



# Global guidelines for the management of geospatial information in the framework of the UN-GGIM work agenda

Technical Assistance of ECLAC to the Management Institute for Land Registration and Land Information System - MI-GLIS

Paramaribo, Suriname, 04 to 07 December, 2018

# United Nations Initiative for the Global Management of Geospatial Information

The global importance of geospatial information was recognized by the **United Nations in July 2011**.

The Economic Social Council (ECOSOC), at its 47th Plenary Meeting,

RECOGNIZING the urgent need to take concrete actions to **strengthen international cooperation in the area of global management of geospatial information**

ADOPTED resolution 2011/24 to establish the United Nations Committee of Experts on the Global Geospatial Information Management (UN-GGIM)

## Committee of Experts UN-GGIM

Adopts joint decisions and **establishes guidelines on the production and use of geospatial information** within national and global regulatory frameworks;

Promotes common **principles, policies, methods, mechanisms and standards for the interoperability** of geospatial data and services;

It provides a platform for the development of effective strategies on **how to build and strengthen national capacity in geospatial information**, especially in developing countries..



# Committee of Experts UN-GGIM

## UN-GGIM Bureau:

Co-Chairs: Cameroon, China, Netherlands

Rapporteur: Chile

## UN-GGIM Regional Committees & Chairs:

- Africa: Ethiopia
- Americas: Mexico
- Arab States: Saudi Arabia
- Asia-Pacific: Japan
- Europe: Slovenia

## UN-GGIM International Networks:

- Academic
- Geospatial Societies
- Private Sector
- United Nations system



# Global Strategic Framework UN-GGIM 2018-2021

|         |                               |  |   |   |  |   |
|---------|-------------------------------|--|---|---|--|---|
| CONTEXT | VISION                        | <b><i>Positioning geospatial information to address global challenges</i></b>  |   |   |  |   |
|         | MISSION                       | <b><i>Operating within agreed policies and institutional arrangements, and as an interconnected global community of practice, the Committee of Experts will ensure that geospatial information and resources are coordinated, maintained, accessible, and able to be used effectively and efficiently by Member States and society to address key global challenges in a timely manner</i></b> |   |   |  |   |
|         | 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                                | HABITAT III Urban Agenda  |  |  |
|              | GEOSPATIAL CHALLENGES & DRIVERS         | Environmental management<br>Urban planning<br>Land management<br>Legal & policy  | Disaster management<br>Humanitarian assistance<br>Climate change<br>Health & welfare | Sustainable development<br>Food security<br>Water scarcity<br>Poverty reduction | Population<br>Education<br>Oceans & marine<br>Sustainable cities | National security<br>Institutional governance<br>Socio-economic metrics |  |  |
|              | DIRECT NATIONAL BENEFITS & EFFICIENCIES | <ul style="list-style-type: none"><li>• Reduced duplication of effort in the capture, management, and delivery of fundamental geospatial information</li><li>• Authoritative, reliable and maintained geospatial data available nationally, regionally, and globally</li><li>• Increased return on investment through better coordination, use and reuse of data, information and systems</li><li>• Better evidence-based decision making, supported by good data, science and policy</li><li>• More open, accountable, responsive and efficient governments</li><li>• Presentation and delivery of timely and ‘fit for purpose’ data in times of need</li><li>• Increased collaboration and integration of national data and information systems across all levels of government</li><li>• Best practices and use cases for enriching national processes on geospatial information management</li></ul> |  |   |  |   |  |  |
|              | 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"><li>• Geospatial Information for Sustainable Development: 2030 Agenda, Sendai Framework, etc.</li><li>• Integration of Geospatial &amp; Statistical Information: Implement the Global Statistical Geospatial Framework</li><li>• Geospatial Information and Services for Disasters: Implement Strategic Framework</li><li>• Global Geodetic Reference Frame: Roadmap to Implement</li><li>• Determination of global fundamental data themes</li><li>• Marine geospatial information</li><li>• Land administration and management</li><li>• Legal and policy frameworks</li><li>• National institutional arrangements</li><li>• Implementation and adoption of standards for the global geospatial information community</li></ul>  |  |   |  |   |  |  |

## Committee of Experts UN-GGIM: Working activities

1. Development of the **global geodetic** reference framework
2. Geospatial information and services for **disasters** (Global Framework - document available)
3. Geospatial information in support of the **2030 Agenda for Sustainable Development** (geospatial lens)
4. Adoption and implementation of **standards** by the global geospatial information community (two manuals)
5. **National Institutional Arrangements** in the Management of Geospatial Information
6. **Integration of statistical and geospatial** information (Global Statistical and Geospatial Framework)
7. **Legal and policy framework** (Draft compendium of licenses)
8. Determination of **fundamental geospatial data sets** (Global proposal)
9. Geospatial information for **land administration (Framework**
10. **Marine** geospatial information

# Implementation at the national level



## 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.**



# Implementation at the national level



## INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK

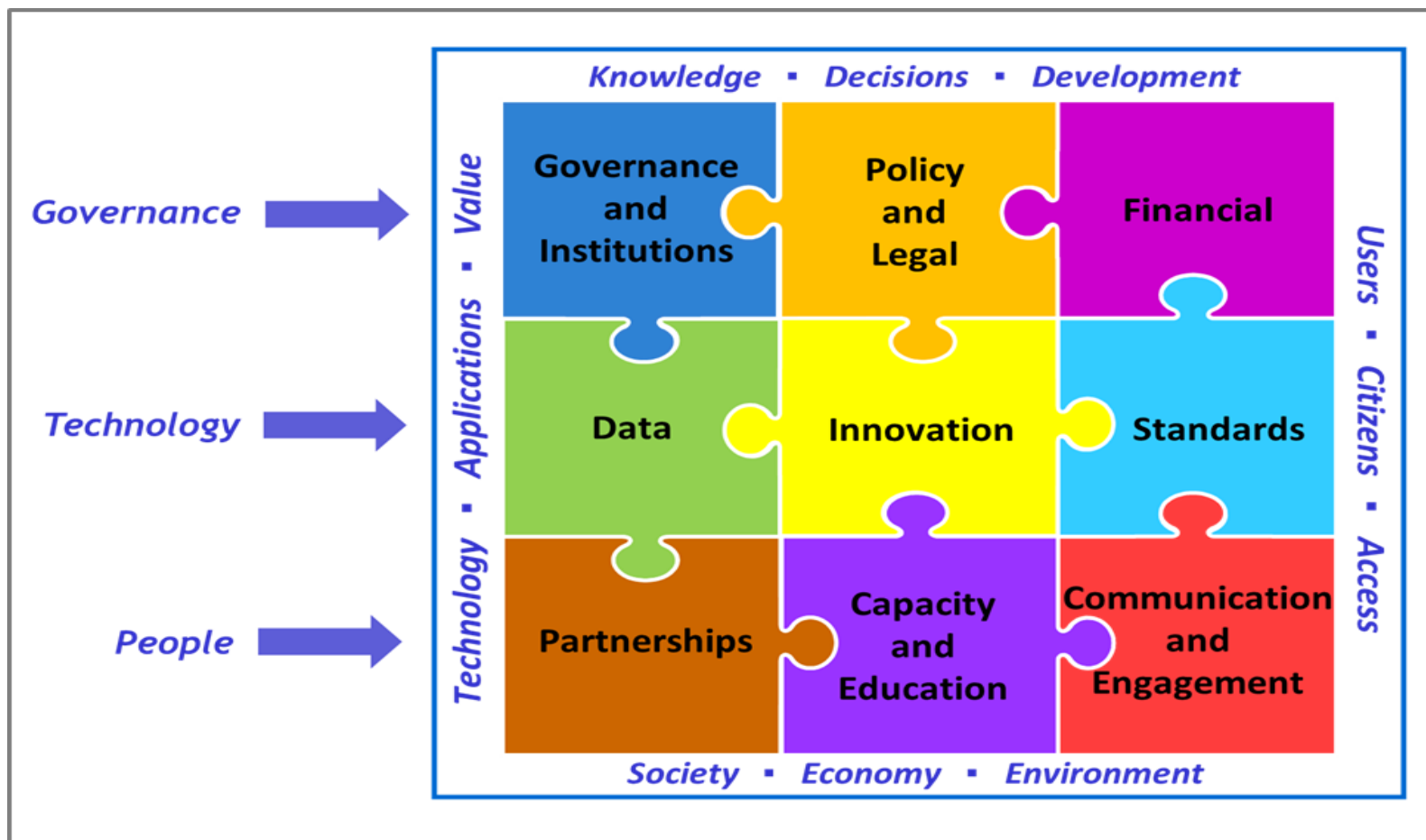
A STRATEGIC GUIDE TO DEVELOP AND STRENGTHEN  
NATIONAL GEOSPATIAL INFORMATION MANAGEMENT

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;

## Implementation at the national level



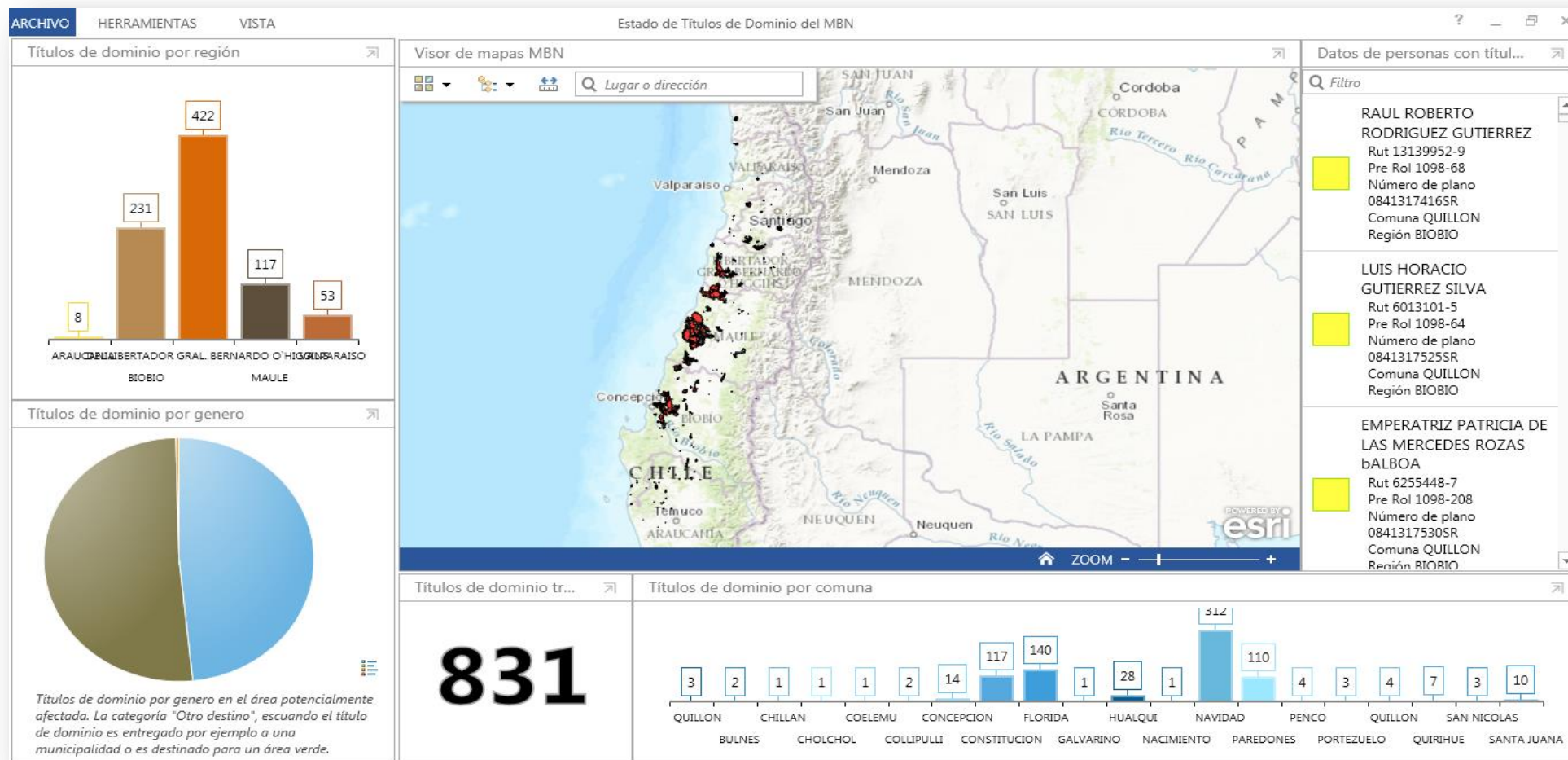
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3. Geospatial information in support of the **2030 Agenda for Sustainable Development** (geospatial lens)
4. Adoption and implementation of **standards** by the global geospatial information community
5. **National Institutional Arrangements** in the Management of Geospatial Information
6. **Integration of statistical and geospatial** information (Global Statistical and Geospatial Framework)
7. **Legal and policy framework** (draft compendium of licenses)
8. Determination of **fundamental geospatial data sets** (Global proposal)
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# Strategic Framework on information and geospatial services for disasters



# Strategic Framework on information and geospatial services for disasters



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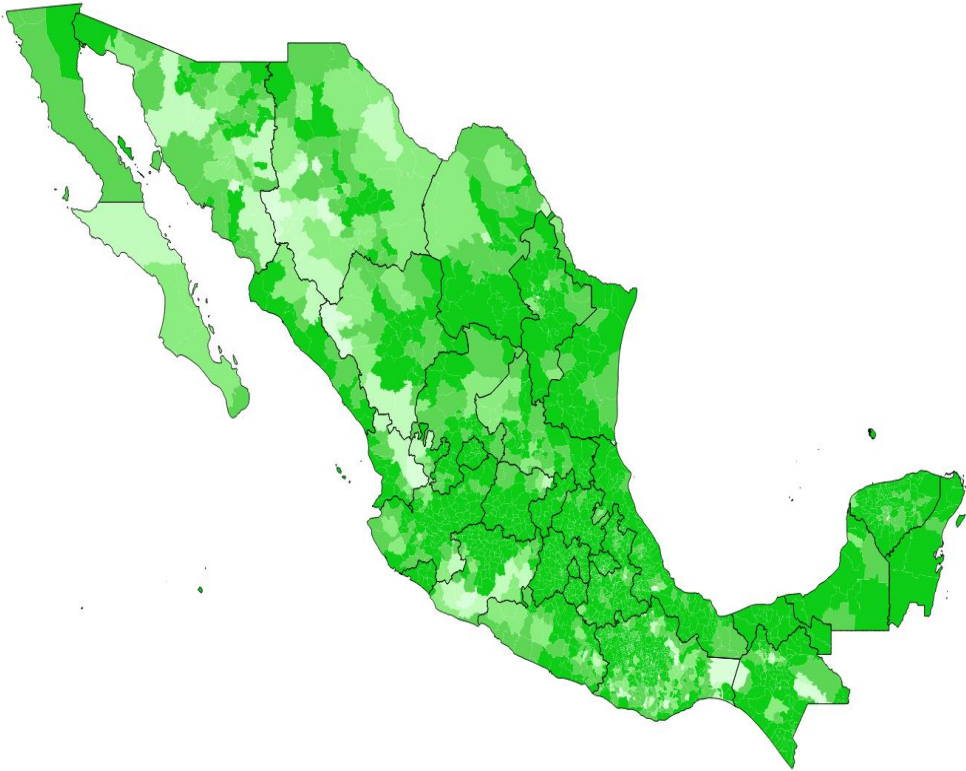
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# Geospatial information supporting Agenda 2030 implementation



# Geospatial information supporting Agenda 2030 implementation

| Municipio (clave) | Población a 2km de carretera | Población Rural Total | Porcentaje de población rural a 2km de camino |
|-------------------|------------------------------|-----------------------|---|
| 16071             | 27685                        | 27685                 | 100   |
| 16072             | 4118                         | 4445                  | 65  |
| 16073             | 6044                         | 6044                  | 100   |
| 16074             | 3188                         | 3217                  | 85  |
| 16075             | 21868                        | 21868                 | 100   |
| 16076             | 5718                         | 5718                  | 100   |
| 16077             | 10812                        | 10997                 | 94  |
| 16078             | 5531                         | 5531                  | 100   |
| 16079             | 17221                        | 17861                 | 91  |
| 16080             | 13820                        | 15720                 | 70  |
| 16081             | 7573                         | 8704                  | 72  |
| 16082             | 33823                        | 35610                 | 86  |
| 16083             | 14693                        | 22667                 | 52  |
| 16084             | 4358                         | 4472                  | 95  |
| 16085             | 14007                        | 14007                 | 100   |
| 16086             | 5630                         | 5630                  | 100   |
| 16087             | 7093                         | 7118                  | 91  |
| 16088             | 40543                        | 40687                 | 98  |
| 16089             | 7189                         | 7766                  | 76  |
| 16090             | 1227                         | 1227                  | 100   |
| 16091             | 6588                         | 6588                  | 100   |
| 16092             | 6093                         | 11064                 | 35  |
| 16093             | 22999                        | 24057                 | 97  |
| 16094             | 3662                         | 3662                  | 100   |
| 16095             | 4357                         | 4587                  | 41  |
| 16096             | 2059                         | 5089                  | 11  |
| 16097             | 11233                        | 22182                 | 25  |
| 16098             | 15248                        | 16904                 | 64  |

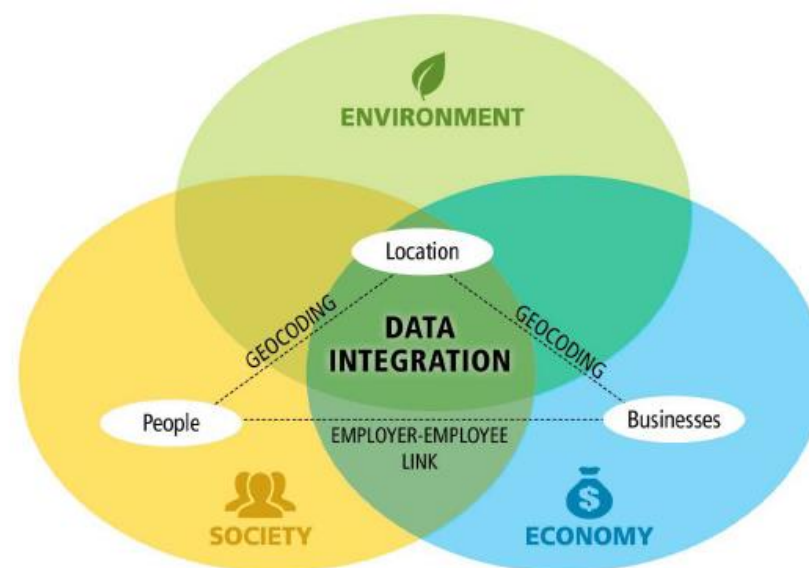


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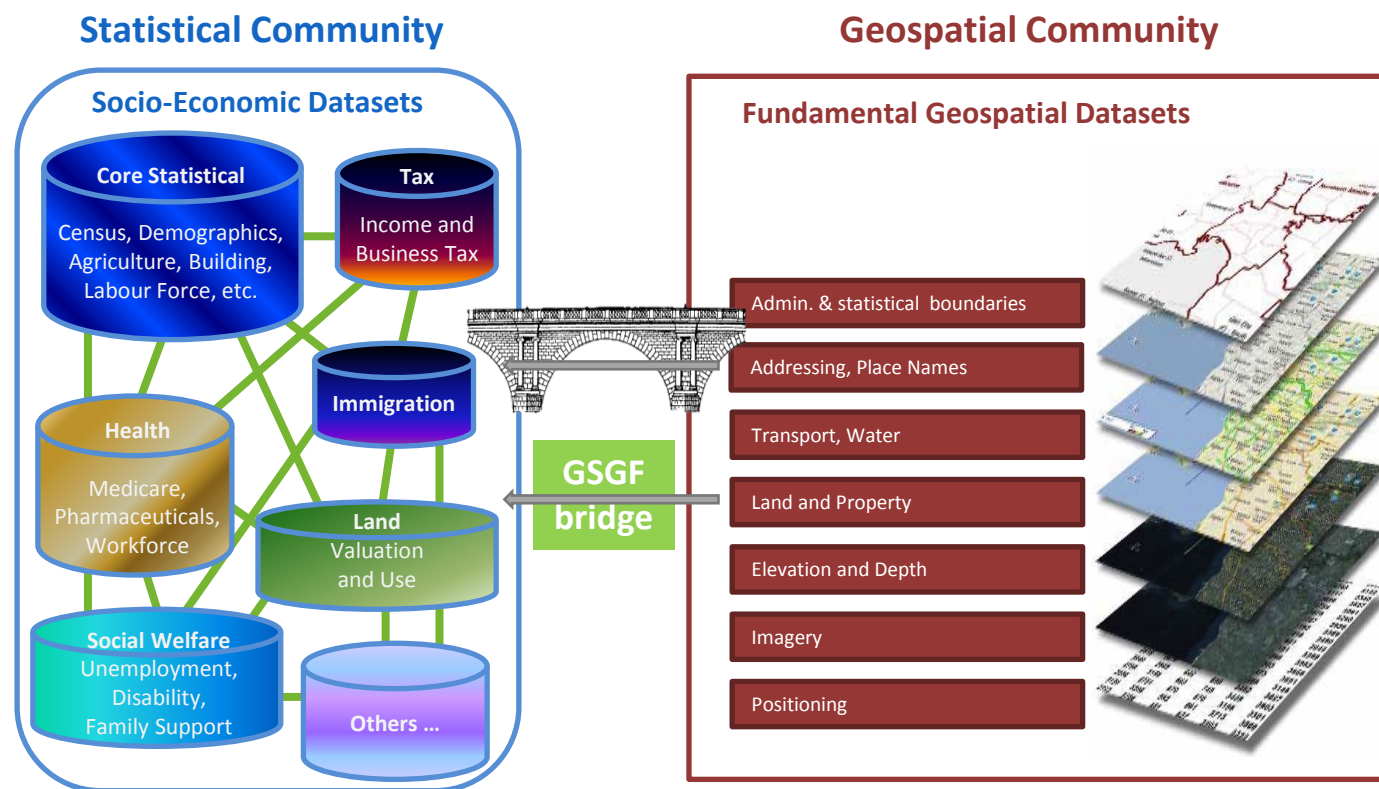
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# Global Statistical Geospatial Framework

The Global Framework provides the international community with a **common approach** that connects people-centered information with a place (socio-economic and environmental data), improving the accessibility and usability of these geospatially-enabled data.



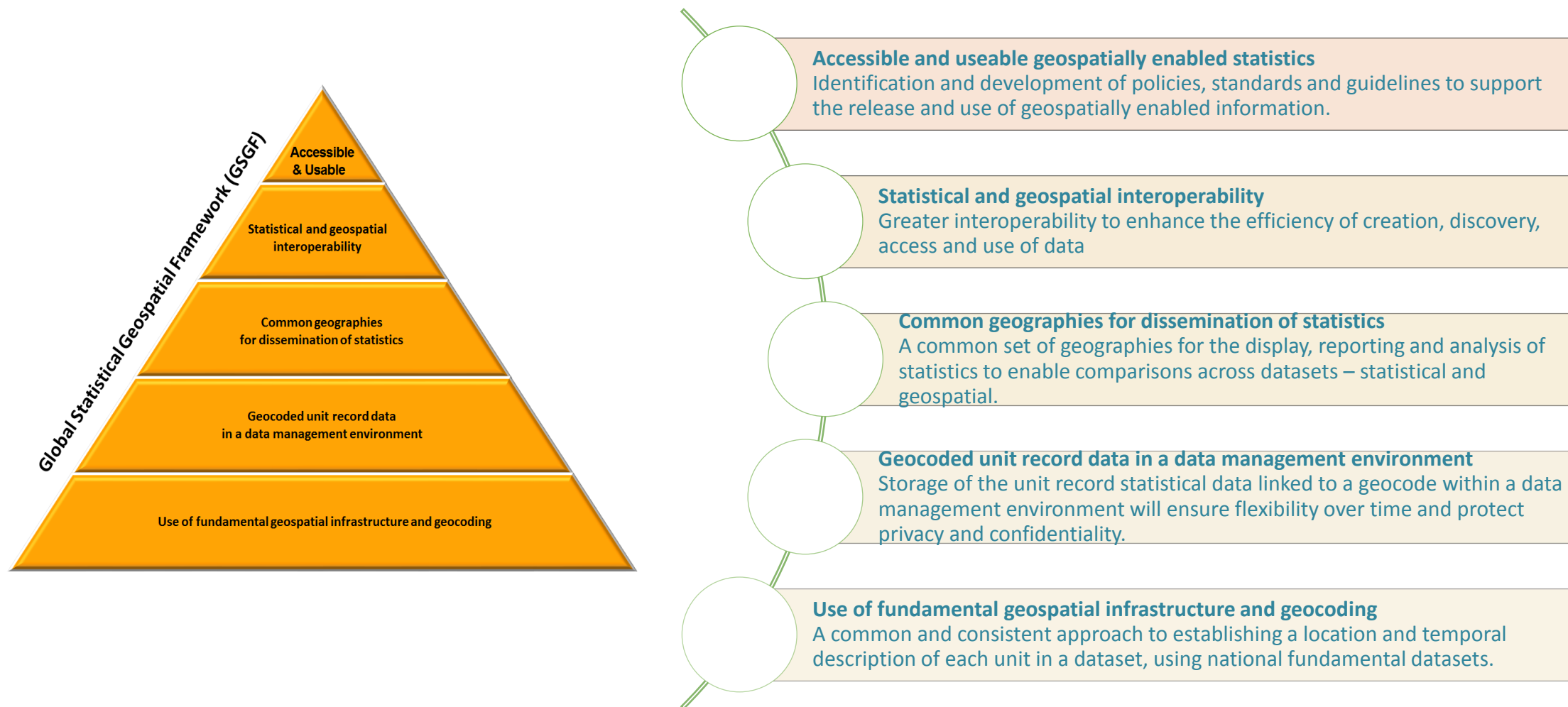
# Integration of statistical and geospatial information



“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.”

# Global Statistical Geospatial Framework



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# 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 7<sup>th</sup> Session (Decision 7/104), August 2017

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# Geospatial information for land administration

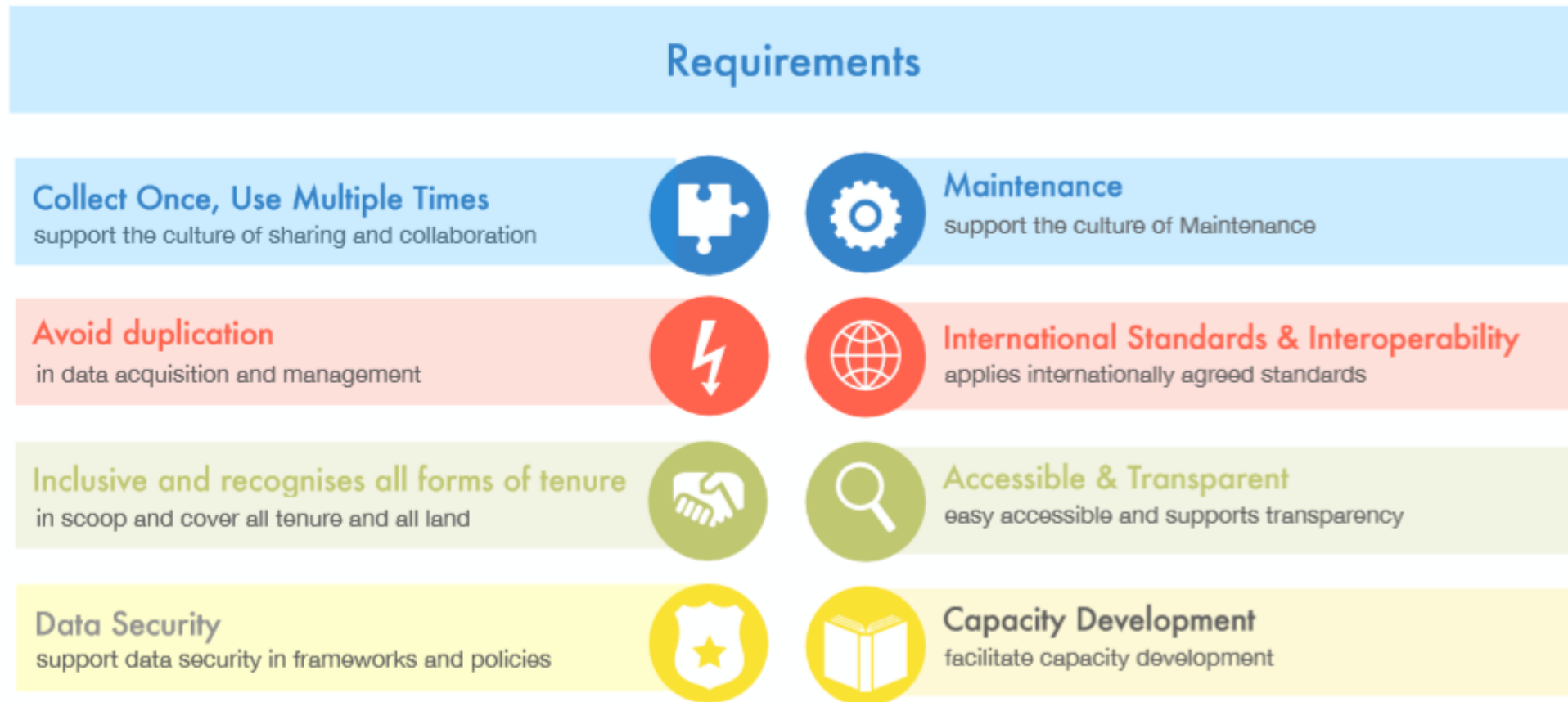
A framework for sustainable land administration ...

*... shall describe key principles for a sustainable and interoperable land administration and management system that can efficiently and effectively document, record and recognise people-to-land relationship in all its forms ...*

# Geospatial information for land administration



# Geospatial information for land administration



## Support from ECLAC at the regional and national levels

- ✓ Support the implementation of the **global agenda** at the **national level**
- ✓ Provide **technical assistance** for the implementation of national geospatial frameworks and spatial data infrastructures (SDI)
- ✓ Support the process of **integration of statistical and geospatial information** in the countries of LAC
- ✓ Promote **the use of geospatial information** in the implementation of the **2030 Agenda** for sustainable development
- ✓ **Facilitate the coordination** of ECLAC with the world organizations of the United Nations and other global and regional organizations in the management of geospatial information
- ✓ Apply the diagnosis and **monitor regional progress** related to the management of geospatial information



Thank you !

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