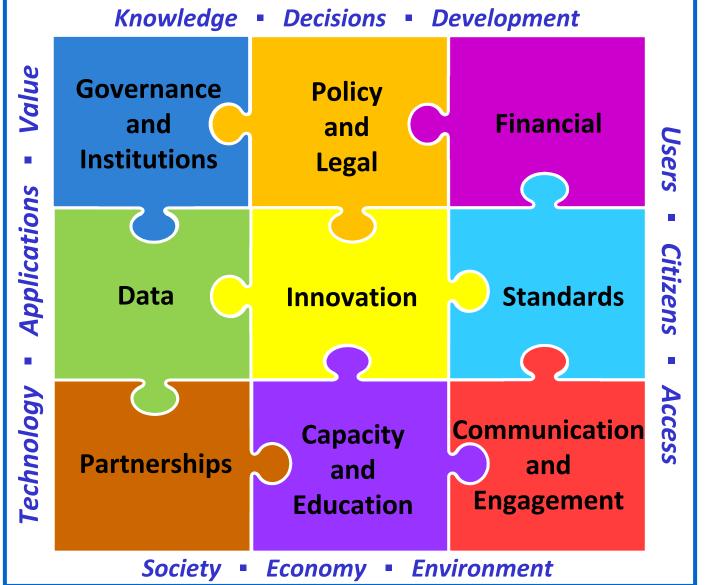


## 9 Strategic Pathways

**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.



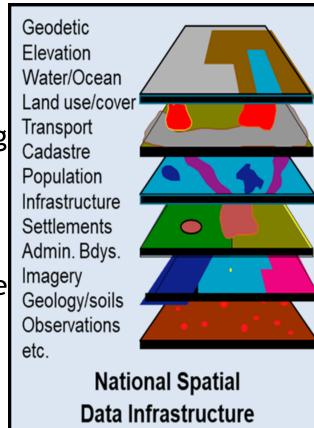
#### IGIF: Implementation Guide - Foundations

- The Implementation Guide provides the 'what', the *specific <u>guidance</u> and <u>options</u> to be taken by countries in implementing the IGIF*. It captures strategic to operational needs with guiding principles; while not being detailed and prescriptive Country-level Action Plans do that.
- Expanding on each of the 9 Strategic Pathways, the Guide comprises references, good
  practices and specific principles and actions for each of the Pathways, including those
  generated through each of the Subcommittee, Expert and Working Groups of UN-GGIM.
- The aim is to provide guidance for governments to establish 'nationally' integrated
  geospatial information frameworks in countries in such a way that transformational
  change is enabled, visible and sustainable. The Guide's benefits will cascade right down to
  the citizen.
- While intended to benefit low to middle income countries and small island developing States, the Guide can be used to establish and/or improve national geospatial information management arrangements. The Guide can also be used to coordinate activities to achieve alignment between already existing national agency capabilities and infrastructures.

#### IGIF: Linkages to the NSDI

 Virtues of NSDIs are their ability to promote geospatial data sharing throughout all levels of government and society, enabling effective use of geospatial data for sustainable national development and other every day requirements.

- Two factors challenge the limitations of a traditional NSDI:
  - 1. The growing availability of more data and more data types. Big data, structured and unstructured data, and the potential value of other 'external' data pressure existing NSDI structures. Further, some data are geospatially referenced, others are not.
  - 2. The need for data integration and analysis. Traditional NSDIs are very structured (silo) repositories of valuable geospatial information, with defined and managed (separate) data sets and themes. Today, these data assets must meet diverse and specific local and national requirements, and need to be 'integrated' with other data and sectors.



### IGIF: Linkages to the NSDI

- The principal focus of NSDIs is geospatial data. What is needed to establish or maintain an integrated national geospatial program is not sufficiently addressed by the NSDI.
- While an NSDI is a core and valuable component, a national geospatial program is much more than the data. The IGIF defines each of the interconnected 9 Strategic Pathways required for an integrated national geospatial program.
- Building on the existing benefits and practices of NSDIs, the IGIF is more comprehensive than the traditional efforts of NSDIs.
- What is the driver for why we have the IGIF rather than the NSDI? More diverse data types and needs that are now more relevant and dependent on geospatial data than were originally considered. This is a reflection of both technology evolution and the new and emerging data ecosystem that is more dependent on a systems approach to 'location' and 'integration'.

Geodetic Elevation Water/Ocean Land use/cover **Transport** Cadastre Population Infrastructure Settlements Admin. Bdvs. **Imagery** Geology/soils Observations etc. **National Spatial** 

Data Infrastructure

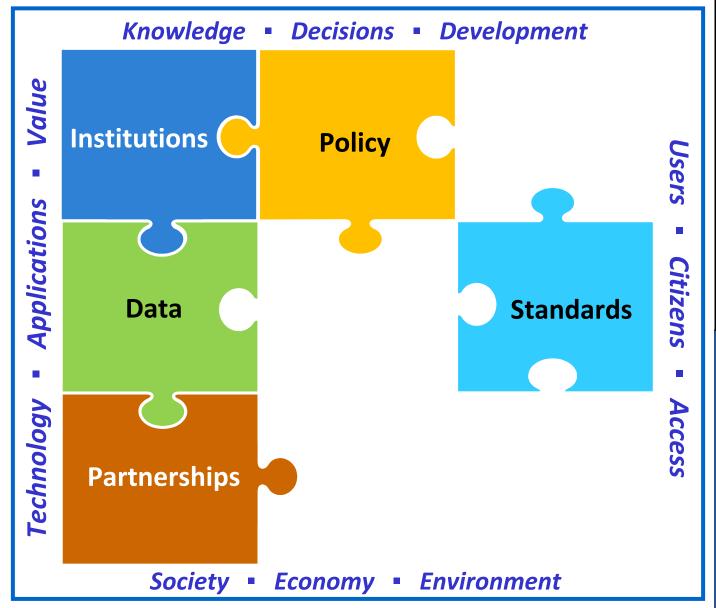
The Framework will augment and build upon existing NSDI arrangements, providing a holistic, integrated national information systemof-systems approach to the data life cycle

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Elevation
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Population
Infrastructure
Settlements
Admin. Bdys.
Imagery
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etc.

National Spatial

Data Infrastructure

"The technology, policies, standards, human resources and related activities to acquire, process, distribute, use, maintain and preserve spatial data" (OMB 2002).



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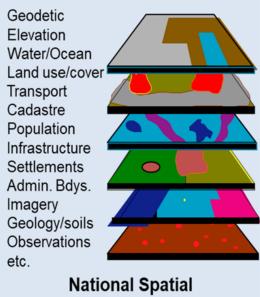


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## IGIF: Linkages to National Priorities

- Typically, efforts at achieving an NSDI have focused on <u>creating an NSDI rather than developing national geospatial capacity</u> to address priority societal, economic and environmental decisions. Efforts have not been integrated into the broader requirements and mandates of government.
- The IGIF, as an integrated framework, allows those countries that have already implemented NSDI capabilities to build upon this existing progress and investment.
- More importantly, the IGIF offers a new paradigm and mechanism to further strengthen nationally integrated geospatial information management and the desired transformational change that is required.
- The approach, and comprehensive guidance for countries, recognizes the importance of capacity and capability development from the outset, beginning with the process to develop and prepare a Country-level Action Plan, a process that is participatory and inclusive for whole-of-government.



National Spatial

Data Infrastructure

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