

ECONOMIC COOPERATION ORGANIZATION (ECO)

TRAINING COURSE



The National Cartographic Center of Iran with the support of ECO Secretariat holds a training course on:

The Current Technologies and Trends in Various Levels of Spatial Data Infrastructure (SDI)

23-24 September 2024



Integration of Geospatial Information and Statistics to Achieve the SDGs

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National Cartographic Center of Iran

Introduction



Location-based Statistics

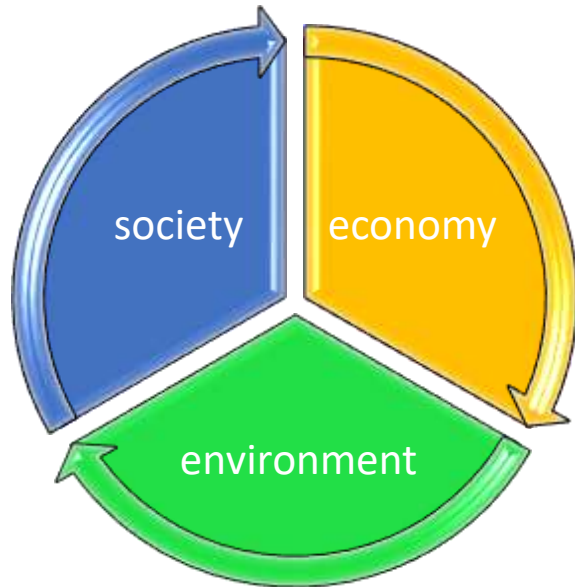
Support informed, data-driven,
evidence-based decision making

Create and analyze local geographies

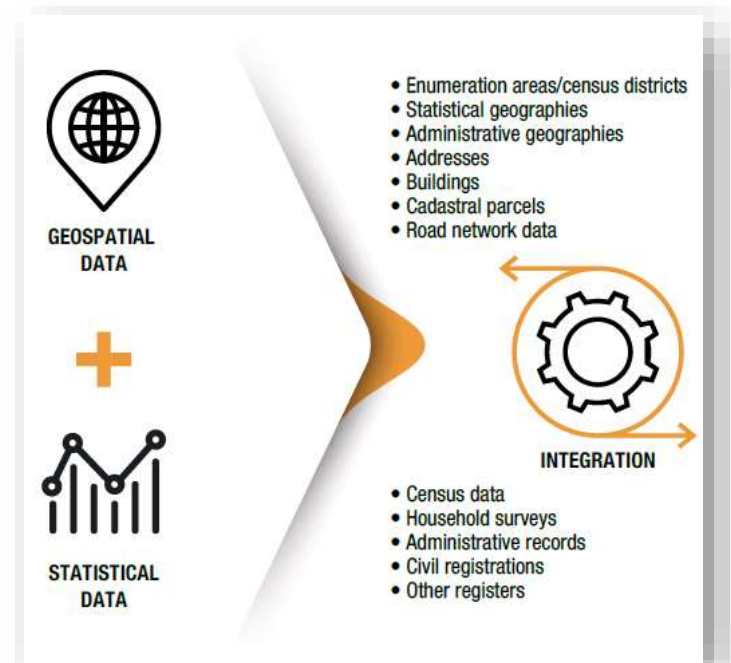
Utilize new data sources



Geo-statistical Integration



Integration of geospatial and statistical Information



The Interaction of Statistical and Geospatial Information

- Enables standardization and increased use of data
- Leads to improved efficiency and simplification in the creation, discovery, integration and use of geospatial statistics
- Enhances the potential applications of a wide range of data and technologies
- Makes a broad range of information available and usable for decision making
- Emphasizes the aspects of better cooperation between all producers and users of statistical and geospatial information




UNSDI

- 
- Provides a comprehensive and distributed framework for geospatial information

- 
- Facilitates decision-making at various levels within the United Nations

- 
- Provides organizational and technical foundations, policies, data and collaboration standards and procedures

- 
- Facilitates the discovery, evaluation and use of geospatial information





Global Geospatial Frameworks

Global Geospatial Frameworks



WG4: Integrated Geospatial Information Framework

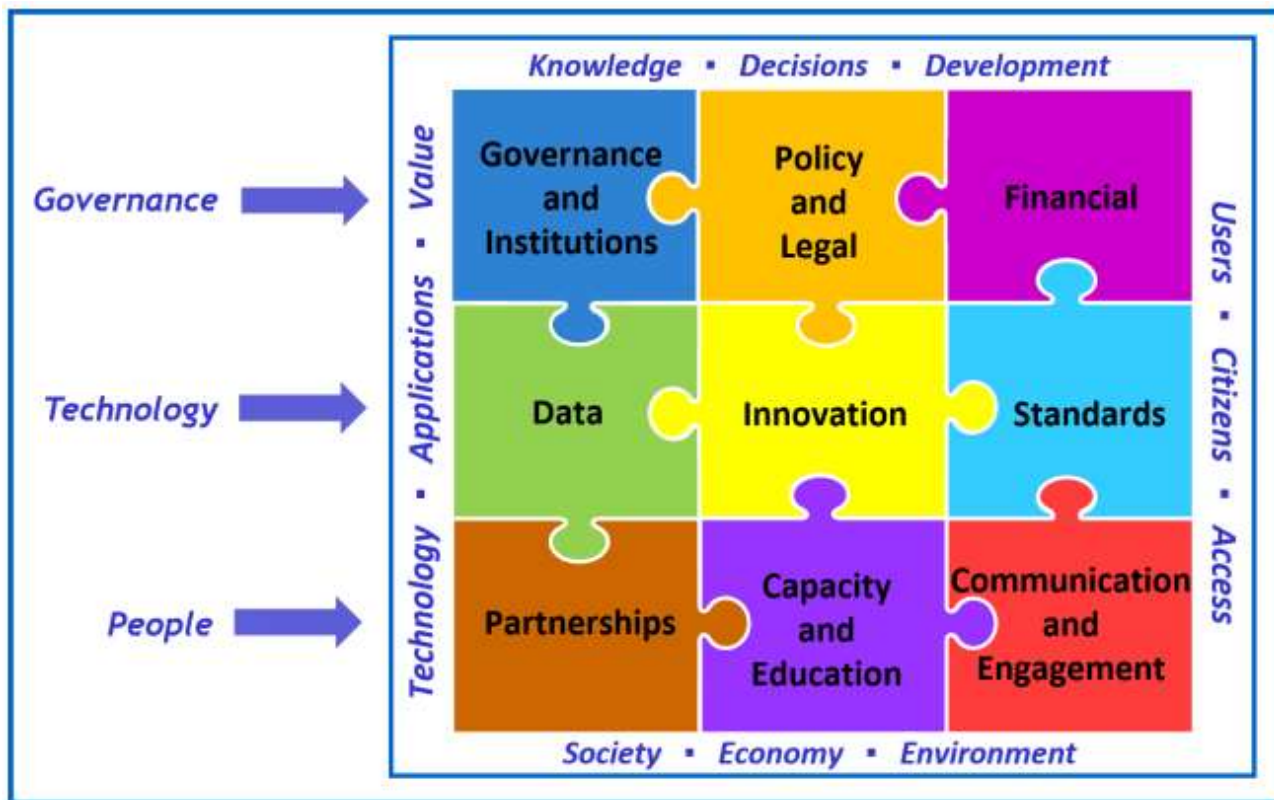
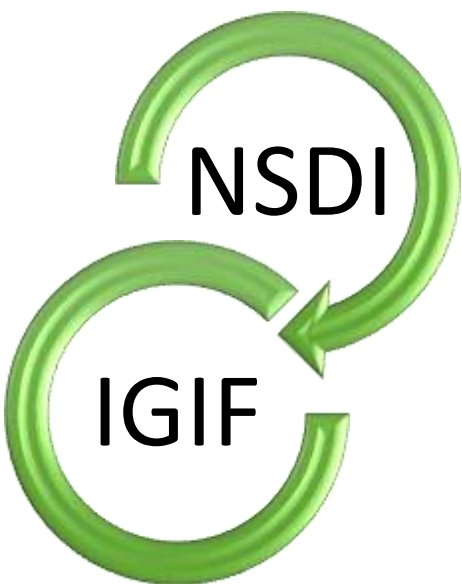
WG3: Integrating of geospatial information and statistics

2018

2019



Integrated Geospatial Information Framework




Working Group No. 3

UN-GGIM-AP Home About Us Members Meetings Working C


Working Group 3: Integrating Geospatial Information and Statistics


About Members Documents Meetings


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The Main Tasks of Working Group No. 3 (2022-2025)

Promote the use of standards and the sharing of common literatures for the integration of geospatial information and statistics

Strengthen national cooperation among geospatial and statistical agencies in the AP region

Promote the adoption of GSGF principles in the AP region

Contributing to the SDGs by integrating geospatial statistics

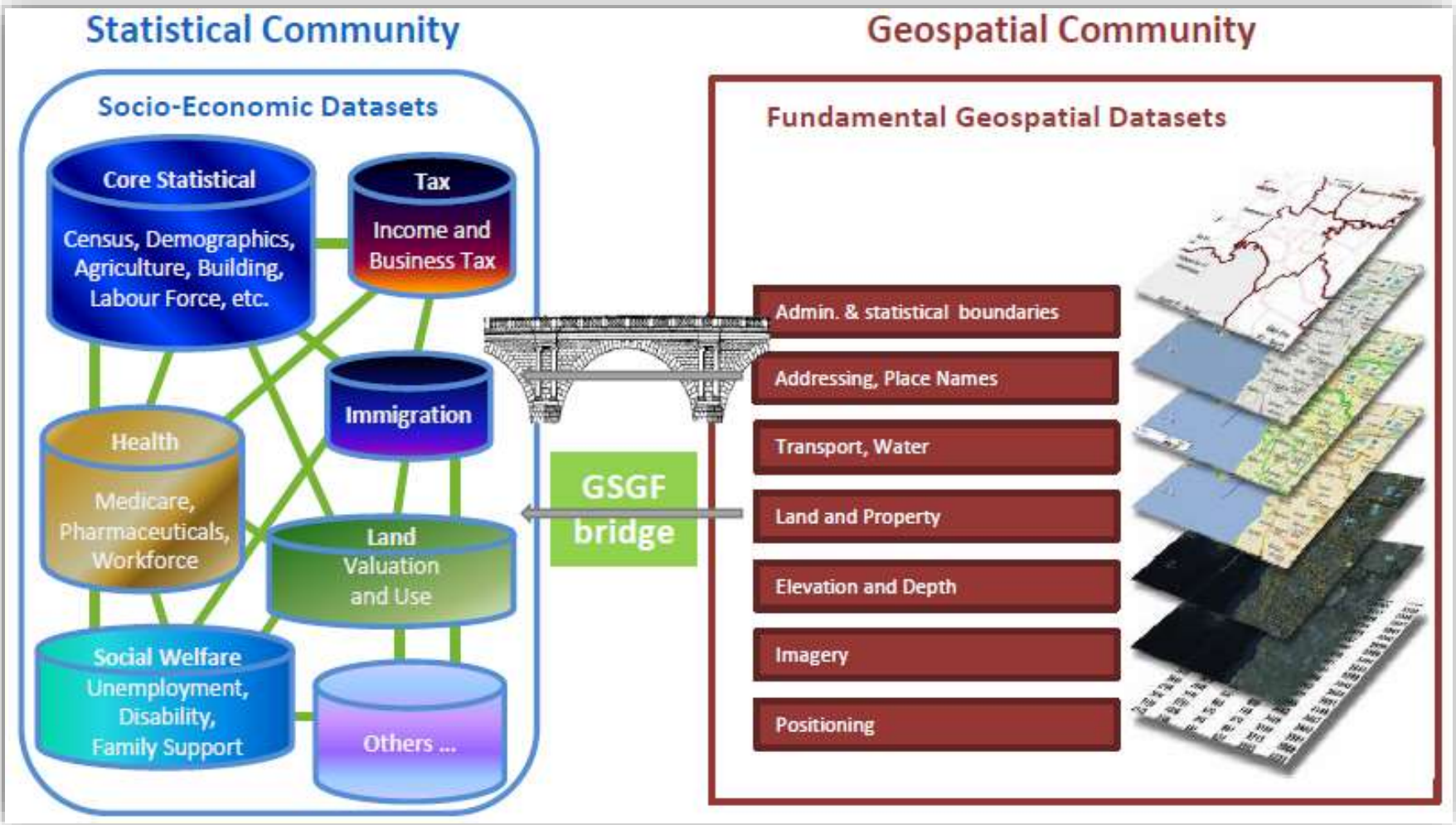
Share case studies of integrating geospatial and statistical information for effective natural disaster management

Capacity Development

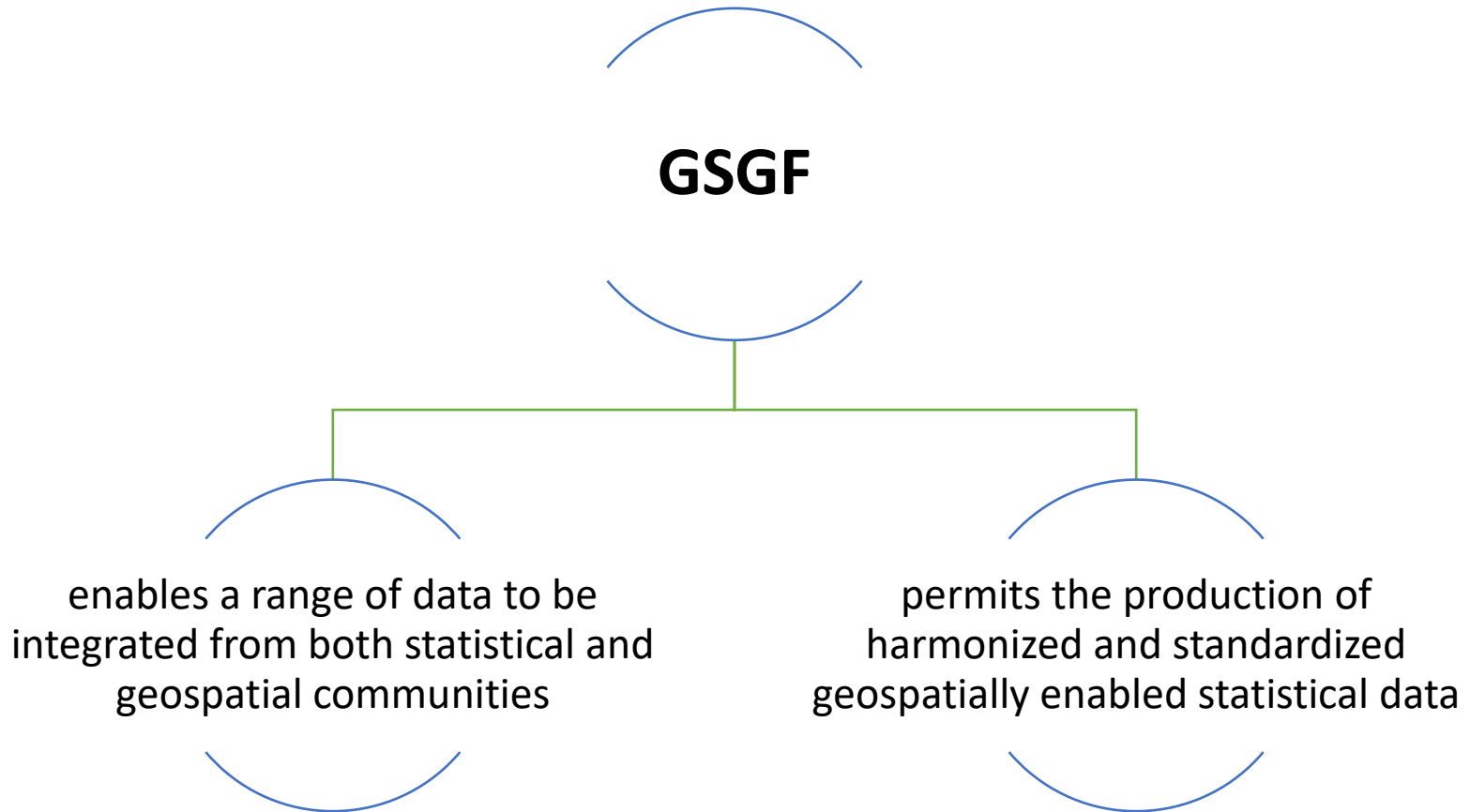
Strengthening the relationship with the United Nations Expert Group on the Integration of Statistical and Geospatial Information

Explore opportunities to collaborate with the Global Geospatial Knowledge and Innovation Center in Deqing, China.

GSGF Introduction



Advantages of GSGF



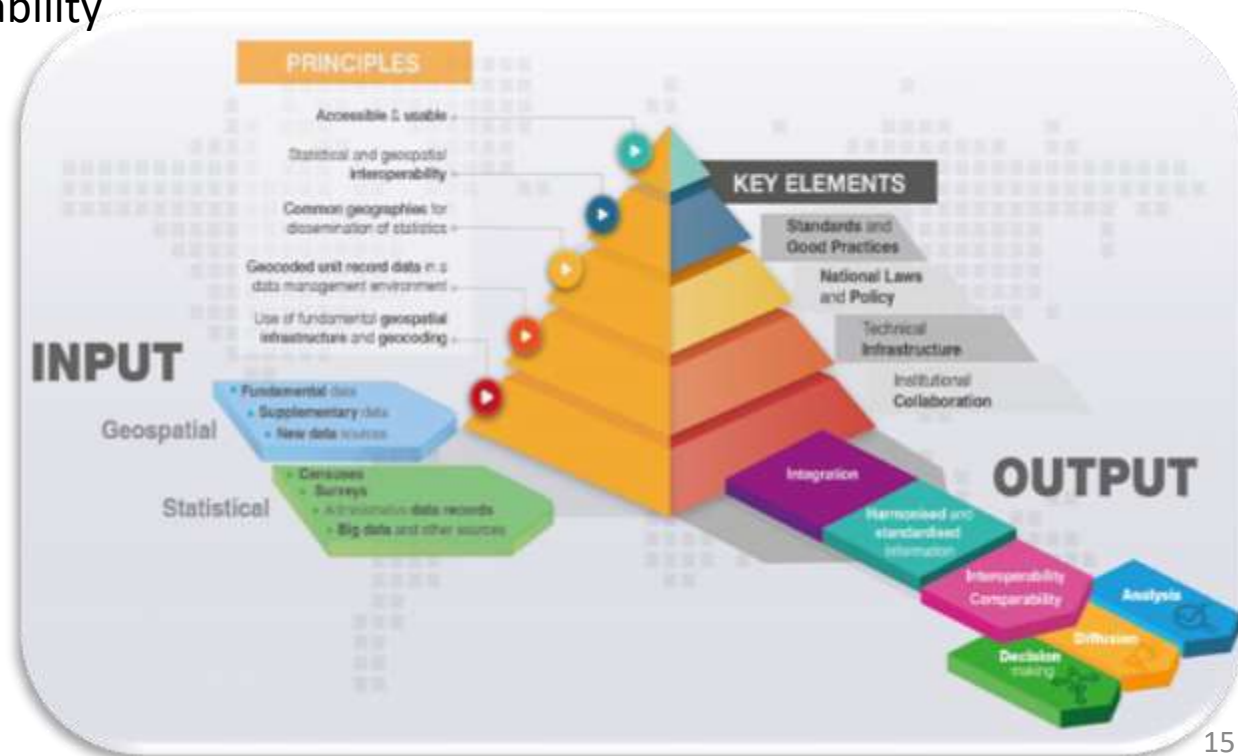
The GSGF Cycle

The inputs of the GSGF:

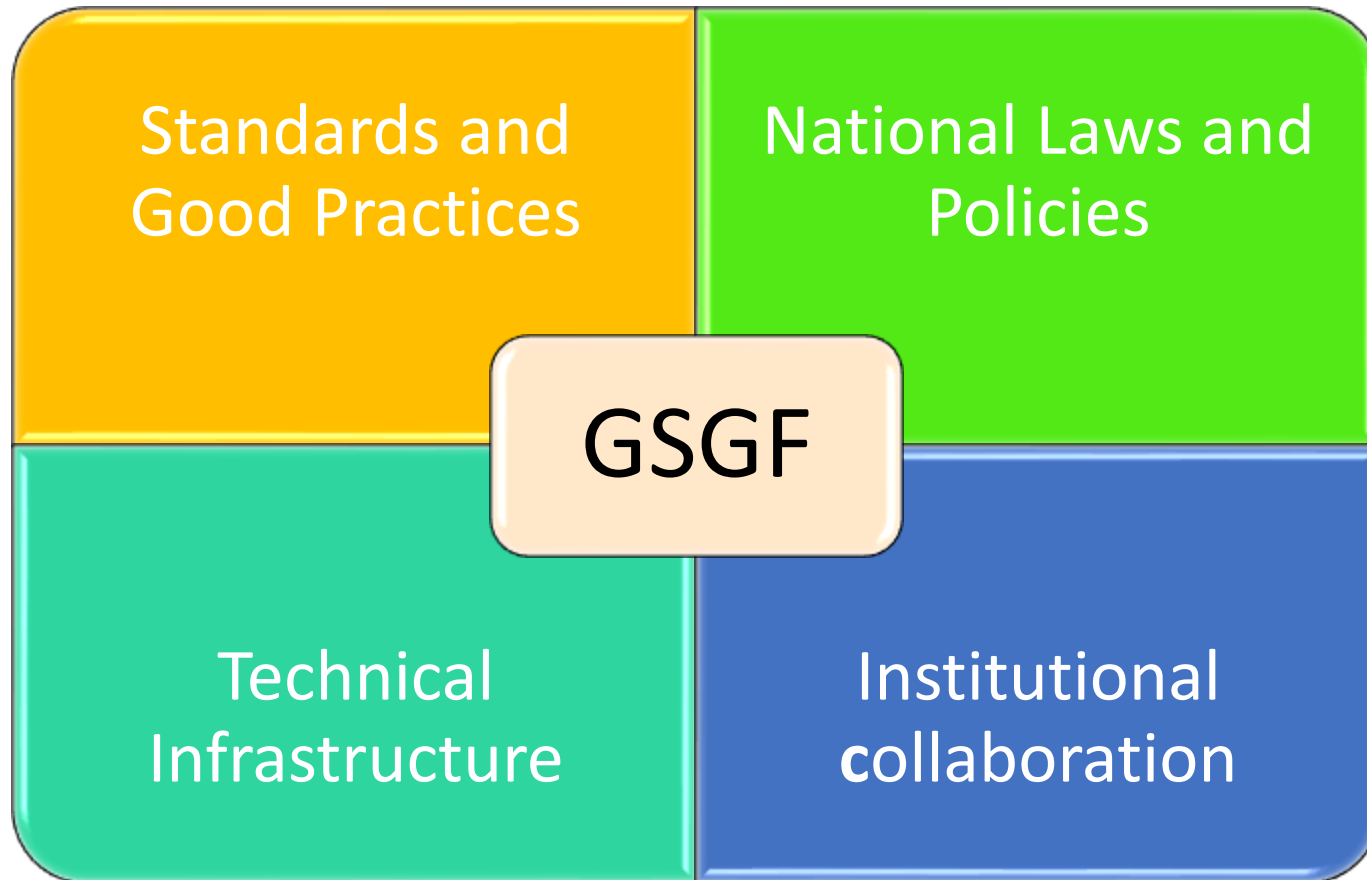
- ✓ geospatial information
- ✓ statistical information

The outputs of the GSGF:

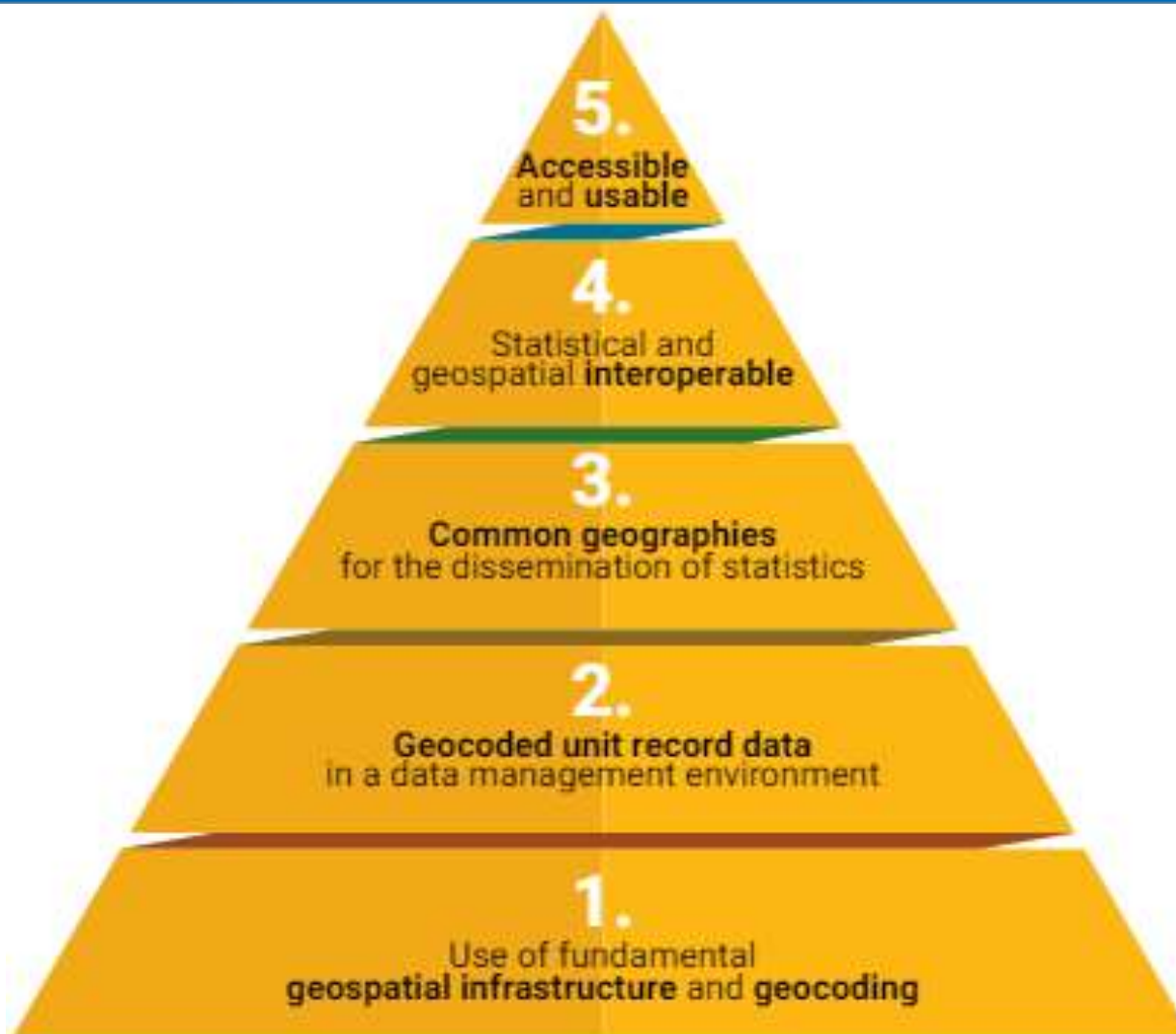
- ✓ Data Integration and Consolidation
- ✓ Coordinate and standardize information
- ✓ Compatibility and comparability
- ✓ Analysis
- ✓ Dissemination
- ✓ Decision Making



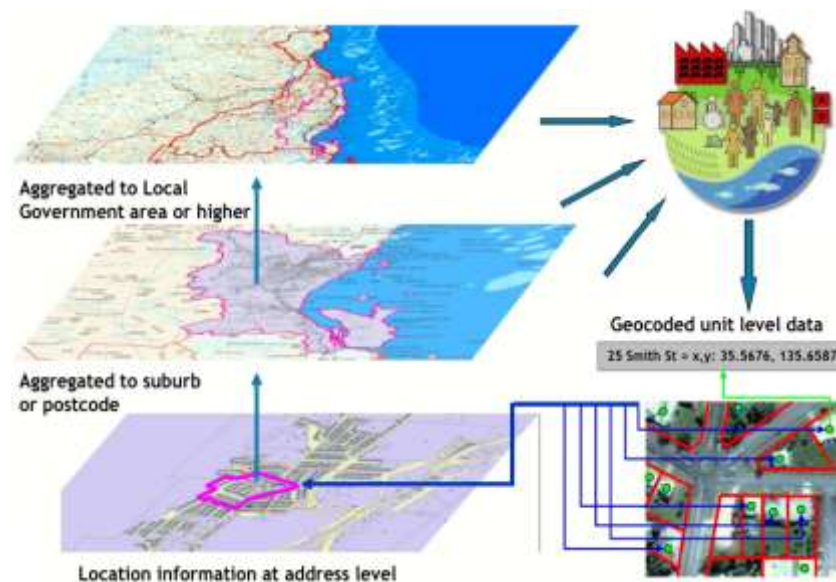
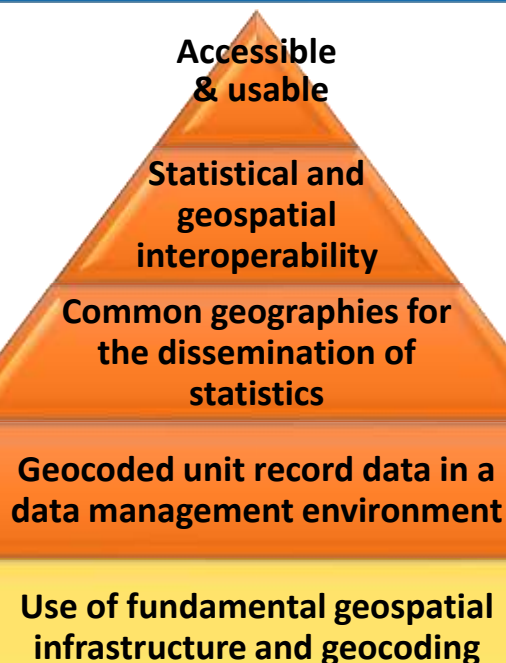
Key Elements Of GSGF



GSGF Principles



Principle 1: Use of fundamental geospatial infrastructure and geocoding

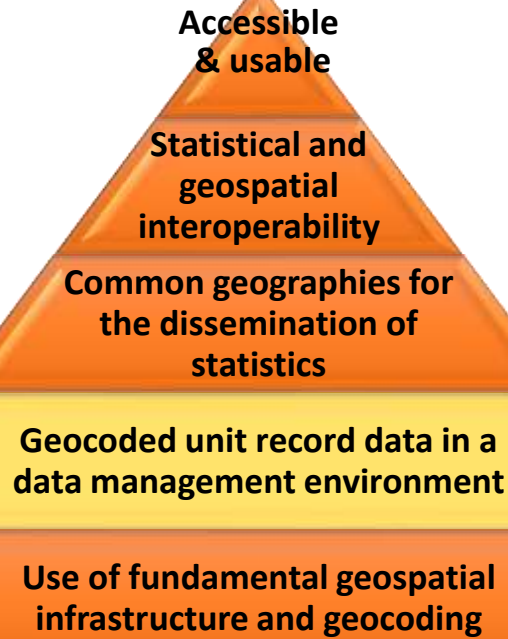


Accurate and consistent address, property, building and location information

Accurate and consistent geocoding results, and consistent management of geocoding issues



Principle 2: Geocoded Unit Record Data in a Data Management Environment



Effective data and metadata management

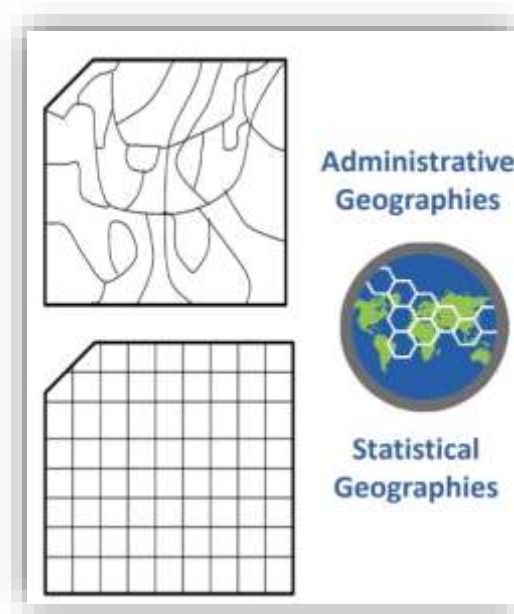
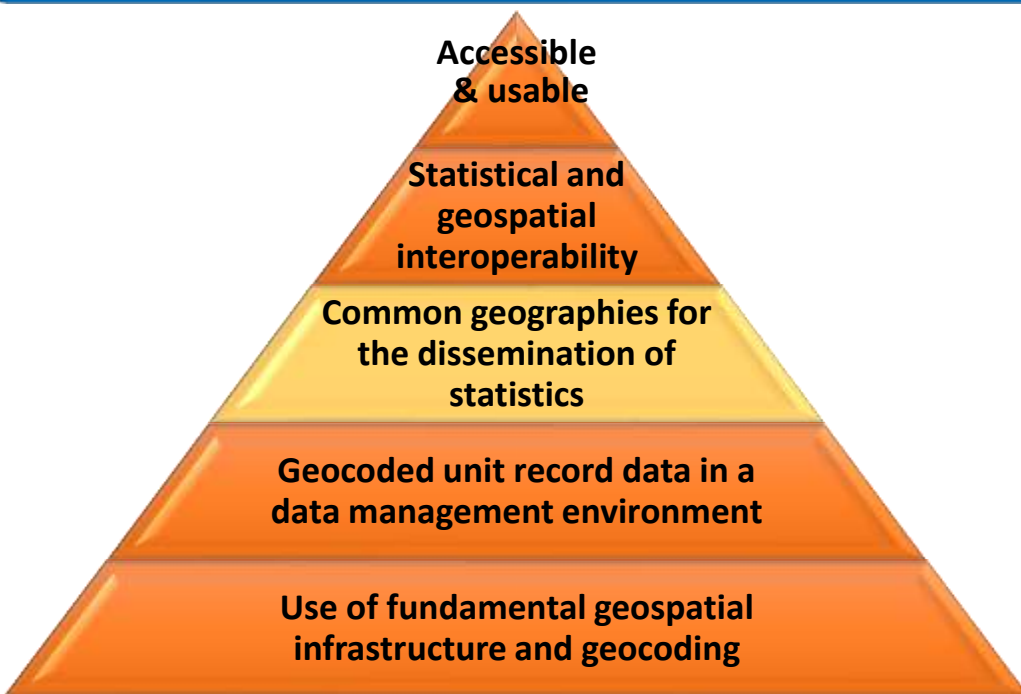
Consistent and interpretable geocode information

Simplified data aggregation for larger geographic units

data maintenance and custodianship roles



Principle 3: Common Geographies for the Dissemination of Statistics



Data from different sources can be integrated

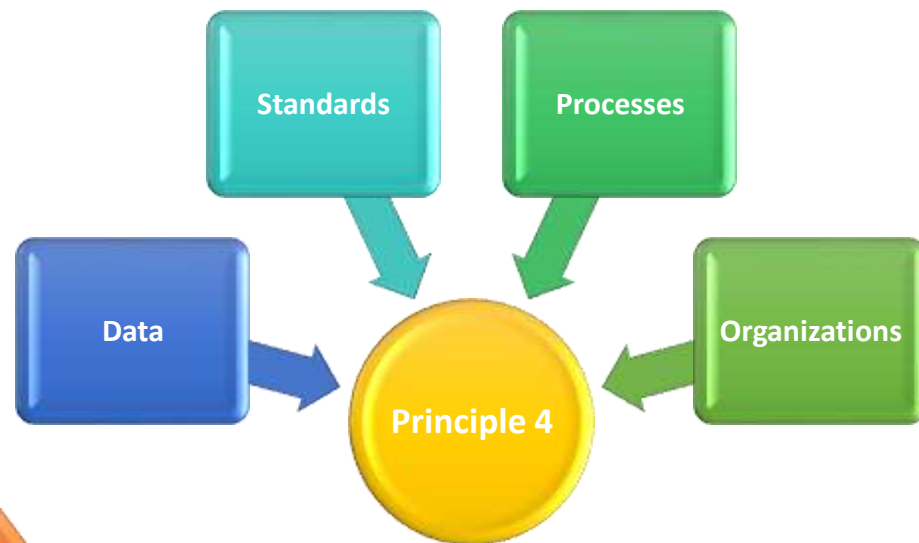
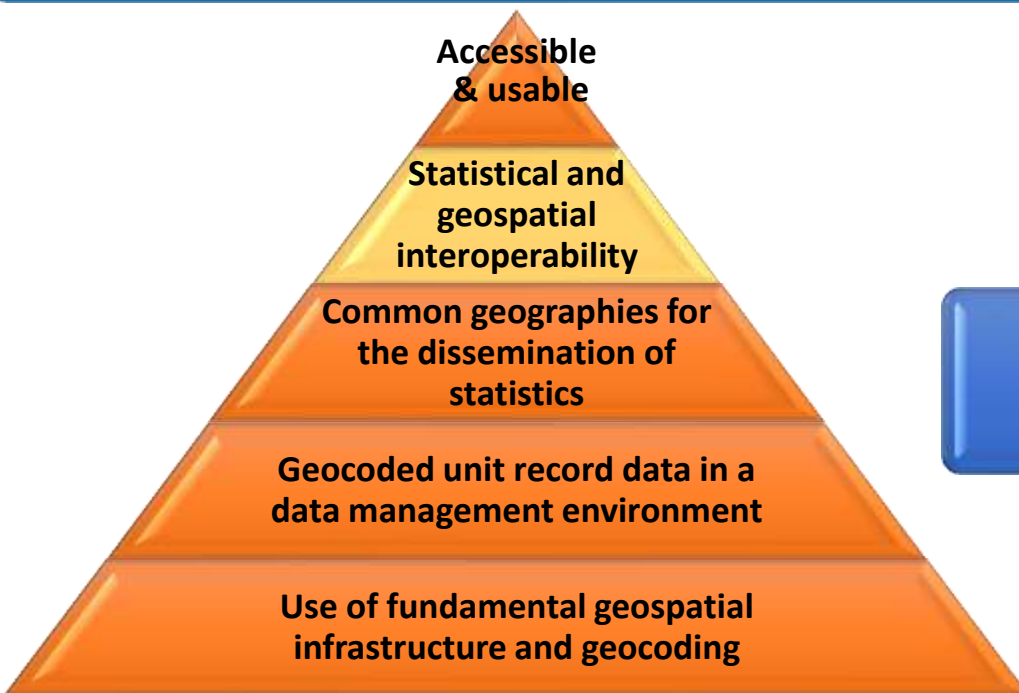
Metadata supports data integration and use

Visualization and analysis is simplified

Conversion of data between geographies is supported



Principle 4: Statistical and Geospatial Interoperability

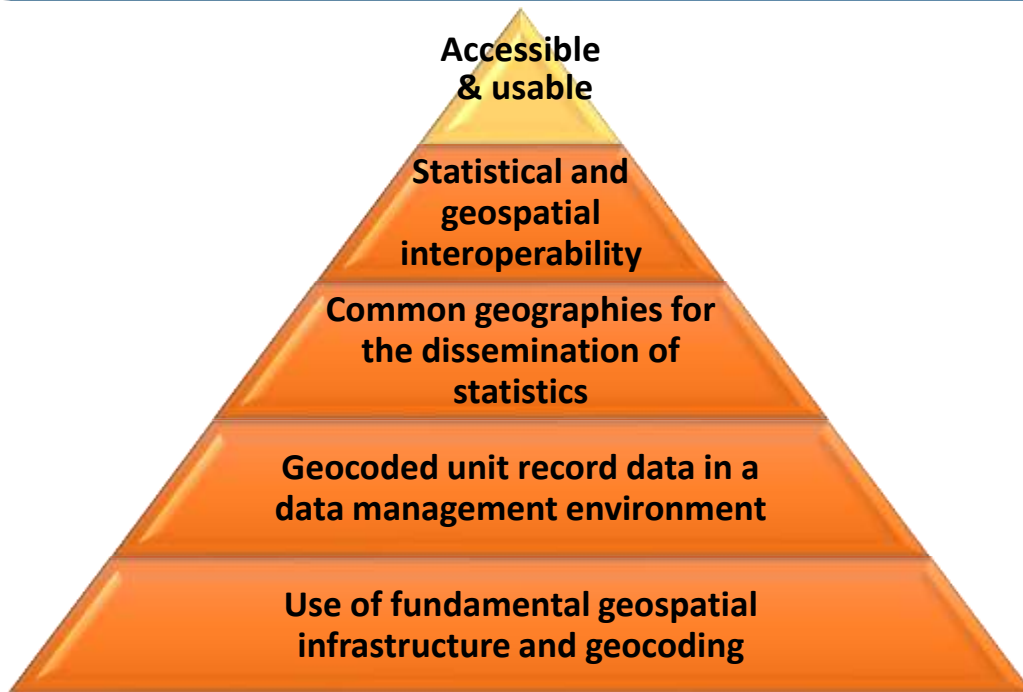


Greater efficiency and simplification in the creation and use of data.

A wider range of data available for analysis and increasing potential applications of data and technologies.



Principle 5: Accessible and Usable Geospatially Enabled Statistics



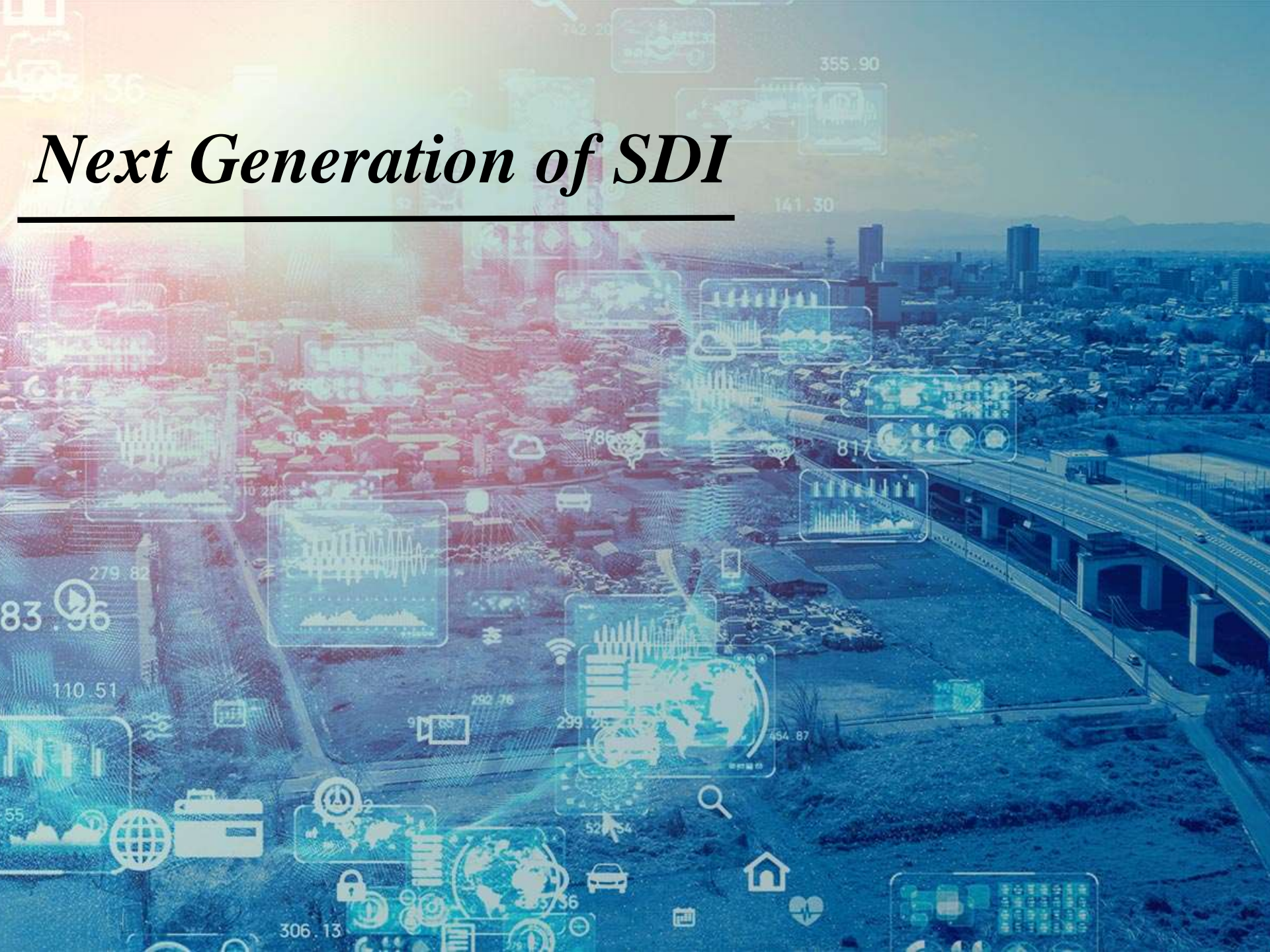
Data released and accessible, with privacy and confidentiality protected

Web services enabling machine-to-machine access and dynamic linking of information

Promote best practices



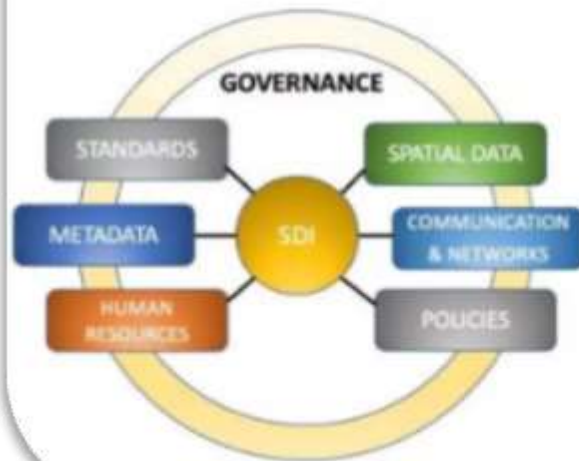
Next Generation of SDI



Geospatial Knowledge Infrastructure

STRENGTHENING NATIONAL GEOSPATIAL INFRASTRUCTURE

SDI



IGIF



GKI



Geospatial Knowledge Infrastructure

GKI

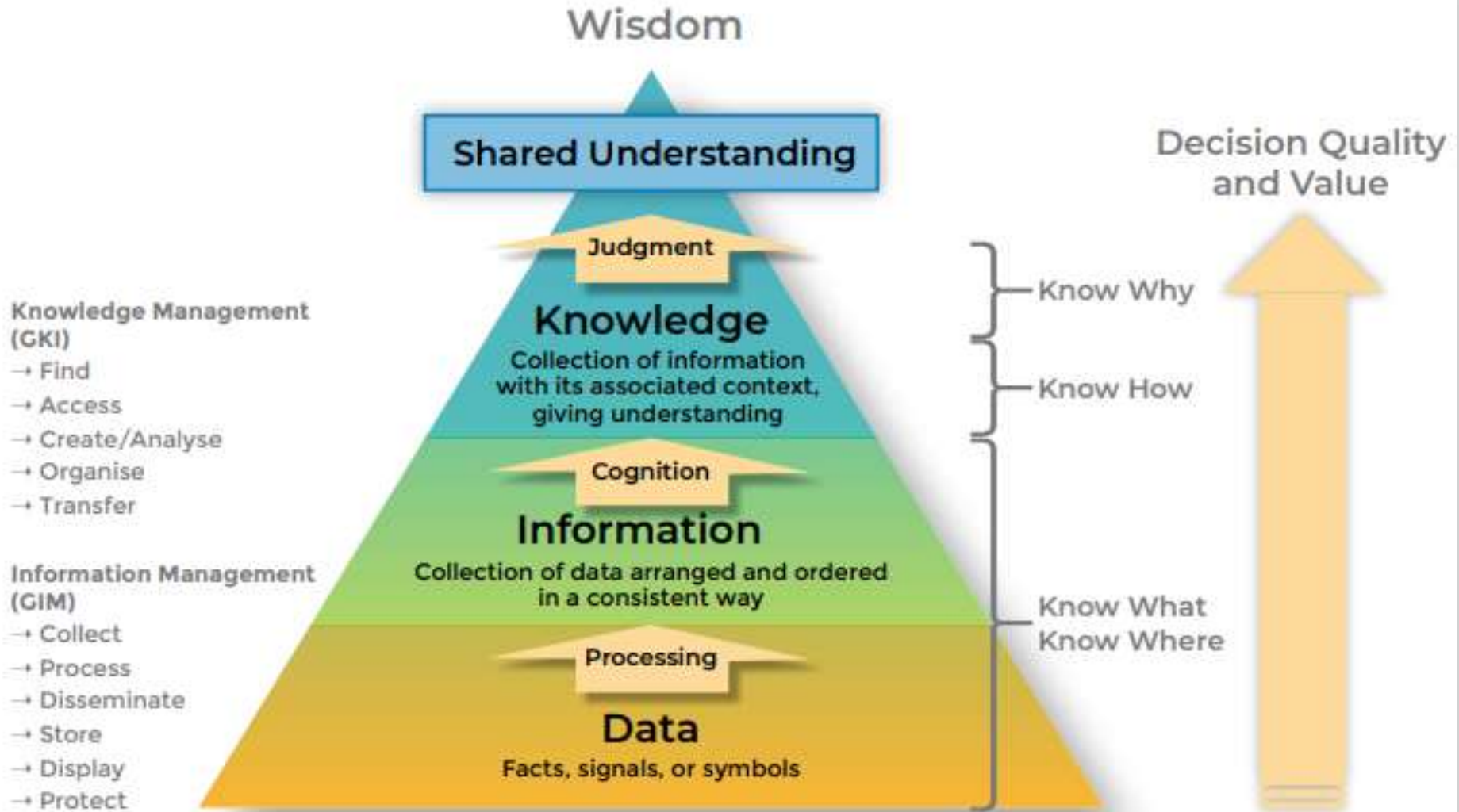
A broadly interoperable infrastructure for creating, organizing, sharing, managing, and using spatial knowledge across many domains.

Provides the critical geospatial component to knowledge and automation.

Creates a mechanism to make the necessary processes of geographic knowledge with the highest efficiency and usability

Integrates geospatial concepts, data and technologies into the wider digital ecosystem

The DIKW Pyramid



The Relationship between IGIF and GKI

The IGIF and the GKI will make it possible to turn geospatial "data" into "knowledge".

The IGIF complements, and supports the implementation of NSDIs and knowledge-based geospatial infrastructures such as GKI.

GKI recognizes the importance of the UN IGIF as the foundation for nations to create, share, and use geospatial information.



Conclusions



**INTEGRATED GEOSPATIAL
INFORMATION FRAMEWORK**



**The Global Statistical
Geospatial Framework**



Thank you very much!

