



**UN-GGIM:Americas**

REGIONAL COMMITTEE OF UNITED NATIONS  
ON GLOBAL GEOSPATIAL INFORMATION  
MANAGEMENT FOR THE AMERICAS

# 9° SESSION

## UN-GGIM: Americas

### Contributions from Academic Network UN-GGIM: Americas - Aportes desde la Red Académica UN-GGIM: Americas

Rosario Casanova

Session 5



November 28, 29 and 30  
Santiago de Chile, ECLAC

# Comments about...

- Opportunities regional work
- Challenges
- Interaction
- Contribution the work guidelines of the Regional Committee.

# Some functions of ANA

- **Provide:**
  - **academic advice** - geospatial information management
  - **coordination and dialogue forum for academics and researchers** - activities related to the competencies and qualifications needed for the **administration, management, and use of geospatial information.**
- **Undertake activities that foster collaboration** amongst universities and research centers- addressing common research topics and overarching trends.
- Elaborate **academic strategies** according to the UN-GGIM Americas Plan of Action.
- **Identify the challenges and opportunities** - can promote inclusion and **development** based on an academic response.

# Challenges/Opportunities

Some comments from national members of UN-GGIM Americas, 12 session of the UN-GGIM, August 2022.

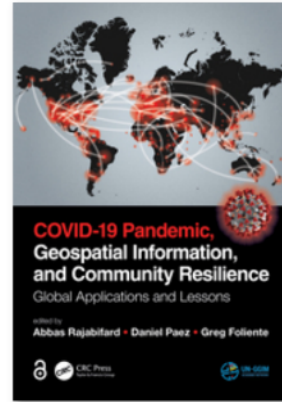
**Work to be done!!**

- Share conceptual and practical experiences- Network- communities connected.
- Formation/training of technicians/professionals in the subject.
- Technologies are converting technicians trained by vendor companies but there is a lack of academic-based technical training.
- Human resources qualified in GIS.
- Leverage synergies and knowledge given the reduced budgets, therefore cooperation for capacity building is essential.
- Continuing education.

**“The importance of professional education, continuing professional development, and training as a “life-long” learning approach throughout a whole career”**

# Sharing knowledge

## Books- Articles



Book

## COVID-19 Pandemic, Geospatial Information, and Community Resilience

Global Applications and Lessons

By *Abbas Rajabifard, Greg Foliente, Daniel Paez*

ScienceDirect Journals & Books

View PDF | Access through your institution | Purchase PDF

Technology in Society  
Volume 69, May 2022, 101964

### Ethics in the use of geospatial information in the Americas

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<sup>b</sup> University of Republic, Uruguay  
<sup>c</sup> Association for Geographic Information and University of Southampton, UK  
<sup>d</sup> American Geographical Society, USA

Received 12 November 2021, Revised 5 March 2022, Accepted 7 March 2022, Available online 12 March 2022, Version of Record 14 March 2022.

- Outline
- Highlights
- Abstract
- Keywords
- Abbreviations
- 1. Introduction
- 2. Methodology: Towards a regional analysis
- 3. Results: Ethics in the Americas region
- 4. Conclusions
- Author statement
- Author contributions
- Declaration of competing interest
- References

Show full outline

Revista Geográfica

Actual | Archivos | Acceso de + | Registrarse | Entrar

Índice | Archivos | Núm. 165 (2022): Revista Geográfica | Artículos

### Estado de la medición de los indicadores geográficos de los Objetivos de Desarrollo Sostenible en Uruguay

Rosario Casanova  
Instituto de Agrimensura, Facultad de Ingeniería

Agustín Asuña  
Servicio de Oceanografía, Hidrografía y Meteorología de la Armada de Uruguay

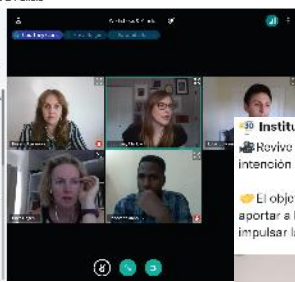
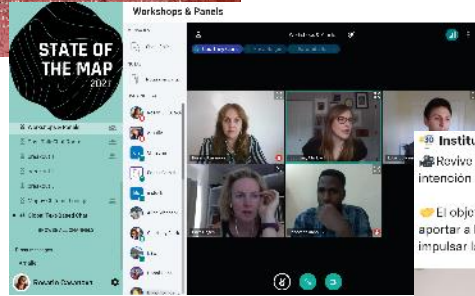
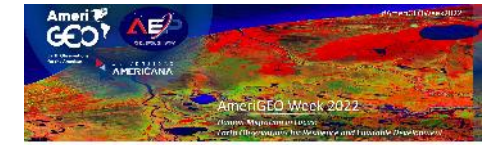
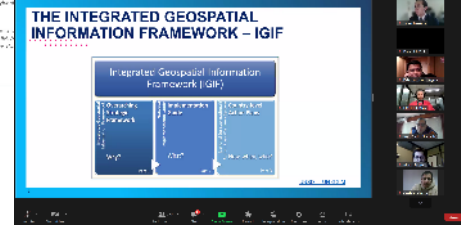
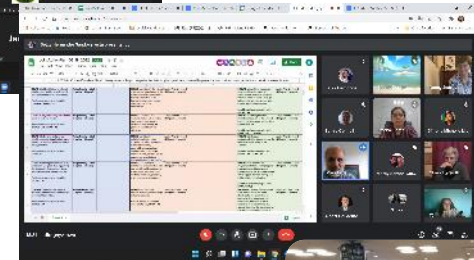
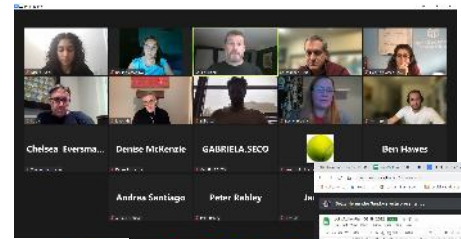
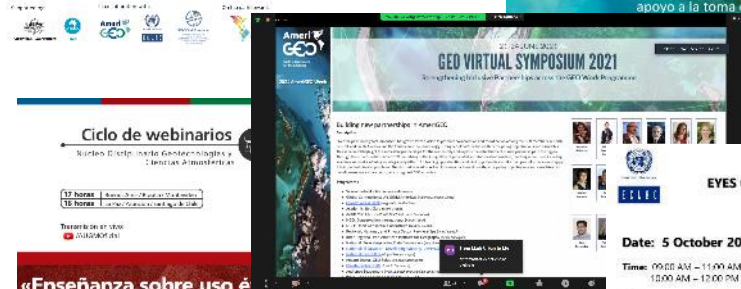
Paula Teperino  
Universidad de la República

REVISAR EL TEXTO

PAI ABBAS RAJABIFARD

NUMERO | SECCION | COMO CITAR

# Webinars – Workshop – eLearning- Events



Instituto Geográfico Agustín Codazzi - @igacColombia - 18 Jul.  
Revive la #SomanaGeomática2022 y la firma de la carta de intención con la Pots. de @UN\_GGIM\_ANA. Rosario Casanova.

El objetivo de estas alianzas internacionales es generar lazos, aportar a la visión y el intercambio regional de conocimientos para impulsar la investigación.

**Judges**

- Mrs. Jacqueline deCosta – Land Information Council Jamaica
- Dr. Michael Sutherland – The University of the West Indies
- Mrs. Sandra Turner – National Geographic Certified Educator
- Dr. Silburn Clarke – Spatial Innovation Limited
- Mrs. Khadija Banno – Independent GIS Consultant
- Mrs. Paloma Merodio – INEGI/GGIM
- Mrs. Cecilia B. Aké – UN-GRID/GGIM Switzerland
- Dr. Rogério Casanova – GGIM/Academic Network
- Dr. Zaffar Saifullah-Mohamed-Ghouse – World Geomatics
- Mrs. Eric Van Praag – Esri
- Mrs. Alison DeGreff Ollivierre – Tomblow Map

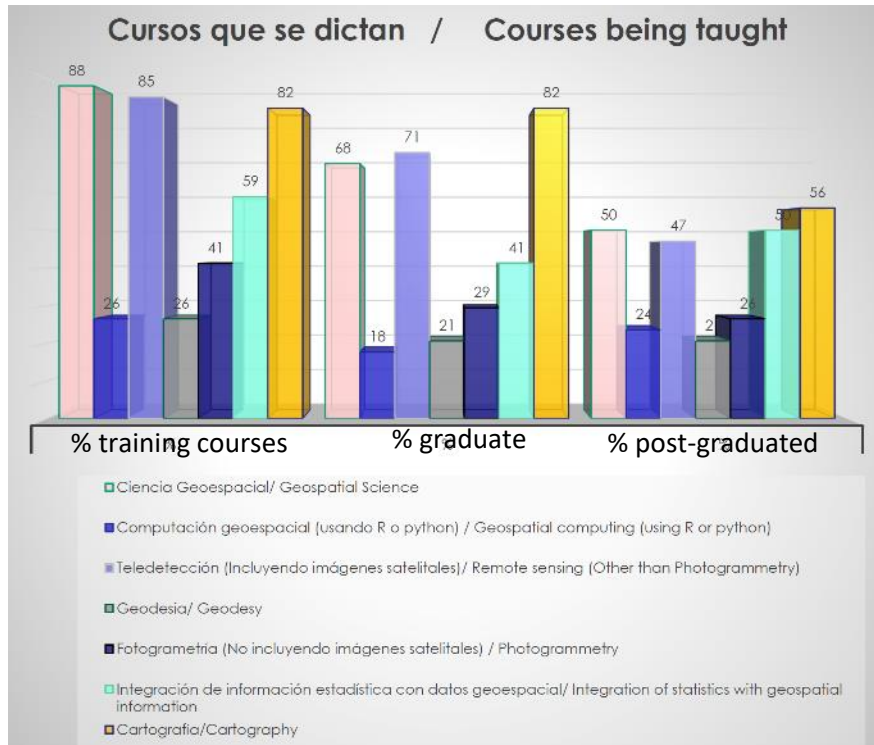
UN-GGIM-ANA @UN\_GGIM\_ANA - 5 ago.  
Nosotros presentamos a los miembros de la Academia de la Información Geoespacial de América Latina y el Caribe en la conferencia sobre el futuro de la información geoespacial, celebrada en la 7ª Sesión de la UN-GGIM.

Capacity Development UN-GGIM: Americas  
Rosario Casanova, Chair Academic Network UN-GGIM: Americas



# Survey of offers of courses regarding GI

# Repository of courses – AN



### Relevamiento de Capacitación en Geotecnologías – Red Académica UN-GGIM

El objetivo de la presente encuesta es realizar un inventario sobre la sobre la formación (cursos/talleres/seminarios) que se dictan periódicamente o se brindarán en el correr del próximo año sobre temáticas relacionadas con UN-GGIM. La información recopilada estará disponible en el sitio de la Red, de manera que todo el público interesado pueda acceder.

rosario.casanova@gmail.com [Cambiar cuenta](#) Se guardó el borrador

**\*Obligatorio**

Correo electrónico \*

casanova@fing.edu.uy

En qué idioma prefiere contestar el formulario? \*

Español

English

[Siguinte](#) [Borrar formulario](#)

Nombre de Institución Académica responsable del dictado del curso \*

Tu respuesta

---

Sitio web de dicha institución \*

Tu respuesta

---

País \*

Tu respuesta

---

Ciudad \*

Tu respuesta

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Breve descripción del curso \*

Tu respuesta

---

Modalidad de dictado \*

Presencial

Virtual

Híbrido

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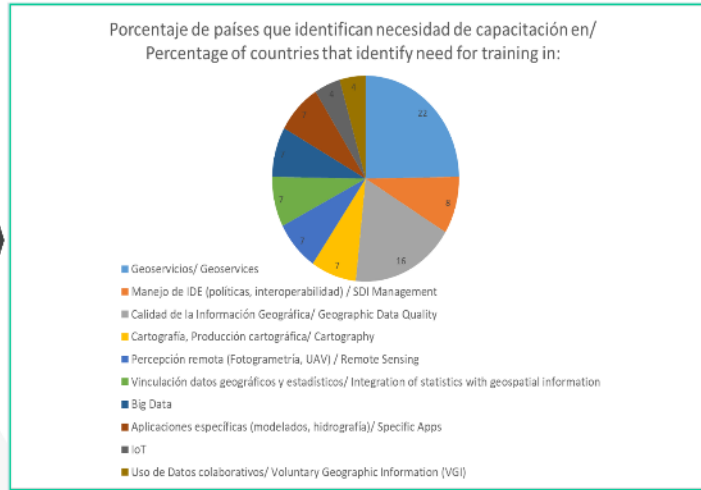
¿A qué temáticas se relaciona que principalmente abarca el curso capacitación? \*

- Ciencia Geoespacial
- Computación Geoespacial
- Teledetección
- Geodesia
- Fotogrametría
- Integración de información estadística con datos geoespaciales
- Cartografía
- Otros

# Identifying needs

## Survey of needs on capacity courses country members

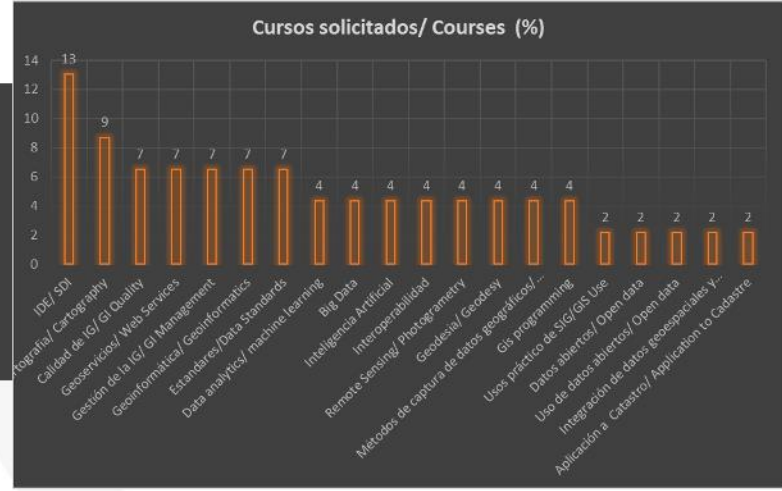
2018



2020



2021





# Surveys: ethical use of geospatial data (2021 – 2022)

## Americas: national members and academia

**Existence of  
National  
regulation**

9 questions – 16 responses-  
national members

**Existence of  
Education**

8 questions – 90 responses

## Europe: academia

**Existence of  
Education**

8 questions – 40 responses

# Survey of status of ethics issues in the use of GI state members

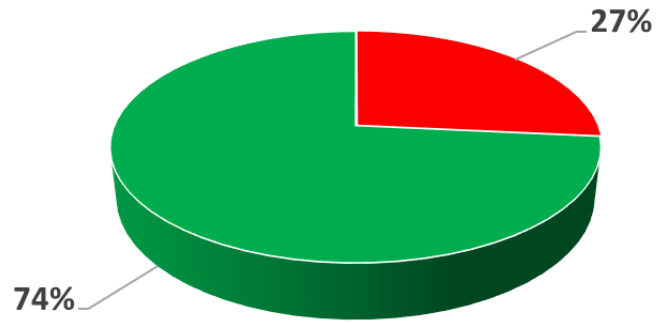
Questions: regulation

*Work to be done!!*

- 69%:** the ethical use of data is not controlled by regulations; norms exist as an orientation.
- 54%:** there are no federal or state regulations that penalize the inappropriate use of location data.
- 77%:** government institutions or agencies do not have standards on the ethical use of geospatial data.

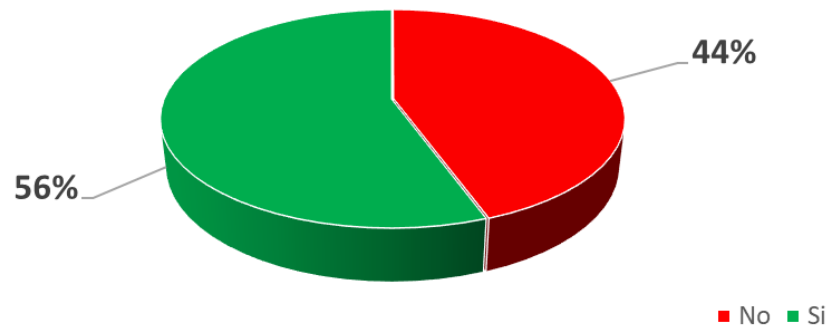
# Survey of education regarding the ethical use of GI

Have a education/ training course of the ethical use of geographic information? - English survey

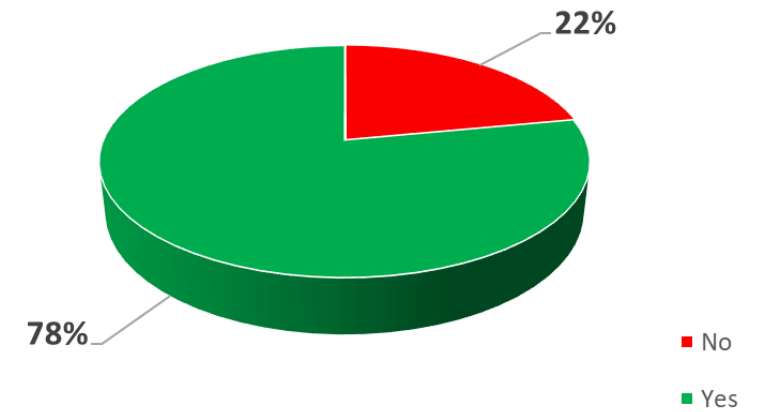


America

¿Brinda algún curso de entrenamiento/capacitación sobre el uso ético de los datos geográficos? - Encuesta en español



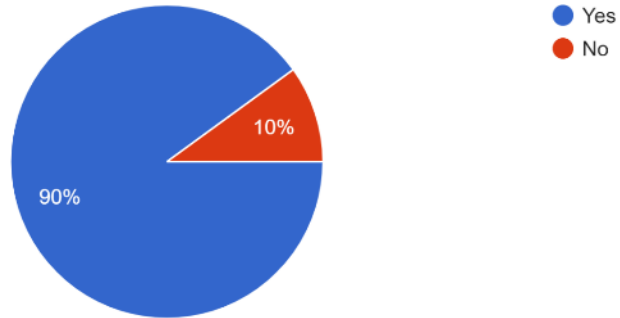
Have a education/ training course of the ethical use of geographic information? - Europe



Europe

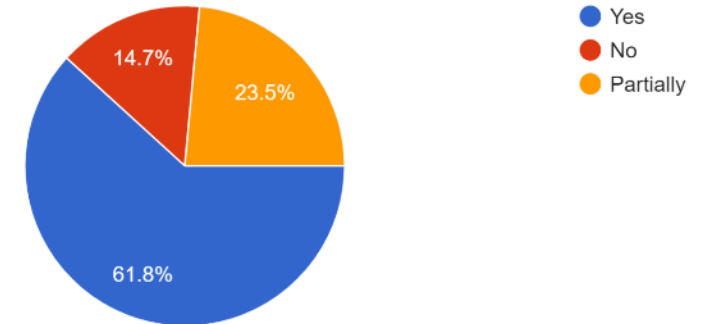
# Including in the future...

Are you considering including a discussion of ethics in your course in the future?  
50 responses



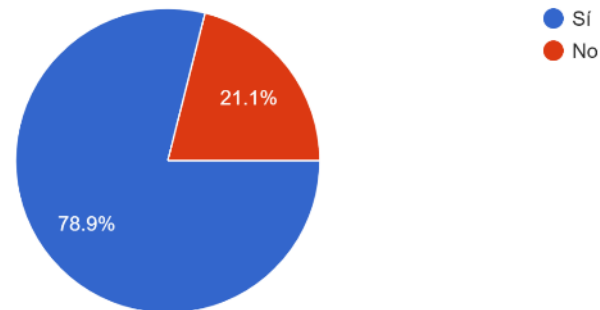
**Work to be done!!**

Are you considering including a discussion of ethics in your course in the future?  
34 responses



Está considerando incluir la discusión de la ética en cursos futuros?  
38 responses

**America**



**Europe**

# Making proposals

# Proposal Project - PAIGH: Education in the ethic use of GI

Proyecto: Ética en el uso de los datos geográficos: Diagnóstico y Propuesta para su Enseñanza en los Estados Miembros del IPGH.

## RESUMEN

La presente propuesta viene a analizar una brecha en el conocimiento y en la capacitación que está siendo brindada por nuestras instituciones académicas y por tanto los técnicos de nuestros países no están incluyendo este abordaje en sus actividades profesionales.

De alguna manera, la pandemia y el uso masivo de los datos geográficos han puesto en evidencia la importancia de su uso ético, en particular algunos aspectos como la privacidad del individuo, uso y difusión inadecuada, la geovigilancia, etc. Es por ello, que el abordaje de la ética en el uso de los datos y de los geográficos en particular, ha cobrado más visibilidad.

Es por ello, que se ha percibido una gran ausencia de conocimiento en estas áreas y por tanto ha disparado una señal de alerta en la comunidad académica. Si bien la ausencia de capacitación en estos aspectos se puede detectar como una gran debilidad en nuestros países también abre una gran oportunidad para acortar la brecha del conocimiento que entendemos podrá achicarse mediante la realización de esta propuesta de investigación.

Este proyecto tiene por objetivo principal elaborar lineamientos generales de apoyo para facilitar la inclusión de la enseñanza de ética en el uso de los datos geográficos en instituciones académicas. Se propone realizar un análisis del estado de situación de la enseñanza sobre el uso ético de los datos geográficos en los países participantes, la identificación de buenas prácticas y lecciones aprendidas de experiencias regionales e internacionales así como la elaboración de un [plan de trabajo](#) que permita implementar actividades de capacitación

Dra. Rosario Casanova - Instituto de Agrimensura Facultad de Ingeniería - Ude

## Argentina:

Investigador responsable:  
Agrim. Mario Piumetto - Centro de Estudios Territoriales. Facultad de Ciencias Exactas, Físicas y Naturales. Universidad Nacional de Córdoba.

## Chile:

Investigador responsable:  
Geog. Macarena Pérez - Instituto de Geografía de la Pontificia Universidad Católica de Chile. Jefa de alianzas estratégicas y redes del Instituto para la Resiliencia ante Desastres, [Irend](#).

## Costa Rica:

Investigador responsable:  
Ing. Top. Gabriela Cordero Gamboa- Escuela de Topografía, Catastro y Geodesia (ETCG) de la Universidad Nacional (UNA).

## Estados Unidos:

Investigador responsable:  
PhD. Charlotte Smith - Environmental Health Sciences - School of Public Health- Berkeley University of California.

## México:

Investigador responsable:  
PhD. (C) Rigoberto Alejandro Moreno Vázquez - Residencia Regional de Proyectos de Transmisión y Transformación - CFE - CPTT

## Panamá:

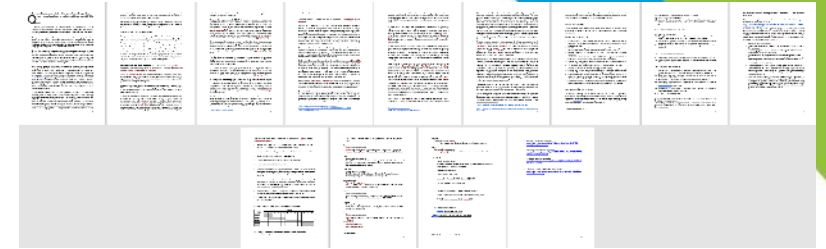
Investigador responsable:  
Geog. Isis Tejada- Departamento de Geografía-Facultad de Humanidades- Universidad de Panamá

## Uruguay:

Investigador responsable:  
Msc. Rosario Casanova - Instituto de Agrimensura Facultad de Ingeniería - UdeLaR

## Participantes:

Ing. Agustín Acuña  
Ing. Paula Teperino



- [PDF USNS Support Letter Ethical Use of Geographic Data.pdf](#)
- [PDF Carta apoyo IDECOR\\_Argentina.pdf](#)
- [Avales secciones nacionales.zip](#)
- [PDF Apoyo-sección nacional\\_Panama.pdf](#)
- [PDF Apoyo-seccion nacional\\_Mexico.pdf](#)
- [PDF Apoyo-sección nacional\\_Costa Rica.pdf](#)
- [PDF Apoyo-sección nacional\\_Argentina.pdf](#)

## Países Invitados:

### Bélgica:

Investigador responsable:  
• Joep Crompyoets- European Spatial Data Research network

### Brasil:

Investigador responsable:  
• Edilson Bias- Instituto de Geociencias - Universidad de Brasilia

# Joining efforts/ networks

- Advisory board of AN UN-GGIM
- HLG-IGIF Capacity Development Working Group of UN-GGIM
- Co-chair of the Capacity Development Group of the Joint Action Plan-Aguascalientes Declaration
- Deputy chair of Commission Education of the International Federation of Surveyors (FIG)
- Group of geotechnologies and atmospheric sciences of the Association of Universities of Grupo Montevideo.
- PAIGH Geographic Education Network
- Iberoamerican Academic Network of Cadaster and Land Administration

# Contribution the work guidelines of the Regional Committee

## Objectives Regional Committee UN-GGIM: Americas

As in previous years, the objectives of the Regional Committee for the period 2021-2025 will be governed by Articles 4 and 5 set forth in the current Statutes of UN-GGIM: Americas.

### Article 4. General Objective

The Regional Committee determines the relevant regional issues for the management of geospatial information, and takes the necessary measures to maximize the economic, social and environmental benefits derived from its use. The foregoing based on knowledge and the exchange of experiences and technologies by the Member States, which allows promoting the establishment of Geospatial Data Infrastructures in the Americas and other national initiatives, in addition to contributions to the debates in UN-GGIM.

### Article 5. Specific Objectives

1. UN-GGIM: Americas will hold annual/regular high-level multi-stakeholder discussions on geospatial data infrastructure and geospatial information management, including by convening annual plenary sessions with a view to promoting dialogue with all Member States of the Americas and relevant topics, groups and stakeholders to share experience, best practices and the state of the art of technologies.
2. Align its work on the geodetic reference frame for the Americas to the United Nations General Assembly Resolution (in note A/RES/69/266) 69/266 entitled "A global geodetic reference frame for sustainable development", adopted on February 26, 2015.
3. Improve the capacities of Member States in the development and establishment of policies for the national management of geospatial information, taking into account the needs and priorities of each Member State.
4. Develop strategies and guidelines to support the development of an authoritative source of geospatial information in each Member State of the Regional Committee.
5. Establish and promote the necessary institutional arrangements and framework to allow the Member States of ONIG (National Organizations responsible for Geospatial Information) to develop and achieve a level of consistency and geospatial maturity, respecting their autonomy in accordance with their national laws and policies.
6. Promote interoperability and ease of use and timely exchange of geospatial information among Member States to regional and global affairs, including disaster management.
7. Develop strategies and guidelines for the flow, discovery, access, integration and dissemination of geospatial information in order to meet current challenges, with a particular emphasis on the 2030 Agenda for Sustainable Development, the reduction of vulnerabilities and the improvement of the capacity of Member States to deal with disasters.
8. Contribute to the promotion and monitoring of principles, policies, methods, research and development of standards for geospatial data and services in order to achieve the goal of UN-GGIM.

### Strategic Focus for the Working Groups

This document proposes to focus the activities of the Working Groups, considering the following focuses as a baseline:

1. Support the implementation of global frameworks at the country level
2. Follow up on national geospatial information management processes
3. Strengthen capacities in all lines of work that are considered a challenge
4. Increase information assets through geospatial knowledge management
5. Support the implementation of standards at the national level

Considering these guidelines, each Working Group will develop its specific plan of activities looking for points of collaboration, support and feedback between one and other.

- Integrate WG/ Network
- Ethics
- Repository – Webinar

## Academic Network of the Americas

The Academic Network provides specialized support to coordinate and have pedagogical support that allows the exchange of knowledge.

The Academic Network should maximize the Human Capital of the Regional Committee to promote the transfer of the best experiences between Member States, having all the necessary powers to support the co-chairs and Member States in this matter.

It is important to emphasize that for the fulfillment of the Strategic Focus, points 3 and 4 allow the Academic Network to raise and coordinate the training needs among the Member States.

## **WE ARE TO SUPPORT AND COORDINATE TRAINING NEEDS**

### **LET US KNOW :**

- **YOUR PLANS**
- **YOUR NEEDS**
- **YOUR SUCCESS**





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REGIONAL COMMITTEE OF UNITED NATIONS  
ON GLOBAL GEOSPATIAL INFORMATION  
MANAGEMENT FOR THE AMERICAS

# 9° SESSION

## UN-GGIM: Americas

# GRACIAS

Rosario Casanova

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November 28, 29 and 30  
Santiago de Chile, ECLAC