Report 2024

Fourteenth Session of the UN Committee of Experts on Global Geospatial Information Management

4 August 2024- 9 August 2024

Summary

The report provides an update on the activities of the United Nations Global Geospatial Information Management Geospatial Societies during the intersessional period 2023-2024. The Geospatial Societies is a coalition of international organizations involved in geospatial information and related matters. Two new societies joined this network (ISC-CODATA and OSGeo) totalizing now 11 societies. The report provides details on the increased involvement of the societies in the UN-GGIM collective objectives, committees and meetings. The accompanying technical background document also informs for each member organizations of the Geospatial Societies on their abundant activities.

UN-GGIM Geospatial Societies (UN-GGIM GS)

The UN GGIM Geospatial Societies Thematic Network is a coalition of recognized international organizations involved in the coordination, development, management, standardization or regulation of geospatial information and related matters.

These organizations are:

- IEEE Geoscience and Remote Sensing Society (GRSS)
- International Association of Geodesy (IAG)
- International Cartographic Association (ICA)
- International Federation of Surveyors (FIG)
- International Geographical Union (IGU)
- International Map Industry Association (IMIA)
- International Society for Digital Earth (ISDE)
- International Society for Photogrammetry and Remote Sensing (ISPRS)
- International Union of Geodesy and Geophysics (IUGG)
- Open-Source Geospatial Foundation (OSGEO)
- International Science Council CODATA (CODATA)

The UN GGIM GS made 6 online meetings during the period 2023-2024 to exchange information and put in place the necessary structure to better organize their activities. To coordinate their own educational and scientific workshops and meetings having many topics related to UN-GGIM (sometimes with specific UN-GGIM sessions), an updated joint calendar is now regularly available on the Geospatial Societies website

This background-report provides a general view on the activities of the joint contributions of the societies (part 1), and details (part 2) society by society their involvements and potential future ones with the other networks and groups within the UN-GGIM – IGIF perspective.

Activities of the Geospatial Societies in the UN-GGIM in 2023-2024

The <u>Geospatial Societies</u> (GS) network established in 2023 a new leadership with the IGU and revised its main representatives members, detailed under its <u>website</u>. The 11 Geospatial Societies are now further creating synergies by conducting joint action and engagement together inside the UN-GGIM (points 1 to 5) and by focusing on Education together with the Academic network, the International Telecommunication Union – ITU (UN Network) and the Private Sector Network (Points 6 and 7).

1. The GS involvement in the setting-up of the three UN-GGIM Centers

- The UN Global Geodetic Centre of Excellence in Bonn, Germany: IAG and FIG are Partner Organizations of the SCoG and participated in the 4th Plenary meeting of the SCoG (Subcommittee on Geodesy) held in Bonn, in March 2024. IAG is also Chair of the SCoG Working Group on Global Geodesy Needs Assessment and member of SCoG Working Group on Capacity and Education. The new center was presented by his Head of Office, Mr. Nick Brown, during the plenary session of FIG Working Week 2024.
- The UN Global Geospatial Innovation and Knowledge Centre in Daqing, China: ICA is member of the International Advisory Committee and participated to the committee's meetings in 2023-2024. ISPRS is in discussion with the center to joint tutorials, conferences, resource sharing, etc.
- The UN Global Geospatial Ecosystem Centre in Riyadh, Saudi Arabia: IGU participates to the working group on the definition of the Future Geospatial Information Ecosystem (writing team).

2. The GS actively participated to the UN-GGIM regional meetings 2023-2024

- The 9th Plenary meeting of the UN-GGIM Africa meeting in Cape Town 14-18 August 2023: FIG, ICA, ISPRS and IGU were represented.
- The 11th Plenary meeting of the UN-GGIM Americas in Santiago de Chile, 20 October 2023: OSGeo organized an Open-Source Side Event
- The 12th Plenary meeting of the UN-GGIM Asia and the Pacific in Bali, 6-10 November 2023: it coincided with the Asia-Pacific Geospatial Forum (APGF 2023), which had a theme "Embracing Geospatial Innovation for Sustainable World". FIG organized several sessions and IAG participated in the "Geodetic Reference Frames and Application for Disaster Workshop".
- The 10th UN-GGIM Europe meeting in Brussels, 22-23 November 2023: IGU and FIG participated and IGU as the GS chair presented the GS network activities.

3. The GS involvement in the UN-GGIM Working Groups

- **UN-IGIF Integrated Geospatial Information Framework:** FIG is co-chairing a working group on "Strengthening Capacity Development".
- Land Administration and management: FIG has been involved in the creation of the Framework for Effective Land Administration (FELA). FELA is a part of UN-IGIF.
- **Geodesy:** IAG is Chair of the subcommittee on Global Geodesy Needs Assessment and Member of the subcommittee on Geodesy Working Group on Capacity and Education. FIG participates.
- Marine Geospatial Information: FIG/IHO/ICA lead the International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC)
- Toponymy: ICA/IGU Commission on Toponomy participates actively

4. The GS participated to the UN-GGIM Expert consultation and meetings on enhancing geospatial information management arrangements and accelerating the implementation of the SDGs, Aguascalientes, Mexico – 22-26 January 2024

IGU as the GS chair, presented the GS Network activities (FIG and ICA attended).

5. The GS participates to the preparation of the 7th High-Level Forum on UN-GGIM in Mexico City on 6 – 8 October 2024.

ICA and IGU participate to the advisory committee meeting. Together with the 3 other networks (Academic network, Private Sector, UN Network in particular ITU-AI for Good), the GS is organizing a session on

"The rise of AI, Big Data and data analytics: The GeoAI of the future".

- 6. The GS actively collaborated with the Academic Network and the UN Network in particular the International Telecommunication Union ITU GeoAl for Good, to the action: 'Building a foundation for geospatial AI: defining a syllabus and body of knowledge'.
 - The GS collaborates to the 3 syllabi Working groups' elaboration, corresponding to 3 levels of training: Experts; Users; Decision makers.
 - The GS co-leads the working group 4 on "Body of Knowledge"

These 4 working groups' first results were presented during the hybrid ITU's events on GeoAl for Good on May 30th 2024.

In complement, the GS launched a **survey on the main training centers of the World on Geo-AI.** This survey was diffused to the GS whole members and to the Academic Network members. It is in progress and will be presented during a side event of the XIVth UN-GGIM session.

These activities related to GeoAI will be briefly presented during the Fourteenth UN-GGIM Session joint side event with the 3 other UN-GGIM networks:

Geospatial and GEOAI accelerating the SDGs and Impacting in Countries.

7. The GS members organized numerous webinars on Geospatial Information and methodologies

Members of GS that are also members of ISC (International Science Council) GeoUnions, organize individually or collectively the following webinar series:

- ISC GeoUnions Distinguish lecture series
- ISDE Lectures on Digital Earth
- Joint webinar of IMIA, ICA and others on <u>'Trust in Mapping'</u>
- ISPRS Student Consortium webinar series

One of the goals in the future of the Geospatial Societies would be to better promote and share these webinars with the UN-GGIM members making them available on the <u>Geospatial Societies website</u>.

8. Perspectives for the future involvement of the Geospatial Societies in the UN-GGIM

The GS members are now better organized to contribute more actively to the UN-GGIM actions. While The GS was initially built with personalities who participated to the foundations of the UN-GGIM in 2011, newcomer representatives needed more information on the different WGs and actions to choose their priorities for their future involvement according to the competences they can offer.

REPORTS BY SOCIETY

International Association of Geodesy (IAG)

https://www.iag-aig.org/

Representative in the UN-GGIM in 2023-2024

Richard Gross, President



The International Association of Geodesy (IAG) is a scientific association in the field of geodesy. It promotes scientific cooperation and research in geodesy on a global scale and contributes to it through its various research bodies. It is a constituent association of the International Union of Geodesy and Geophysics (IUGG).

The Mission of the IAG is the advancement of geodesy. The IAG implements its mission by advancing geodetic theory through research and teaching, by collecting, analyzing, modelling and interpreting observational data, by stimulating technological development and by providing a consistent representation of the figure, rotation and gravity field of the Earth and planets, as well as their temporal variations.

PARTICIPATION TO THE UN-GGIM ACTIVITIES

1. Setting-up of the three UN-GGIM Centers:

The UN Global Geodetic Centre of Excellence in Bonn, Germany:

- IAG participated in the Second Consultative Meeting for the Global Geodesy Development Plan that was held in November 2023 at the offices of the GGCE in Bonn, Germany.
- IAG is a Partner Organization of the Subcommittee on Geodesy and participated in the 4th Plenary meeting of the Subcommittee on Geodesy and the Second Meeting of the UN-GGCE International Advisory Committee that were jointly held in March 2024 at the offices of the GGCE in Bonn, Germany.
- IAG participated in the Expert Consultation on Strengthening the Global Geodesy Supply Chain that was held in April 2024 at the offices of the GGCE in Bonn, Germany. Richard Gross gave a presentation entitled The Importance of the Global Geodesy Supply Chain for Science and Society.

2. Participation to UN-GGIM regional meetings 2023-2024

The 12th Plenary meeting of the UN-GGIM Asia and the Pacific in Bali, 6-10 November 2023:

The meeting coincided with the Asia-Pacific Geospatial Forum (APGF 2023), which had a theme *Embracing Geospatial Innovation for Sustainable World*. IAG participated in the *Geodetic Reference Frames and Application for Disaster Workshop* where Richard Gross gave a presentation entitled *Geodesy and Geodetic Reference Frames*.

OTHER RELATED ACTIVITIES

3. Journals

The Journal of Geodesy is an international journal concerned with the study of scientific problems of geodesy and related interdisciplinary sciences. It presents peer-reviewed papers on theoretical or modeling studies, and on results of experiments and interpretations. In addition to original research papers, the journal

includes commissioned review papers on topical subjects, occasional short notes on topics with broad significance to the readership, and special issues arising from, e. g., scientific symposia or workshops. The journal covers the whole range of geodetic science and reports on theoretical and applied studies in research areas such as positioning; reference frame; geodetic networks; modeling and quality control; space geodesy; remote sensing; gravity fields, and geodynamics. It is published on behalf of the IAG by Springer.

4. Publications

Springer publishes the proceedings of selected symposia organized by the IAG:

- The *Geodesist's Handbook* is published by Springer on behalf of the IAG after each IUGG/IAG General Assembly. The objective is to present the current IAG structure and its specifications, and to introduce the terms of reference and the officers of the Association's components for the upcoming 4-year term to the broad geodetic community. It is published as a special issue of the *Journal of Geodesy*.
- The *Travaux de l'Association de Géodésie* are published for the IUGG/IAG General Assemblies and serve as comprehensive documentation of the work carried out by the IAG during the past 4-year term. Midterm reports are also published for the IAG Scientific Assemblies that are held in between the General Assemblies.

International Cartographic Association (ICA)

https://icaci.org/

Representatives in the UN-GGIM in 2023-2024

- Georg Gartner, President of ICA
- Tim Trainor, Past President of ICA

International Cartographic Association
Association Cartographique Internationale



Priority Issues and Challenges

The ICA focuses on promoting cartography and GIScience around the world. The organization's long-standing alignment to UN activities continues with plans for offering programmatic support to the UN Centre of Excellence on Knowledge and Innovation in Deqing and contributing to an actionable agenda for the proposed Global Geospatial Ecosystem Centre of Excellence in Riyadh where the ICA proposes attention to research on trust in maps, mapping and geospatial information.

Activities, Areas of Work – Achievements

Capacity building and liaising with countries not currently part of the ICA family is a current area of work for expanding the role and importance of cartography and geospatial information. Supporting and organizing regional cartographic conferences is another area of work where the ICA awarded 24 scholarships to the recent CAGIS-UCGIS conference in Columbus Ohio while planning an active program for EuroCarto in September 2024. These events will be followed by the first Asian Cartographic Conference (AsiaCarto 2024) December 8-10 in Hong Kong. A future goal is to coordinate a similar conference for Africa. Building our future is another pillar of interest within the ICA where scholarships to ICA events are exposing many young scholars and professionals to opportunities that they would not otherwise have.

Perspectives and Future Plans

Trust in maps, mapping and geospatial information is increasingly becoming more important as more data is available, more automation, including AI and machine learning are coming to the fore, and bad actors continue their quest to disrupt everyone's lives. The ICA plans to contribute to the UN Centre in Riyadh as it develops and agenda for a future geospatial ecosystem.

PARTICIPATION TO THE UN-GGIM ACTIVITIES

1. Setting-up of the three UN-GGIM Centers

- The UN Global Geodetic Centre of Excellence in Bonn, Germany: A representative of the ICA sits on the International Advisory Committee for the Centre in Bonn. The ICA continues to monitor the plans and progress of UN-GGCE Strategy and Operating Plan.
- The UN Global Geospatial Innovation and Knowledge Centre in Daqing, China: A representative of the ICA sits on the International Advisory Committee for the Centre in Daqing and recently provided guidance to the Committee on the development of a Strategic Plan for the Centre's work.
- The UN Global Geospatial Ecosystem Centre in Riyadh, Saudi Arabia: The ICA has discussed with the UN Secretariat an interest on the part of the ICA to contribute to the Centre's agenda when it is developed.

2. Participation to UN-GGIM regional meetings 2023-2024

- The 9th Plenary meeting of the UN-GGIM Africa meeting in Cape Town 14-18 August 2023: The ICA arranged to have the International Cartographic Conference (ICC) in alignment with the 9th plenary meeting of UN-GGIM Africa. The arrangement made it possible for 34 African countries to be exposed to the ICA and participate in the ICC. The President of the ICA also made presentations to the Members of the 9th Plenary while they were in Cape Town.
- The UN-GGIM Europe meeting in Lisbon, 15-16 April 2024: The President of ICA participated in the substantive program of the meeting in updating Member States on recent research interests of the ICA. Data integration is a familiar topic for cartographers which was a common theme of the meeting, with special emphasis on the SDGs. In partnership with the UN, the ICA published the book "Mapping for a Sustainable World" which includes many examples of SDG data integration.

3. Involvement in the GGIM Working Groups

- **Geodesy:** The ICA is represented on the International Advisory Committee for the Bonn Centre.
- **Integration of Statistical and Geospatial Information:** The ICA actively participates and has contributed to the work on integration of statistical and geospatial information. In aligning with the UN efforts, the ICA recently approved a new Commission on Integrated Geospatial Information for Cartography.
- **Geospatial Information and Services for Disasters:** The ICA has a Commission on Cartography in Early Warning and Crisis Management and is focused on the disasters topic and contributes its work to the Working Group.
- Marine Geospatial Information: In alignment with the UN, the ICA has a Commission on Marine Cartography.
- **Role of Standards:** The ICA has a Commission on and actively participates in discussions on Standards. ICA is also an active member of the OGC.
- **Toponymy**: The ICA Commission on Commission on Toponymy (ICA-IGU joint commission) contributes to the UNGEGN work and exemplifies collaboration across different international societies.
- 4. UN-GGIM Expert consultation and meetings on enhancing geospatial information management arrangements and accelerating the implementation of the SDGs, Aguascalientes, Mexico 22-26 January 2024

The ICA actively participated in the Expert consultation and meetings and emphasized the importance role of cartography in the Sustainable Development Agenda. The ICA recently approved a new Commission on Cartography and Sustainable Development.

5. Preparation of the 7th High-Level Forum on UN-GGIM in Mexico City on 6 - 8 October 2024.

The ICA is represented on the International Advisory Committee for the 7th High-Level Forum.

6. 'Building a foundation for geospatial AI: defining a syllabus and body of knowledge'.

The President of the ICA has met with national leaders on the importance of trust in maps, mapping and geospatial information to foster interest in having the ICA pursue this important topic while plans are made for the Centre in Riyadh.

OTHER RELATED ACTIVITIES

7. Journals

The ICA has, as its hallmark publication, the International Journal of Cartography, a peer-reviewed professional journal. A special issue is forthcoming on cartography and sustainable development.

8. Publications

In 2020 ICA published together with the UN a joint publication on how cartography can help to better understand, share and communicate the status of the Sustainable Development Goals (SDGS), titles "Mapping for a sustainable world". Further translations from the original (English) are pursued currently, just recently a japanese translation became available.

9. Relevant ICA commissions for future contributions in the UN-GGIM

The ICA is making substantial attempts to align with real-world topics to assure its relevance. Several ICA Commissions, the core of the work of the ICA, are focused on topics of interest to the UN-GGIM Member States and extended community. In addition to those Commissions already referenced, the following have relevance to the UN-GGIM community.

- Commission on Digital Transformation of National Mapping Agencies
- Commission on Education and Training
- Commission on GeoAl

<u>ww.fig.net</u>	
presentatives in the UN-GGIM in 2023-2024 Diane Dumashie, President Mikael Lilje, Vice President Louise Friis-Hansen, Director	FIIG

Priority Issues and Challenges

The International Federation of Surveyors FIG represents the interests of surveyors worldwide. FIG covers the whole range of professional fields within the global surveying community, hereunder surveying, cadastre, valuation, mapping, geodesy, hydrography, geospatial, and quantity surveyors and provides an international forum for discussion and development aiming to promote professional practice and standards. FIG is the organization of national member associations, cadastral and mapping agencies and ministries, universities and corporates from over 120 countries.

FIG is operated through 10 commissions covering the broad range of surveying and related topics and professions and three networks, Young Surveyors, Standards and Regional Networks (Asia/Pacific, Africa and Americas).

The current council has established four current task forces concentrating on:

- FIG and the SDGs
- Diversity and inclusion with a special focus on the next generation and to ensure that there will be enough young people wo would like to choose to study surveying
- Task Force on the Role of FIG in international Trends and Future Geospatial Information Ecosystem

• FIG Climate Compass Task Force – focusing on how surveyors can contribute to the climate challenges that the world is facing – e.g. floodings, droughts and other challenges

Perspectives and Future Plans

FIG is a globally acting organisation representing the full range of a modern surveying profession. To keep the position as the premier international representation of surveyors, FIG cannot ignore the dramatic changes in technology and society that have occurred in the last decades to stay relevant for our profession and society. The four-year Council work plan 2023-2026 has the the vision of: Serving society, benefitting people and the planet: Tackling the Global Challenges. The work plan has a special focus on:

- Planet
- People
- Partnership
- Governance and communication

Each of the Working Weeks in this term is based on the overall vision and work plan.

PARTICIPATION TO THE UN-GGIM ACTIVITIES

1. Setting-up of the three UN-GGIM Centers

- The UN Global Geodetic Centre of Excellence in Bonn, Germany:

FIG is pleased that the chair of FIG Commission 5 is part of the steering commission at the United Nations Global Geodetic Centre of Excellence. The yearly FIG Conference, called Working Week, was in 2024 held in Accra, Ghana on 19-23 May 2024. One of the plenary speakers was **Nick Brown, Head of Office UN-GGIM Global Geodetic Centre of Excellence (Bonn)** on how sustainable and resilient the global geodesy foundations are.

UN-GGCE organized several "Listening World Tours" to get to know UN-GGCE. Together with ISO and IHO, FIG invited to two meetings on 20 February at different times to reach out around the world. The two sessions were identical. The staff at the UN-GGCE got the chance to meet with representatives from FIG, IHO and ISO, listen and better understand how UN-GGCE can assist each organization.

FIG News item: https://www.fig.net/news/news 2023/12 unggce-listening-tour.asp

Full concepts note: https://www.fig.net/news/news 2023/unggce-listening-tour-feb24.pdf

As FIG can reach out to a broad spectre of surveyors and geospatial experts FIG would be pleased to promote further sessions/workshops.

- The UN Global Geospatial Innovation and Knowledge Centre in Daqing, China:

FIG is committed to be involved in the creation and development of the further UN-GGIM center in China both through its commission and council.

- The UN Global Geospatial Ecosystem Centre in Riyadh, Saudi Arabia:

FIG is committed to be involved in the creation and development of the further UN-GGIM center in Saudi Arabia both through its commission and council. Further the FIG Task Force 'The Role of FIG in International Trends and Future Geospatial Information Ecosystem' is a key pillar of FIG work plan. The geospatial industry and land professions are dealing with major global challenges such as rapid urbanisation and the effects of climate change. FIG wishes to examine its role, as well as the functions and competencies of surveyors, to make sure they remain aligned with international trends and domain specific drivers which shape our industry. Over the next three years this work will significantly ensure FIG ongoing commitment to UN GGIM.

2. Participation to UN-GGIM regional meetings 2023-2024

- The 9th Plenary meeting of the UN-GGIM Africa meeting in Cape Town - 14-18 August 2023:

In 2023/24 FIG was represented at the 9th Plenary meeting of the UN-GGIM Africa meeting in Cape Town — 14-18 August 2023 by the chair of the Task Force on the SDGs and the Africa Network chair. Full report published on FIG Website. The FIG Africa Regional Network (ARN) held its first High Level Meeting for Presidents of associations in Africa to enhance the awareness of land issues and the importance of the networking opportunities through FIG. The chair of ARN attended the Africa UN-GGIM meeting in Cape Town together with the chair of the Task Force on FIG and the SDGs.

- The 12th Plenary meeting of the UN-GGIM Asia and the Pacific in Bali, 6-10 November 2023:

At the 12th Plenary meeting of the UN-GGIM Asia and the Pacific in Bali, FIG was involved in several the planning of several sessions and was represented by one commission chair and two regional network chairs from Asia/Pacific and the Americas regions. Read the full report published on FIG web site. At the Asia/Pacific meeting in Bali several sessions related to the working groups were organised. The Working Groups that FIG are involved in the Asia/Pacific region are:

- 1: Geodetic Reference Frames
- 2: Cadastre and Land Management
- 4: Integrated Geospatial Information Framework

3. Involvement in the GGIM Working Groups

- Under IGIF, FIG is co-chairing a working group on "strengthening Capacity Development" and is generally interested in all IGIF development. It is appreciated that ecosystem geospatial permits intelligent interactions between data and services, a clear thread within FIG strategic work plan. Accordingly, by leveraging the FIG vision; 'serving society' and implementing the work of FIG by highlighting geospatial information practices that can be articulated in the IGIF themes; governance, technology and people and that flows through into the nine pathway sub categories.
- Land Administration and Management FIG has had a representative appointed to FELA, however, currently
 no new member has been appointed
- **Geodesy:** FIG is participating, represented by FIG Vice President in this working group.
- 4. UN-GGIM Expert consultation and meetings on enhancing geospatial information management arrangements and accelerating the implementation of the SDGs, Aguascalientes, Mexico 22-26 January 2024

FIG Vice President attended various UN-GGIM meetings and consultations during 22-26 January 2024 in Aguascalientes, Mexico. See full report, published of FIG web site

5. Permanent secretary of the UN-GGIM Geospatial Societies

FIG ensures a continuation by maintaining the secretary of the UN-GGIM GS (List of representatives, website).

OTHER RELATED ACTIVITIES

6. Other FIG activities

Further to this, throughout last year there were commission meetings both online and in-person. Each commission has various working groups that are all active under their sub-theme. The Diversity and inclusion task force held online meetings as well as special sessions at the FIG Working Week. The Climate compass Task Force has held several online webinars, meetings and expert group meetings, e.g. three meetings showcasing regionally relevant case studies showing opportunities and gaps for surveying and climate. The Task Force on FIG and the SDGs has defined how surveyors are working with the various goals, and one visible outcome was that all sessions at the FIG Working Week 2024 was highlighting which SDG goals the session touched upon.

UN-GGIM: Geospatial Societies UNITED NATIONS COMMITTEE OF EXPERTS ON

7. **Publications**

FIG has published two new publications since the last report:



8. Partnership

FIG works together with various partners, both sister organizations, UN bodies and the World Bank. The MoU with the World Bank has been renewed recently during the World Bank Conference. A new MoU has been signed with CASLE. Various projects are undertaken in cooperation with partners, especially with UN bodies and networks such as UN-Habitat-Global Land Tool Network. FIG is currently co-leading the International Professional Bodies Cluster. The work of UN-GGIM is central to FIG and FIG tries to include the UN-GGIM agenda in its work.

9. Future meetings

The upcoming FIG Regional Conference that will be held in Nepal 14-16 November 2024 is organized in cooperation with the World Bank and UN-Habitat/Global Land Tool Network and has a specific focus on climate responsive land governance and disaster resilience, safeguarding land rights. Involved in this regional conference are several FIG commissions as well as the task forces on Climate Compass and on Surveyors and the SDGs. It is the hope that UN-GGIM will be included in this Regional Conference, too.

Maintaining the significance of the surveying profession remains an important target for FIG. Council will continue to keep and strengthen our partnership with UN agencies, the World Bank, other international agencies, and sister organizations. FIG very much looks forward to continuing and active collaborative with GS and to effectively engage with UN GGIM members.

International Geographical Union (IGU)

www.igu-online.org

Representatives in the UN-GGIM in 2023-2024

- Mike Meadows, President
- Yukio Himiyama, past President
- Celine Rozenblat, vice-President
- Barbaros Gönençgil, Secretary General
- Pankaj Kumar, assistant Secretary General



Activities and Areas of Work

The International Geographical Union (IGU) promotes actions of its **120 member countries (National committees – NC)** through its Congresses, Regional Conferences, and Thematic Conferences, publications and awards, and through the activities of its **44 Commissions (COM) and 3 Task Forces (TF).**

General Assembly National committees (NC) NC Other organizations

The Executive Committee focuses its attention on three levels of strategic activity:

- actions relating to IGU membership and empowerment of country members, commissions, and task forces.
- actions relating to outreach.
- actions relating to communication.

The IGU celebrated its 100th anniversary in July 2022 in Paris with a meeting of more than 2,300 participants. It is now engaged in the future organization of its International Geographical Congress 2024 in Dublin, which is organized every 4 years only.

Three of the IGU Commissions are exclusively dedicated to the Geospatial technologies and promoting its practices: C20-13 - Geographical Information Science; C20-29 - Land Use and Land Cover Change; C20-36 Modeling Geographical Systems.

Priority Issues and Challenges

The priority issues of the IGU are to work and achieve goals laid down in the strategy document for 2020-2024. Promoting the IGU work in relation to key global initiatives, including:

- UN Sustainable Development Goals (SDGs),
- UN Decade of Ocean Science for Sustainable Development,
- Disaster Risk Reduction, food security, air pollution, human health and well-being and biodiversity.
- Paris Climate Action and Habitat-III,
- ISC Future Earth focusing on challenges of across globe accessibility and usability of Earth Observation (EO),
- GIS, Open Data, Open-Source Software, Cloud Computing in mapping, monitoring and modeling to contribute towards Climate Change, Future Earth and Sustainable Development Goals.
- Geo-spatial technologies should be linked with formal and informal levels of education.

PARTICIPATION TO THE UN-GGIM ACTIVITIES

1. The UN Global Geospatial Ecosystem Centre in Riyadh, Saudi Arabia

IGU participates to the working group on the definition of the Future Geospatial Information Ecosystem center planned in Riyad (writing team). Celine Rozenblat who represents IGU suggested to use the "Innovation ecosystem" concept, developed for more than 20 years in the field of management focusing on the regional clusters' innovative synergies (as the Silicon Valley model). By this suggestion, the proposal leads to sustain the capacity building of the center by the coordination of people's skills coming from different domains and categories of stakeholders, engineers and scientists. Of course, governance and infrastructures remain critical factors of success.

2. Participation to UN-GGIM regional meetings 2023-2024

- The 9th Plenary meeting of the UN-GGIM Africa meeting in Cape Town – 14-18 August 2023: IGU represented by its president, Mike Meadows, attended to the meeting.

- The 10th UN-GGIM Europe meeting in Brussels, 22-23 November 2023:

IGU represented by its vice-president, Celine Rozenblat, attended to the meeting. As chair of the UN-GGIM Geospatial Societies, she presented the actual efforts of the GS network to complete the other networks in the education field.

3. Involvement in the UN-GGIM Working Groups

For long time, IGU together with ICA run a joined commission on Toponymy. For now, there was no possibility to participate to other working groups, but IGU with its specialized commissions could participate to several working groups as One Situation Room, IAEG-SDGS, Geodesy, Integration of Statistical and Geospatial Information, Land Administration and management, Geospatial Information and Services for Disasters, Marine Geospatial Information, Role of Standards. In this perspective, during the General Meeting (IGC) Dublin 2024, a session on August 28th 2024 is in preparation with UN-GGIM IGIF and UN-GGIM One situation room to present their activities.

4. UN-GGIM Expert consultation and meetings on enhancing geospatial information management arrangements and accelerating the implementation of the SDGs, Aguascalientes, Mexico – 22-26 January 2024

IGU represented by its vice-president, Celine Rozenblat, attended to the online meetings. As chair of the UN-GGIM Geospatial Societies, she presented the actual efforts of the GS network to contribute to numerous UN-GGIM working groups and she presented the ongoing project of BoK (see point 6).

5. Preparation of the 7th High-Level Forum on UN-GGIM in Mexico City on 6 - 8 October 2024.

IGU represented by its vice-president, Celine Rozenblat, chair of the UN-GGIM Geospatial Societies, attended to the online meetings. Together with the 3 other networks, they are organizing a session on "The rise of AI, Big Data and data analytics: The GeoAI skills of the future".

6. 'Building a foundation for geospatial AI: defining a syllabus and body of knowledge'.

This action is in progress since fall 2023. It was launched by the UN-GGIM Academic network and ITU, supported by the UN-GGIM Geospatial societies network.

Celine Rozenblat co-leads the working group 4 on establishing a **Geo-AI Body of knowledge (BoK)**. Together with Song Gao and Samantha Arundel, they established a state of the art of the existing BoKs in Geoscience. Two advanced projects retained their attention:

- The USA University Consortium for Geographic Information Science **UCGIS** with a first edition of BoK in 2006: https://gistbok-topics.ucgis.org/UCGIS
- The EO4GEO Body of Knowledge coming from a European consortium to empower space data users: https://bok.eo4geo.eu/GIST

These 2 projects, beside defining the main Geoscience terms (organized in RDF-SKOS format), provide services like defining pathways of learning to reach some skills, or matching job offers with potential candidates' CVs. Both projects are Open Source.

The goal of our working group of UN-GGIM Geospatial Societies with UN-GGIM Academic network and ITU is to complete these 2 bodies of knowledge (organized with different conceptual hierarchies as there no standards) together with the 3 groups dedicated to Syllabi. These **3 groups of Geo-Al syllabi** address different levels of backgrounds and functions:

- Experts (in AI)
- Users (like GIS specialists and employees of the institutions of geomatics)
- Decision makers

Celine Rozenblat participated in the groups of users and decision makers. In these 2 groups, she contributes to three domains: network approaches, multiscale frameworks, and ethic and governance of tools and data.

Besides, on behalf of the UN-GGIM Geospatial Societies, Celine Rozenblat launched a survey to collect information on all the training centers in Geospatial Information domain. This survey specifically questions on the Geo-Al skills objectives, codes, governance and ethics aspects, consistently with the 3 Geo-Al syllabi.

OTHER RELATED ACTIVITIES

8. Journals

IGU has several journals. One of them, **Geography and Sustainability – GEOSUS** (ISSN 2096-7438) was launched 5 years ago. It received CiteScore 2023 of 16.7, ranking in top of journals (Q1) in the following categories:

- 2/179, Earth and Planetary Sciences: Earth-Surface Processes;
- 9/821, Social Sciences: Geography, Planning and Development;
- 3/211, Environmental Science: Nature and Landscape Conservation;
- 13/461, Environmental Science: Ecology.

9. Publications

IGU Commissions quite frequently publishes book on Geospatial Technologies and Geography Education under two IGU series:

- IGU Springer series: Advances in Geographical and Environmental Sciences
- Edward Elgar series: The International Geographical Union Series on Contemporary Geographies

The <u>IGU trimestral newsletter</u> promotes the IGU community activities but also the neighbor associations and the UN-GGIM Geospatial societies and UN-GGIM webinars. It is distributed to more than 10,000 people and sustained by an ongoing promotion strategy on social networks (linked-In, Twitter, Instagram).

International Map Industry Association (IMIA)

www.imiamaps.org

Representative in the UN-GGIM in 2023-2024

Mark Cygan, Board of Directors



Activities, Areas of Work – Achievements

IMIA increased its event offerings this year to create more opportunities for face-to-face relationship building.

- March 2024 Map Industry Summit: London, UK. IMIA members and associates gathered to reflect on trends, make connections and foster collaboration among the industry.
- June 2024 Mapping Leaders Forum, Denver, Colorado USA. Industry leaders shared informative presentations and engaging networking sessions, with a focus on trust in mapping during this two-day event.
- August 2024 Map Industry Summit: Toronto, Toronto, Ontario, Canada. This event will bring together leading experts, professionals, and stakeholders from both public and private sectors to discuss the latest advancements, challenges, and opportunities in Canada's map industry.
- October 2024 Frankfurt Bookfair, Frankfurt, Germany. IMIA member collective stand for IMIA co-exhibitors at the Frankfurt Book Fair serves as a central hub for our members to hold business meetings and exhibit their products and services.

Priority Issues and Challenges

The International Map Industry Association (IMIA) continues to advocate for the growth and success of the industry and has focused this past year on ethics and trust in mapping. "Connecting the Business of Maps Worldwide" through educational programs and networking opportunities remains a top priority for the association.

Webinars

- April 2024 Where Cartography Meets Industry: Trust in Mapping. An expert panel from affiliate organizations British Cartographic Society, International Cartographic Association, and Cartography & Geographic Information Society discussed the issues, challenges and opportunities with trust in mapping.
- Fall 2024 IMIA is in the process of planning a webinar for the Asia Pacific mapping industry

Others

In Summer 2023, the IMIA collaborated with industry leaders to create the <u>Ethics in Cartography Resources</u> Guide, which is a compilation of studies, reports, forums and discussions focused on ethics. The guide is on the IMIA website.

International Society for Digital Earth (ISDE)

http://www.digitalearth-isde.org/

Representatives in the UN-GGIM in 2023-2024

- Dr. Zaffar Sadiq Mohamed-Ghouse, Vice President ISDE, HonFGCA FRGS FIEAust, Director, Advisory and Innovation, Woolpert, Australia
- Prof. Changlin Wang, Secretary-General



Activities and Areas of Work

The International Society for Digital Earth (ISDE) was founded in Beijing, China in 2004. ISDE is an international organization principally promoting academic exchange, science and technology innovation, education, and international collaboration towards Digital Earth. ISDE has been actively involved with the UN-GGIM Geospatial Societies and is committed to contribute to the UN-GGIM agenda. ISDE has been active in promoting the utilization of Digital Earth contributing to the UN SDGs. ISDE actively participated in the 13th Session of UN-GGIM held from 2-4 August 2023 at the United Nations Headquarters in New York.

Priority Issues and Challenges

In 2023-2024, ISDE focused on four key priorities that aligned with and supported the UN-GGIM Integrated Geospatial Information Framework Strategic Pathways of Innovation, Partnerships, Capacity and Education, and Communication and Engagement within the Digital Earth community. The main challenge faced by ISDE was to activate ISDE Working Groups and the community, nurturing loyalty among all ISDE event participants and followers, and launching impactful initiatives on a global scale.

Activities, Areas of Work – Achievements

Strengthening ties with other international organizations, aligning with Partnerships pathway of UN-IGIF:

- The ISDE strengthened international partnerships by renewing MoUs with IEEE GREE and AARSE and signing new MoUs with ANSO, MAPIN/ISRS, and MGA. ISDE was re-selected as a GEO Programme Board Member for 2024-2026.
- O ISDE is also dedicated to the Sustainable Development Goals (SDGs) and UN initiatives. On 10 May 2024, ISDE coorganized a side event themed "Strengthening Scientific Cooperation, Technology, and Data Sharing for African Countries" at the 9th annual Multi-Stakeholder Forum on Science, Technology, and Innovation for the Sustainable Development Goals (STI Forum) as an international partner. The ISDE Honorary President delivered remarks, and two other ISDE representatives gave speeches at the event.
- ISDE is an active member of the International Science Council (ISC), Group on Earth Observations (GEO), and UN-GGIM Geospatial Societies. In support of ISC's scientific initiatives, ISDE Bureau representatives attended the midterm ISC General Assembly, participated in the 2023 ISC Global Knowledge Dialogue, and engaged in discussions with the ISC President and Chief Executive Officer during their visit to the ISDE Secretariat in Beijing.
- Additionally, ISDE has been selected as a Program Board member for the 2024-2026 term by GEO in Cape Town.

PARTICIPATION TO THE UN-GGIM ACTIVITIES

Aligning with UN-IGIF Capacity Building Pathway

- ISDE organized six bimonthly ISDE International Lectures, three quarterly Lectures on Digital Earth Youth Innovation (including one IEEE GRSS/ISDE-YSIN Symposium on GeoAl for Remote Sensing Data Analysis) and initiated an academic salon series.
- 2. ISDE will further the agenda of the UN-GGIM and UN-IGIF by organizing meetings, events, and educational programs for its members.



- Plans are underway to organize the 20th Anniversary Celebration of the International Society for Digital Earth –
 2024 through a series of events.
- During the 2024 GEO Symposium and Open Data & Open Knowledge Workshop (ODOK) in Hangzhou, China, 23-26 September 2024, ISDE will organize a special side event at the Symposium.
- Hosted by the University of Rwanda, ISDE will organize the 10th Digital Earth Summit in Kigali, Rwanda, 19-22 November 2024, with the theme "Digital Intelligence to Sense our Planet and Sustain its Future".
- ISDE will organize the 2nd Youth Innovation Forum on Digital Earth in Hong Kong, China, on 4-7 December 2024 along with the Chinese University of Hong Kong (CUHK) and International Research Center of Big Data for Sustainable Development Goals (CBAS), co-hosted by International Society for Digital Earth Young Scientist Innovation Network (ISDE YSIN), Institute of Space and Earth Information Science (ISEIS) of CUHK and Hong Kong Young Scientist Association (HKYSA). Embracing the theme "Digital Technology Innovation Driving Sustainable Development", this forum will continue to explore the pivotal role of advanced digital technologies in achieving the Sustainable Development Goals (SDGs) and UN-IGIF. The forum invites researchers, scholars, and graduate students from all over the world in the field of digital technologies to present their innovative research and contribute to the global effort of using digital technologies for sustainable development.
- The 14th International Symposium on Digital Earth in Chongqing, China will be organized from 21-25 April 2025 hosted by the Southwest University, Chinese National Committee of ISDE, and Chongqing Yuelai International Convention Center. The symposium is expected to be a gathering of international scholars and experts to share the latest findings and thoughts on the Digital Earth vision.

OTHER RELATED ACTIVITIES

3. Journals

 Noteworthy achievements in ISDE publications include the *International Journal of Digital Earth (IJDE)* achieving an Impact Factor (IF) of 5.1 and a CiteScore of 8.2, while the *Big Earth Data Journal (BEDJ)* reached an IF of 4.0 and a CiteScore of 8.0.

4. Events and meetings

- In 2024, ISDE celebrated its 20th anniversary with a series of events. From June 2023 to June 2024, ISDE hosted the 13th International Symposium on Digital Earth in Athens, Greece, and the 3rd China Digital Earth Conference. It also launched two new conference series: the Youth Innovation Forum on Digital Earth and the Belt and Road Forum on Digital Earth.
- The ISDE Academic Salons serves as a crucial addition to the ISDE international academic conference matrix and an innovative outreach effort in expanding collaborations with universities, research institutes, and other key organizations. So far, 2 thematic salons were organized with positive feedback.

5. Webinars and education

- o Following lecture series are available for the UN-GGIM community to benefit:
 - ISDE International Lectures: http://www.digitalearth-isde.org/list-34-1.html
 - ISDE Lecture on Digital Earth Youth Innovation: http://www.digitalearth-isde.org/list-108-1.html
 - The Manual of Digital Earth, jointly published by ISDE and the Springer Group in November 2019, is the world's first scientific book on Digital Earth and has been downloaded over 1.12 million times globally and received 306 citations from around the world.

6. Perspectives and Future Plans

ISDE will continue to support the UN-GGIM and IGIF agenda by:

- Advancing scientific and technological development while integrating economic, governmental, technological, and social factors. Establishing closer dialogues with industry and civil society by better-engaging people, industry, and government in Digital Earth implementation.
- o Promoting inclusivity and diversity across cultures, ages, and genders.

International Society for Photogrammetry and Remote Sensing (ISPRS)

www.isprs.org

Representatives in the UN-GGIM in 2023-2024

- Lena Halounova, President
- Jiang Jie, Secretary General



Priority Issues and Challenges

The International Society for Photogrammetry and Remote Sensing (ISPRS) focuses on processing mainly image data from the Earth observation from various carriers to integrate them into spatial information systems of the Earth and its parts in unlimited scales and details. Since the systems can implement any digital data, the ISPRS priority is to intensify cooperation with other branches and their scientists to create models of one Earth.

Perspectives and Future Plans

ISPRS aims at strengthening cooperation with African and Latin America countries. Regional Representatives of ISPRS for Africa, Asia, Latin America and Arab States help in this case by its local knowledge and experience. ISPRS has been working on improving influence and position of industry in the Society and importance of the Society members for industry.

ISPRS members are preparing the

- TC IV Symposium will be held in Perth, Australia,
- <u>TC III Symposium</u> will take place Belém, Brazil.
- The next Geospatial Week is prepared by Mohamed Bin Rashid Space Center in Dubai in April 2025.
- The next <u>ISPRS Congress and General Assembly</u> is hosted by the Canadian Ordinary Member in Toronto in July 2026

PARTICIPATION TO THE UN-GGIM ACTIVITIES

1. The UN Global Geospatial Ecosystem Centre in Riyadh, Saudi Arabia

ISPRS is going to cooperate with the UN Global Geospatial Ecosystem Centre in Riyadh, Saudi Arabia

2. The UN Global Geospatial Innovation and Knowledge Centre in Daging, China

ISPRS is going to cooperate with the UN Global Geospatial Innovation and Knowledge Centre in Daqing, China

3. UN-GGIM Working groups

ISPRS will improve involvement in the **Geospatial Information and Services for Disasters** of the GGIM Working Group by ICWG III/IVa Disaster Management

OTHER RELATED ACTIVITIES

4. Events

September 2023. Geospatial Week (GSW) 2023 was held in Cairo, Egypt. It is a bundle of workshops planned
and organized by ISPRS Working Group Chairs and Vice Chairs, and other scientists under the umbrella of one
event in odd years. It is the second most important ISPRS event.

The second year after the past congress, each ISPRS Technical Commission President organizes a symposium dedicated to the Technical Commission (TC) topic.

- May 2024 TC I Symposium, Sensor Systems, in Changsha, China.
- June 2024 TC II Symposium, Photogrammetry, in Las Vegas, USA
- August 2024 TC V Symposium, in Manila, Philippines

The last two, i.e. TC IC and TC III Symposia, will take place in the autumn 2024.

5. Webinars

Scientists of the TC II hold webinars.

6. Journals

ISPRS owns three scientific journals:

- ISPRS Journal of Photogrammetry and Remote Sensing (Elsevier)
- SPRS Open Journal of Photogrammetry and Remote Sensing (Elsevier)
- SPRS International Journal of Geo-Information (MDPI)

7. Publications

Proceedings

ISPRS publishes two types of proceedings from events <u>The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences</u> with papers whose enlarged abstracts are included.

The second proceedings called the <u>ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences</u> publish double blind reviewed papers.

Both proceedings are published as Open Access.

Other Publications

ISPRS issues a newsletter called ISPRS eBulletin five times per year.

ISPRS Media Library streamed sessions from the 2020 & 2021 Congress Edition and other ISPRS events

8. Social Media

Activities of ISPRS are presented on social media like LinkedIn, Facebook, Twitter and Instagram.

9. ISPRS Projects

ISPRS yearly launches a call for projects either Scientific Initiatives or Education and Capacity Building Initiative.

10. Support of Young Scientists

ISPRS founded in 2004 is an independent organisation of young scientists and students called Student Consortium (SC). The SC, financially supported by ISPRS is very active in helping to prepare international summer schools. It actively highlights knowledge about ISPRS themes by webinars with invited speakers, by Spectrum, its newsletter, and by social media.

11. Cooperation with Other Societies

ISPRS is a member of UN-GGIM Geospatial Societies, International Science Council (ISC) and ISC GeoUnions, and UN OOSA. ISPRS cooperates with African Association of Remote Sensing of Environment, with Asian Society of Remote Sensing, with GRSS, etc.

International Union of Geodesy and Geophysics (IUGG)

https://iugg.org/

Representatives in the UN-GGIM in 2023-2024

Harald Schuh, President



Priority Issues and Challenges

The International Union of Geodesy and Geophysics (IUGG) is the international organization dedicated to advancing, promoting, and communicating knowledge of the Earth system, its space environment, and the dynamical processes causing change. Through its constituent Associations (including the International Association of Cryospheric Sciences – IACS, the International Association of Geodesy – IAG, the International Association of Geomagnetism and Aeronomy – IAGA, the International Association of Hydrological Sciences – IAHS, the International Association of Meteorology and Atmospheric Sciences – IAMAS, the International Association for the Physical Sciences of the Oceans – IAPSO, the International Association of Seismology and Physics of the Earth's Interior – IASPEI, the International Association of Volcanology and Chemistry of the Earth's Interior – IAVCEI) Commissions, and services, IUGG convenes international assemblies and workshops, undertakes research, assembles observations, gains insights, coordinates activities, liaises with other scientific bodies, plays an advocacy role, contributes to education, and works to expand capabilities and participation worldwide.

Perspectives and Future Plans

In 2025, all eight IUGG's International Associations will organize their Scientific Assemblies in person again. Scientific Assemblies usually attract between 500 and 1,500 participants.

- <u>IAVCEI Scientific Assembly</u>, 29 June 4 July 2025, Geneva, Switzerland
- IACS/IAMAS/IAPSO Joint Scientific Assembly, 20-25 July 2025, Busan, Rep. of Korea
- IAGA/IASPEI Joint Scientific Assembly, 31 August 6 September 2025, Lisbon, Portugal
- <u>IAG Scientific Assembly</u>, 1-5 September 2025, Rimini, Italy
- IAHS Scientific Assembly, 5-10 October 2025, Roorkee, India

The next IUGG General Assembly will be held in 2027 in Incheon, Rep. of Korea.

PARTICIPATION TO THE UN-GGIM ACTIVITIES

1. The UN Global Geodetic Centre of Excellence in Bonn, Germany:

The IUGG representative (Harald Schuh) and several other IUGG members took part at the opening events of the GGCE in Bonn in March 2023. Since GGCE was established several of its events were supported by IUGG and its members as for instance the meeting on "Expert consultation on Strengthening the Global Geodesy Supply Chain" in Bonn (April 22-23, 2024)

2. Involvement in the UN-GGIM Working Group on Geodesy

IUGG representatives are involved in the UN-GGIM Subcommittee on Geodesy as well as in various GGIM Working Groups.

OTHER RELATED ACTIVITIES

3. Events

The bodies under the umbrella of the IUGG organize up to 100 scientific meetings per year. The IUGG Meeting Calendar 2024 is available here.

In 2023, the IUGG organized its 28th IUGG General Assembly (IUGG2023), which was held from 11 to 20 July 2023 in Berlin, Germany. With about 5,000 participants IUGG2023 was a great success. IUGG2023 consisted of three important parts: (i) an open Scientific Assembly, (ii) a meeting of the duly accredited Delegates of the IUGG Member Countries and guests invited in accordance with the By-Laws (referred to as the Council Meeting); and (iii) business meetings of the IUGG, its Associations, and their scientific bodies.

The Scientific Program of the General Assembly consisted of 640 sessions with 3,109 oral and 1,330 poster presentations in total. The program was completed by the Gold Medal Lecture, nine Union Lectures, six special sessions on 'Big Themes", and four Union Symposia. The Gold Medal and Union Lectures were video recorded and are available here. The Comptes Rendus of IUGG2023 are available here.

4. Publications

IUGG publishes <u>Yearbooks</u>, <u>Annual Reports</u> (the Annual Report 2023 will become available in June 2024), <u>Monthly Newsletters</u> (E-Journals), <u>Proceedings of General Assemblies</u> (Comptes Rendus), <u>Resolutions</u>, <u>Statements</u>, <u>Reports of the National Committees</u>, and a <u>Special Publications Series</u>. IUGG is present on <u>X</u>, <u>Facebook</u>, and <u>YouTube</u>.

In addition, several Associations publish their own scientific Journals, including the <u>Journal of Geodesy</u> by IAG, the <u>Hydrological Sciences Journal</u> by IAHS, <u>Advances in Atmospheric Sciences</u> by IAMAS and the <u>Bulletin of Volcanology</u> by IAVCEI.

5. Cooperation with Other Societies

The work of the IUGG is of relevance to many other scientific organizations. Some of these are inter-governmental such as those affiliated with the United Nations (UN); some are Interdisciplinary Bodies of the International Science Council (ISC), and others are organizations of particular interest to specific Associations. More information about IUGG's partners is available here.

The International Science Council (ISC) – Committee on Data - CODATA

https://codata.org/

Representatives in the UN-GGIM in 2023-2024

- Simon Hodson, Executive Director
- Merce Crosas Navarro, President



<u>CODATA</u> is the Committee on Data of the <u>International Science Council</u> (ISC). CODATA joined the UN GGIM Geospatial societies few months ago. Therefore, as newcomer, CODATA needs time before involving in UN-GGIM actions.

CODATA exists to promote global collaboration to improve the availability and usability of data for all areas of research. CODATA supports the principle that data produced by research and susceptible to be used for research should be as open as possible and as closed as necessary. CODATA works also to advance the interoperability and the usability of such data: research data should be <u>intelligently open</u> or <u>FAIR</u>. By promoting the policy, technological and cultural changes that are essential to promote Open Science, CODATA helps advance ISC's vision and mission of advancing science as a global public good.

The **CODATA Strategic Plan** identifies three priority areas:

- 1. promoting principles, policies and practices for Open Data and Open Science.
- 2. advancing the frontiers of data science.
- 3. building capacity for Open Science by improving data skills and the functions of national science systems needed to support open data.

CODATA achieves these objectives through a number of <u>standing committees and strategic executive led initiatives</u>, and through its <u>Task Groups</u> and <u>Working Groups</u>. CODATA supports the <u>Data Science Journal</u> and collaborates on major data conferences like <u>SciDataCon</u> and <u>International Data Week</u>. Through 'Making Data Work for Cross-Domain Grand Challenges', the CODATA Decadal Program 2020-2030, CODATA fulfills its distinctive role in contributing to the developments needed if the international science community and its national components are effectively to exploit the data revolution.

In addition, CODATA has three long-standing priorities:

- Our Data Policy activities tackle the current urgent challenges to develop policies and strategies for data at the international and national levels.
- Data Science and Stewardship activities provide the data science and data stewardship professions with practical interventions such as the CASRAI terminology for research data management and the outputs of the Task Group on Fundamental Physical Constants.
- Data skills are critical for current and future generations of researchers, information professionals, policy makers and citizens. Our skills capacity building initiatives support early career researchers, repository professionals, and researchers interested in making and keeping data findable, accessible, interoperable and reusable (FAIR).

Among the ways in which we achieve these priorities are through Task Groups and research.

CODATA is also a research-performing organization actively engaging in a range of research initiatives, and research consultancy activities. Our research agenda focuses on digital infrastructures and data use, specifically how research data of any discipline area(s) are created, shared, valued and deployed. CODATA specializes in projects with archival, qualitative and/or document-based methods but can also provide quantitative methods through our network of research consultants.

Open Source Geospatial Foundation (OSGeo)

https://www.osgeo.org/

Representative in the UN-GGIM in 2023-2024

- Ariel Anthieni, Chair UN Committee, Boards of Directors
- Angelos Tzotsos, President



The foundation provides financial, organizational and legal support to the broader open-source geospatial community. It also serves as an independent legal entity to which community members can contribute code, funding and other resources, secure in the knowledge that their contributions will be maintained for public benefit. OSGeo also serves as an outreach and advocacy organization for the open-source geospatial community and provides a common forum and shared infrastructure for improving cross-project collaboration.

The Open-Source Geospatial Foundation has a growing number of local, regional and countrywide chapters. OSGeo Chapters offer a great way to connect with the open-source geospatial community in your area and provide opportunities to network and share. Many of these Chapters hold events, offer support, training and explore advocacy opportunities in their area. Chapters can also form around a specific language or industry supporting a geographical diverse community. Each Chapter is different with a mix of GIS professionals, academic champions, software developers and service providers eager to share their stories and help you start your open-source journey. To discover a group near you please visit the chapter website, we are looking forward to welcoming you.

PARTICIPATION TO THE UN-GGIM ACTIVITIES

1. Participation to UN-GGIM regional meetings 2023-2024

- The 11th Plenary meeting of the UN-GGIM – Americas in Santiago de Chile, 20 October 2023

• OSGeo organized an Open-Source Side Event: *Open-Source Technologies for Geospatial Information Management and Their Role in the Implementation of the IGIF.* with the Geoinquietos Argentina community. Link: https://www.osgeo.org/foundation-news/open-source-side-event-unggim-americas/

2. 13th Session of UN-GGIM

Participation as guests at the 13th Session to be held at the UN headquarter where we shared different external events and part of the sessions. As a result, the following reports were produced.

- Code4Dev IDB (International Developer Bank): we met with the group that coordinates the Open-Source repository for government solutions and the IDB to establish a link with OsGeo and the integration of projects that are available from the community and thus forge new alliances. Link: https://code.iadb.org/en
- GLTN workshop: we participated in the Workshop to reconnect with the Global Land Tool Network (GLTN) Secretariat at UN-Habitat, and thus enhance OsGeo's alliances with the community. Link: https://gltn.net/
- Participation in Digital Public Goods: we had the first meeting to evaluate the integration of this alliance to extend the inclusion in the work plans of the member institutions. Link: https://digitalpublicgoods.net/who-we-are/
- Marketing Committee OsGeo: We started to work on strengthening the section of the Service Providers network
 with the aim of making the implementation of open-source software robust worldwide with the idea of
 implementing it in a stable way in the institutions. Link: https://www.osgeo.org/service-providers/

OTHER RELATED ACTIVITIES

• **UN Open GIS:** participation in the monthly meetings with the community for the integration of Open Source within the UN community, assistance in the FOSS4G to support UN initiatives.

Perspectives and Future Plans

Development of the FOSS4G 2024 event in Belen together with participants from member countries.

IEEE Geoscience and Remote Sensing Society (GRSS)

https://www.grss-ieee.org/

Representative in the UN-GGIM in 2023-2024

- Mariko Burgin, President



The Geoscience and Remote Sensing Society (GRSS) is a technical Society of the Institute of Electrical and Electronics Engineers (IEEE). GRSS fosters engagement of its members for the benefit of society through science, engineering, applications, and education as related to the development of the field of geoscience and remote sensing. The Geoscience and Remote Sensing Society (GRSS) is a community of researchers and practitioners collaborating and designing tools to understand our interaction with Earth's ecosystems, to monitor its environments, oceans and ice caps, and to characterize potential risks.

GRSS & IEEE

GRSS is one of the 39 societies of IEEE, the largest academic and professional Society with about 430,000 members in 160 countries. GRSS has more than 4,200 members in 94 countries. It has currently 79 chapters all over the world (16 of them are student chapters), and 11 ambassadors.

GRSS Members

Members of GRSS come from a wide variety of scientific and engineering backgrounds. Members with engineering backgrounds often support scientific investigations with the design and development of hardware and data processing techniques, requiring them to be familiar with geosciences such as geophysics, geology, hydrology, meteorology, etc. Conversely, scientists find in GRSS a forum for the evaluation and dissemination of remote sensing related science. This fusion of geoscience and engineering disciplines gives GRSS a unique interdisciplinary character and an exciting role in advancing remote sensing science and technology.

Fields of Interest

The fields of interest of GRSS span science and engineering, and include theory, concepts, and techniques of remote sensing of the Earth, oceans, atmosphere, and space, as well as the processing, interpretation, and dissemination of this information:

- Remote Sensing of Land and Surface Processes
- Remote Sensing of the Atmosphere and Oceans
- Remote Sensing of the Cryosphere
- Remote Sensing of Solid Earth and Geodynamic Processes
- Remote Sensing and Mitigation of Natural Disasters
- Remote Sensing Data Processing Techniques
- Electromagnetics and Radiative Transfer
- Sensors, Platforms, and Instruments for Remote Sensing
- Education, Standards and Policy

No report of UN-GGIM participation was delivered by IEEE-GRSS for 2024, waiting for an active representation of this society in the group of Geospatial Societies.