

**Expert Consultation and Meeting on Enhancing Geospatial Information Management Arrangements and Accelerating Implementation of the Sustainable Development Goals, and the Sub-regional Workshop on the United Nations Integrated Geospatial Information Framework (UN-IGIF) for Central America and neighbouring Latin American countries**

**Implementing geospatial strategies: challenges and opportunities**

**Panama City, Panama  
1-5 December 2025**



**Enhancing Geospatial Information Management arrangements Accelerating the Implementation of the SDGs**

**Sub-regional Workshop on UN-IGIF for the Central America and neighbouring Latin American countries**

# ECUADOR

## MILITARY GEOGRAPHIC INSTITUTE



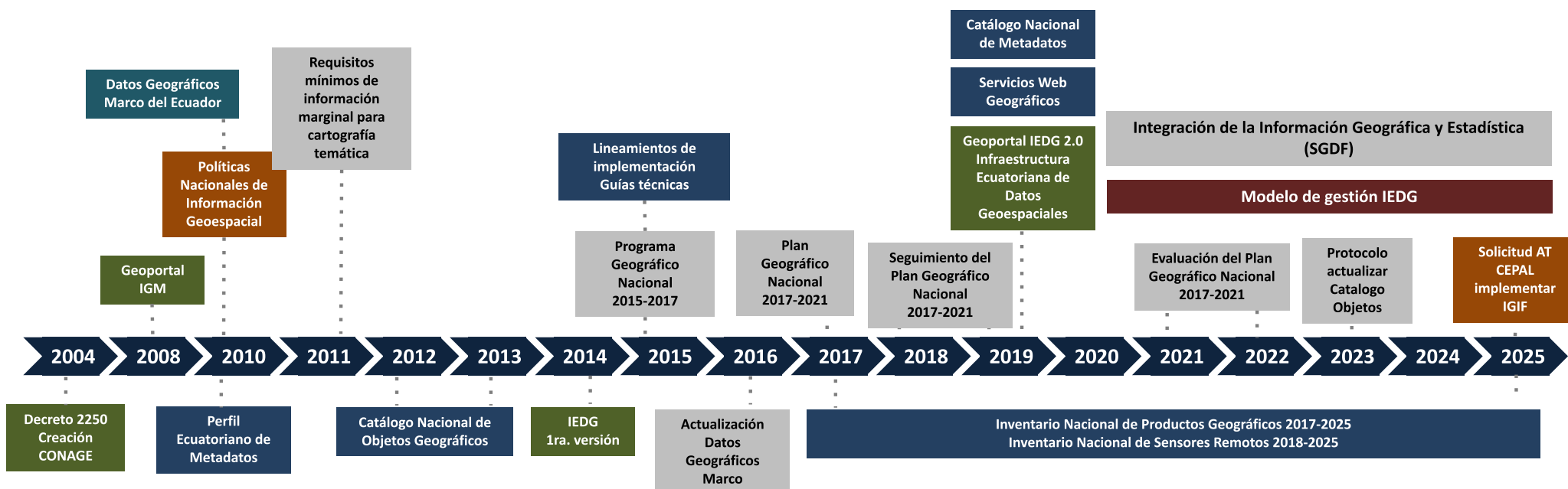
Military  
Geographic  
Institute

Crnl. EMC Hugo Avilés  
Director of the Military Geographic Institute



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American countries

# Context on the Management and Use of Geospatial Information



## CONAGE – NATIONAL GEOINFORMATICS COUNCIL:

- **Data Component:** Management and administration of geographic information by institutions.
- **Regulatory Component:** Technical documents regarding norms and standards, developed by working groups composed of delegates from member institutions and invited participants.
- **Technological Component:** Tools for the dissemination and publication of matters related to geographic information.
- **Coordination Component:** Working groups and inter-institutional coordination.



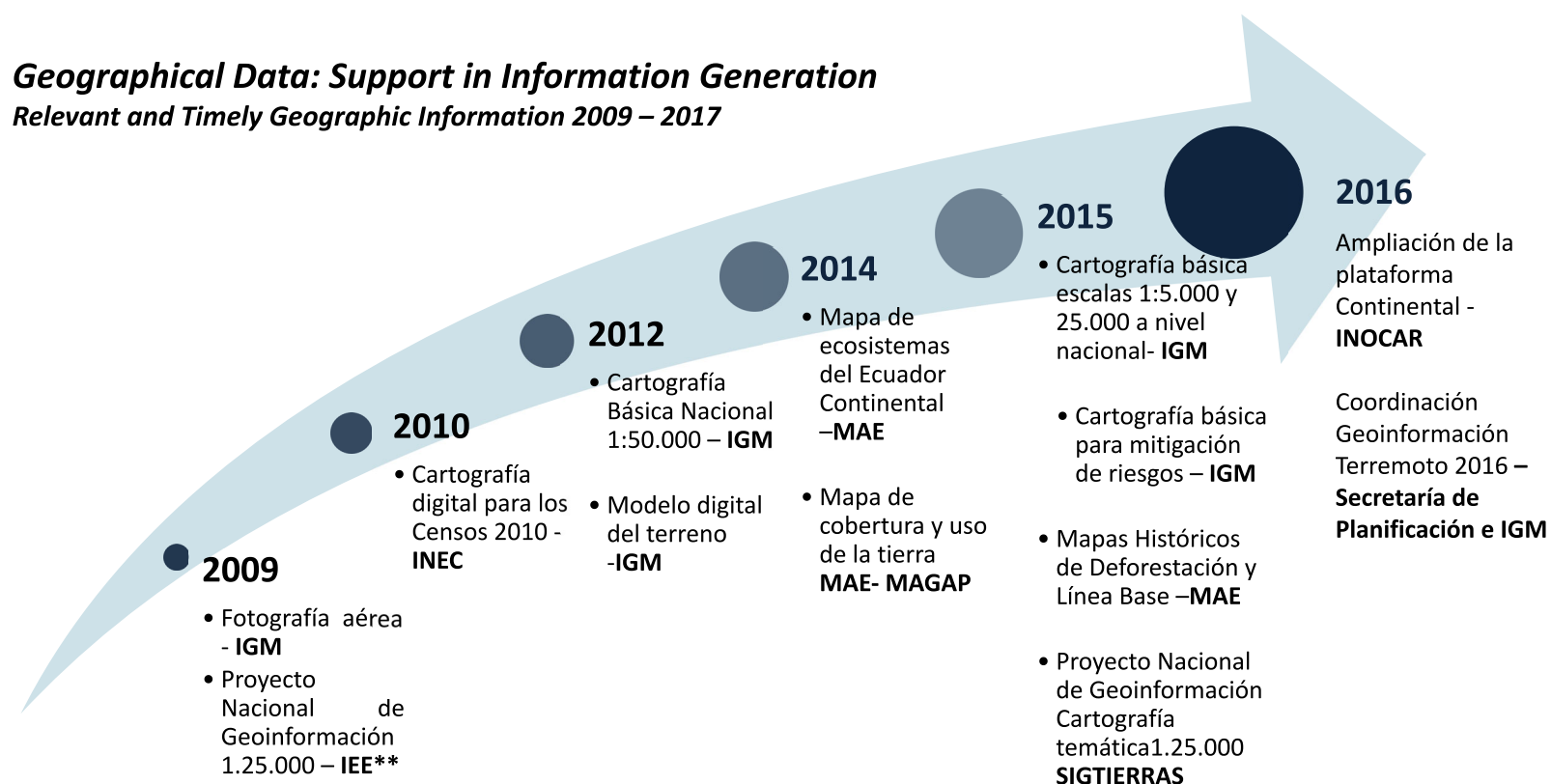
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# Context on the Management and Use of Geospatial Information

## Geographical Data: Support in Information Generation

Relevant and Timely Geographic Information 2009 – 2017



**National Inventory of Geographic Information 2007–2017**

**\*3096** geographic products Available on the IEDG Geoportal

**National Inventory of Remote Sensing Data 2007–2017**

**411** records from 8 institutions \*

\*National Geographical Plan 2017–2021



<https://iedg.presidencia.gob.ec/>

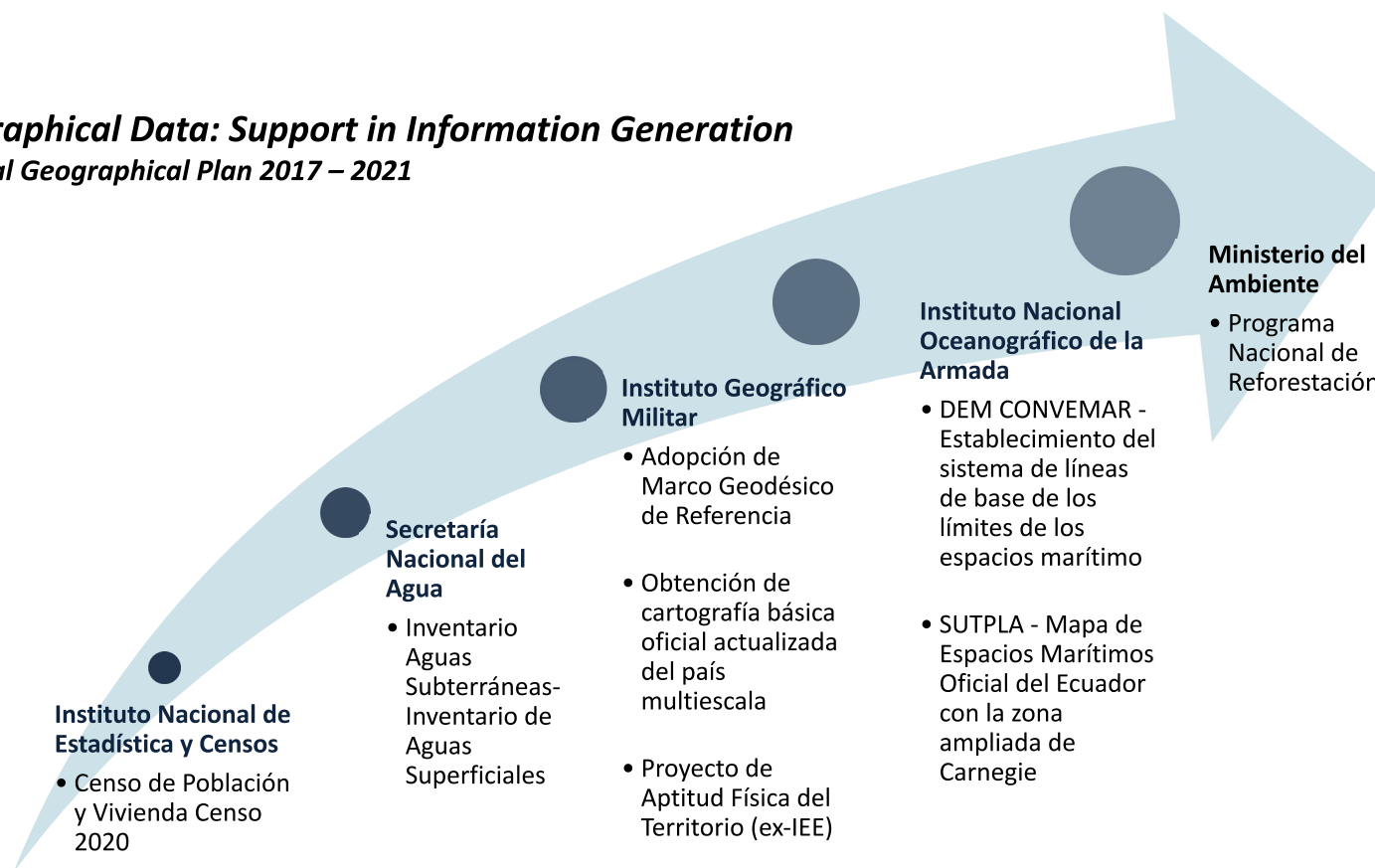


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# Context on the Management and Use of Geospatial Information

## Geographical Data: Support in Information Generation National Geographical Plan 2017 – 2021



### National Inventory of Geographic Information 2007–2024

**\*4175** geographic products  
Available on the IEDG Geoportal

### National Inventory of Remote Sensing Data 2007–2024

**7293** records\*

\*National Geographical Plan 2007–2024



<https://iedg.presidencia.gob.ec/>



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# Where is your country today in enhancing the management and use of geospatial information?



Ecuador is currently engaged in a process to strengthen and update its geospatial information ecosystem, governance, and legal framework, undertaking key actions such as:

## DATA – INNOVATION:

- Updating and publishing official geospatial data through interoperable geoportals that comply with established standards.
- Developing the National Inventory of Geographical Data and Remote Sensors.
- Analyzing and updating the country's Framework Geographical Data.
- Establishing the new National Geographical Plan 2025–2029.
- Integrating Geographical Data as part of the national Open Data ecosystem.
- Maintaining the Ecuadorian Geospatial Data Infrastructure (IEDG).



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# Where is your country today in enhancing the management and use of geospatial information?

## Miembros del CONAGE

El CONAGE actualmente se encuentra conformado por:



## GOVERNANCE – STANDARDS – LEGAL FRAMEWORK – CAPACITIES:

- Promoting the adoption of the United Nations Integrated Geospatial Information Framework (UN-IGIF), with technical assistance from ECLAC.
- Advancing diagnostic and self-assessment processes aligned with the IGIF components.
- Coordinated inter-institutional efforts to implement the Integrated Geographical and Statistical Information Framework.
- Updating standards and technical documents related to the Spatial Data Infrastructure.
- Strengthening data governance policies and institutional mechanisms for inter-institutional coordination.
- Enhancing technical capacities within public institutions through training and specialized assistance.

*However, gaps remain to be addressed in technological resources, institutional capacities, and—most critically—financial resources and political decision-making.*



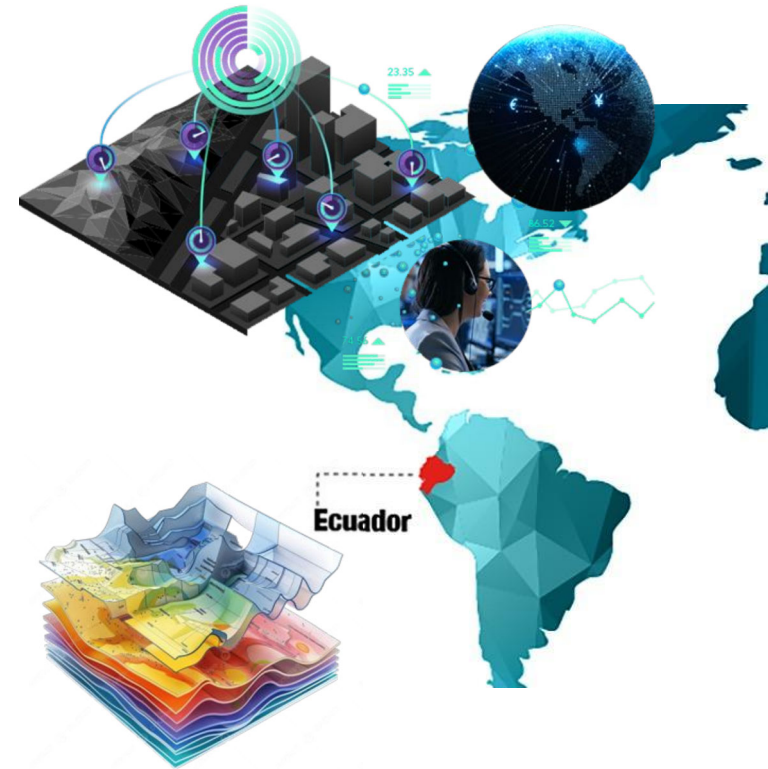
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# Where does your country aim to be in the next five years?

For the period **2025–2030**, Ecuador has established the following strategic objectives:

- **Consolidate national geospatial governance**, supported by updated regulatory frameworks, clearly defined institutional roles, and strong political commitment.
- **Implement a National Action Plan aligned with the IGIF**, articulated with the State's strategic sectors.
- **Modernize the Official Cartographic Base and geoinformation**, incorporating new technologies such as Earth observation, geospatial AI, and continuous updates.
- **Strengthen the Ecuadorian Geospatial Data Infrastructure (IEDG)** as the national platform, ensuring interoperability, data quality, and high-level open services.
- **Integrate geospatial information into public policy**, particularly in territorial planning, risk management, environment, security, defense, and the Sustainable Development Goals (SDGs).
- **Develop specialized human talent** through advanced training and international partnerships.



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## What do you see as the main challenges in reaching this “ideal” situation within the next five years?



The priority general challenges identified include:

- **Budget constraints:** insufficient resources for innovation, technological modernization, and the updating of geoinformation.
- **Limited access to cutting-edge technology** and to robust data infrastructure.
- **Uneven technical capacities:** the need to strengthen competencies within local governments and sectoral institutions.
- **Institutional gaps:** lack of binding regulations, dispersed roles, and limited inter-institutional coordination.
- **Fragmentation in data production,** leading to duplicated efforts and lack of standardization.
- **Limited geospatial data culture** in decision-making processes.



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# What potential opportunities could help address some or all of these challenges?

Among the main opportunities identified are:

- **Strategic partnerships with international organizations** (UN-GGIM, ECLAC, the World Bank, Geographic agencies) capable of providing the necessary financial resources.
- **Academic and scientific cooperation** to develop applied research and advanced capacities.
- **The growth of the open data ecosystem and open-source technologies**, which reduces costs and accelerates innovation.
- **Implementation of the UN-IGIF as a national coordinating framework**, enabling a clear and consensual roadmap.
- **The State's digital transformation**, which promotes interoperable platforms and data-driven services.
- **The increasing demand for geospatial information** in priority sectors such as risk management, environment, mobility, security, and territorial planning.

These opportunities provide a solid foundation for accelerating the country's geospatial maturity in the short and medium term.



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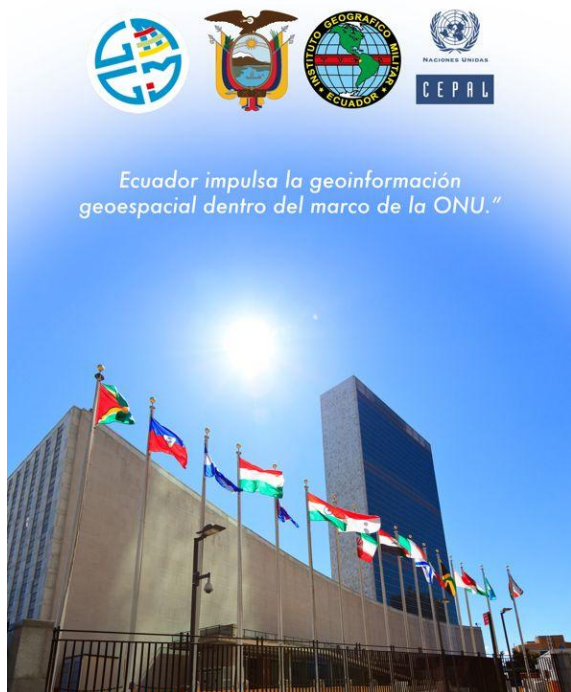
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# How familiar are you with UN-GGIM, the UN-GGKIC, the IGIF, and the CAP?

## *Interaction with UN-GGIM and UN-GGKIC*

In recent years, Ecuador, through the Military Geographic Institute (IGM), has maintained active participation with UN-GGIM and UN-GGIM: Americas. Key interactions include:

- **Participation in sessions and technical consultations**, expert meetings, and conferences of the UN-GGIM Expert Committee.
- **Engagement in regional activities of UN-GGIM: Americas.**
- **Regional leadership of the Disaster Working Group.**
- **Collaboration with international agencies**, such as ECLAC, in processes to strengthen the National Geospatial Data Infrastructure (IEDG), the IGIF, and institutional capacity building.
- **Participation in workshops and training** on Geodesy, Geographic Information Systems, implementation of technical documents, among others.



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# How familiar are you with UN-GGIM, the UN-GGKIC, the IGIF, and the CAP?

## *To use, the IGIF and/or the CAP*



Ecuador **has begun the adoption and implementation of the IGIF** as the guiding framework to strengthen governance and the management of geospatial information.

- Technical advisory support from ECLAC is being provided for the use of the IGIF as a reference to update the geospatial regulatory and legal framework.
- The IGIF is expected to become the national strategic framework to guide investments, governance, regulations, and geospatial technological development over the coming years.
- A current assessment and identification of gaps, priorities, opportunities, and key stakeholders related to the nine strategic pathways of the IGIF has been conducted.
- Analysis and future preparation are underway for the definition and development of the country's Action Plan (CAP) with international support.



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# What kind of support would you like to receive from UN-GGIM, UN-GGKIC, or other partners?

Ecuador highly values international support and requests assistance in the following areas:

- **Ongoing technical assistance** for the implementation of the IGIF and the formulation of the CAP.
- **International cooperation**, including expert networks, exchange of best practices, and funding opportunities.
- **Support to strengthen geospatial governance**, including regional policies that encourage governments to access and use geoinformation for decision-making at all levels.
- **Continuous capacity building and specialized training**, particularly in areas such as:
  - Spatial data infrastructure and interoperability
  - Quality management throughout the geospatial data lifecycle
  - Modern geodesy
  - Geospatial intelligence and emerging technologies
- **Access to UN-GGKIC tools, guides, and methodologies** in all languages.
- **Support for technological modernization**, particularly in Earth observation, geospatial intelligence, interoperable platforms, and other related areas.



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# THANK YOU



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