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Item 17 of the provisional agenda*

Contribution of United Nations global geospatial centres (away from Headquarters) to enhancing global geospatial information management arrangements

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Note by the Secretariat

Summary

The present report contains the report of the Secretariat on enhancing global geospatial information management arrangements, prepared with the expanded Bureau of the Committee of Experts on Global Geospatial Information Management.

At its fourteenth session, held in New York from 7 to 9 August 2024, the Committee of Experts adopted decision 14/101, in which it requested the Secretariat to focus, in particular, on strengthening effective global coordination and governance arrangements for the United Nations global geospatial centres. The Committee welcomed the establishment of the United Nations Global Geospatial Knowledge and Innovation Centre in China and the United Nations Global Geodetic Centre of Excellence in Germany, as well as the advanced planning to establish the United Nations Global Geospatial Ecosystem Centre of Excellence in Saudi Arabia.

The Committee noted that open and transparent management and coordination between the three United Nations global geospatial centres are key to their successes and effective resource utilization, and requested the Bureau, with the support of the Secretariat, to develop a suitable common governance and operational structure for all United Nations global geospatial centres, including, for instance, international advisory committees with broad expertise and geographical representation, and to make available the terms of reference of the international advisory committees as background documents for the Committee of Experts.

In adopting decision 14/105, the Committee reaffirmed that the United Nations Integrated Geospatial Information Framework was a key umbrella for the many activities under the purview of the Committee of Experts, reiterated the importance of coordination, coherence and alignment in the work, efforts and activities of regional committees, functional groups, thematic networks, the United Nations Global Geospatial Knowledge and Innovation Centre and the High-level Group, and reiterated the importance of implementing the Framework together for the benefit of all. The Committee also urged the Centre to intensify its support to Member States to ensure the sustained adoption of geospatial information management capabilities and the operationalization of the Framework in accordance with national circumstances.

^{*} E/C.20/2025/1.

In adopting decision 14/106, the Committee welcomed the reports of the Subcommittee on Geodesy and the United Nations Global Geodetic Centre of Excellence and their progress and activities, including their considerable and coordinated efforts to continue to implement General Assembly resolution 69/266. The Committee also expressed appreciation for the work of the Centre and the Subcommittee to strengthen evidence, awareness and understanding of the importance of the global geodesy supply chain as a vital foundation for critical national infrastructure and global economy and encouraged the Subcommittee and the Centre to continue to provide materials that could be used by Member States to influence decision makers.

In the report, the United Nations Global Geodetic Centre of Excellence provides details on its activities during the intersessional period and the notable progress made in implementing its mandate. Also in the report, note is made of the publication of the first joint development plan on global geodesy, which is available in all six official languages of the United Nations and which contains an outline of the priority actions for Member States, the Centre and partners to strengthen the global geodesy supply chain. In line with the plan, the Centre prioritized the following: (a) the delivery of geodesy capacity-development training; (b) the development of policy-relevant evidence to raise awareness of the role of geodesy in economic and infrastructure resilience; and (c) the strengthening of governance arrangements. Capacitydevelopment activities included regional workshops on modern geospatial reference systems that have been held in Europe, in Africa and in Asia and the Pacific, as well as forthcoming workshops on the same topic planned for the Americas and the Arab States. The Centre also advanced the multilateral memorandum of understanding on strengthening the global geodesy supply chain, which now has 40 participating entities. The report also provides information on the extension of financial support provided by Germany to the Centre until 2030.

Also in the report, the United Nations Global Geospatial Knowledge and Innovation Centre provides details on the activities conducted during the intersessional period, including on its continued support to Member States in the implementation of the Framework as its overarching goal. The Centre also presents its first programme of work, provided as a background document, prepared in close consultation with its international advisory committee in January 2025 and aligned with its five main goals: (a) developing leadership; (b) addressing national priorities; (c) progressing geospatial knowledge; (d) enabling innovation; and (e) communication. The contribution of the Centre to events and annual meetings of the regional committees is also presented in the report. The report also includes details on capacity-development activities, including workshops and global forums on raising awareness of the benefits of geospatial information for national priorities and efforts to raise awareness, and promote the adoption and operationalization, of the Framework.

In the same report, the Secretariat provides updates on the advanced planning and preparatory activities relating to the establishment of the United Nations Global Geospatial Ecosystem Centre of Excellence in Saudi Arabia.

I. Introduction

- 1. In making decision 9/101 at its ninth session in August 2019, the Committee of Experts welcomed the efforts of the United Nations and the Government of China in developing a proposal to jointly advance the establishment, led by the United Nations, of a Global Geospatial Knowledge and Innovation Centre (UN-GGKIC) in Deqing, China, providing opportunities to build global geospatial capacity and capability and to improve and strengthen expertise on how to prepare for national geospatial information management arrangements in countries, especially developing countries.
- 2. At its tenth session in August 2020, the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), in making decision 10/104, welcomed and supported the offer by Germany to establish and host a Global Geodetic Centre of Excellence (UN-GGCE) at the United Nations campus in Bonn, as the first centre of an envisioned federated approach to enhance global cooperation and coordination among Member States and relevant geodetic stakeholders, strengthen geodetic infrastructure and support Member States in improving their national contributions to the global geodetic infrastructure.
- 3. In July 2022, the Economic and Social Council (ECOSOC), through its resolution 2022/24 entitled "Enhancing global geospatial information management arrangements", recognized the notable achievements of the Committee and reaffirmed the importance of strengthening its effectiveness in advancing the global geospatial agenda. In the resolution the ECOSOC recognized the sustained efforts of the Committee of Experts to establish the United Nations Global Geospatial Knowledge and Innovation Centre in Deqing, China, and the United Nations Global Geodetic Centre of Excellence at the United Nations campus in Bonn, Germany, each of which will, in an open, inclusive, participatory and transparent manner, provide opportunities to develop and expand global geospatial capacity, competence and capability, and to strengthen geospatial information management arrangements in countries, especially developing countries.
- 4. In its decision 13/101, adopted at the ninth session in August 2023, the Committee welcomed the Kingdom of Saudi Arabia's commitment to host the United Nations Global Geospatial Ecosystem Centre of Excellence (UN-GGECE) in Riyadh, and encouraged the Bureau and Secretariat to collaborate with Saudi Arabia to define its scope and ensure alignment and complementarity with the existing Centres in Bonn and Deqing.
- 5. In its decision 14/101, the Committee noted that open and transparent management and coordination between the three United Nations global geospatial centres are key to their successes and effective resource utilization, requested the Bureau, with the support of the Secretariat, to develop a suitable common governance and operational structure for all United Nations global geospatial centres, including, for instance, international advisory committees with broad expertise and geographical representation, and to make available the terms of reference of the international advisory committees as background documents for the Committee of Experts. The Committee of Experts established a new agenda item under its programme of work for the United Nations global geospatial centres to provide updates on their respective activities to strengthen and enhance geospatial information management arrangements in countries, especially developing countries.
- 6. The Committee of Experts is invited to take note of the progress of the operationalization and establishment of the Centres of Excellence, express its views on the activities undertaken by the Centres and their advisory bodies, and provide guidance on the way forward, as appropriate. Points for discussion are outlined in paragraph 61.

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II. Mandates and substantive responsibilities

- 7. In making decision 14/101, the Committee of Experts welcomed the establishment of the United Nations Global Geospatial Knowledge and Innovation Centre in China and the United Nations Global Geodetic Centre of Excellence in Germany as well as the advanced planning to establish the United Nations Global Geospatial Ecosystem Centre of Excellence in Saudi Arabia. The United Nations global geospatial centres, established under the decisions of the Committee of Experts, aim to enhance effective geospatial information management across the world. Each Centre of Excellence have a specific substantive focus defined through a Memorandum of Understanding signed between the respective Member States where they are hosted and the United Nations. The substantive focus are as follows:
 - (a) United Nations Global Geodetic Centre of Excellence (Bonn, Germany)

Recognizing the importance of the global geodesy supply chain, assist Member States and geodetic organizations to coordinate and collaborate to implement A/RES/69/266 and to sustain, enhance, access and utilize an accurate, accessible and sustainable Global Geodetic Reference Frame (GGRF) to support science, society and global development.

(b) United Nations Global Geospatial Knowledge and Innovation Centre (Deqing, China)

Develop and promote the required knowledge, innovation, and leadership to strengthen the adoption of geospatial information to support the implementation of national development priorities and the SDGs, leveraging the UN-IGIF, and where Member States will have the ability to integrate and deliver national geospatial information policy, systems, services and capabilities into national government development policies, strategies, and arrangements.

(c) United Nations Global Geospatial Ecosystem Centre of Excellence (Riyadh, Kingdom of Saudi Arabia) – under establishment

Support Member States and stakeholders in enhancing global geospatial information management with the aim to progress towards a future geospatial ecosystem where the global geospatial information community and stakeholders actively engage and contribute sustainable real-world solutions to humanity's many challenges, leveraging high-quality, timely and reliable location-based information and impactful geospatial analytics including advancements in geospatial technologies and artificial intelligence systems towards new geospatial approaches and capabilities.

8. In accordance with the decision of the Committee of Experts, the operational UN global geospatial centres of excellence provide an overview of the activities of their International Advisory Committees, current staffing and partnerships, and their respective operations aligned to their mandates and substantive responsibilities. The terms of reference of the International Advisory Committees, the Strategic plan, and latest operational work programme are also provided as background documents to the present report. Other background reports on specific substantive activities are detailed in the activities of the Centres.

III. United Nations Global Geodetic Centre of Excellence (UN-GGCE)

9. The UN-GGCE vision is a future where all countries have strong political support for geodesy which enables them to – together – implement the United Nations General Assembly resolution 69/266, entitled 'A global geodetic reference frame for sustainable development' and accelerate the achievements of the Sustainable Development Goals to derive social, environmental, and economic benefits.

International Advisory Committee

- 10. During the intersessional period, the UN-GGCE convened its third meeting of both the IAC and the Steering Committee (SC), alongside the fifth plenary meeting of the Subcommittee on Geodesy. These meetings were held from 10 to 14 March 2025 at the United Nations Campus in Bonn, Germany. The joint sessions focused on the continued implementation of the First Joint Development Plan for Global Geodesy, with discussions addressing geodetic governance arrangements, workforce sustainability, and supply chain resilience. The Steering Committee convened separately in a closed session as the final segment of the workshop to provide strategic oversight and direction. A summary of the outcomes has been made publicly available on the Centre's page on the UN-GGIM website.
- 11. In addition to its annual in-person sessions held in 2023, 2024, and 2025, the UN-GGCE IAC continues to provide input through regular virtual consultations. These engagements ensure continuity in expert guidance and allow the UN-GGCE to remain responsive to evolving global geodetic priorities.

Current staffing and partnerships

- 12. As of July 2025, the UN-GGCE is comprised of three staff positions including the Head of Office, one geospatial professional and a general service staff.
- 13. The UN-GGCE also presently has secondments from France, Germany, Japan, Norway and Singapore. The UN-GGCE also benefits from contributions by 28 partner organizations.

Activities of the Centre

14. The activities of the UN-GGCE in the intersessional period are summarised below:

First Joint Development Plan for Global Geodesy

- 15. The UN-GGCE published Version 1.0 of the First Joint Development Plan for Global Geodesy (The Plan) in all six UN languages on its website in January 2025. The Plan addresses the needs of Member States and partners described in the Global Geodesy Needs Assessment (background paper from 14th session) and articulates them as actions for Member States, partners and the UN-GGCE to carry out to strengthen the global geodesy supply chain.
- 16. The global geodesy supply chain includes:
 - ground station observatories owned and operated by mapping agencies, space agencies, universities and research groups, who constantly observe the movement of the Earth and satellites;
 - data centres operated by specialists who quality check, store, and archive the data from observatories and make it available to the global geodesy analysis community; and,
 - analysis, combination and correlation centres and analysts who translate the raw data into geodetic products.

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It is a *global* geodesy supply chain because no single country can fulfil all the requirements of accurately and reliably observing and analyzing the Earth and satellites. To measure the continuous changes, with the timeliness and level of precision required to produce the geodetic products satellites and users' demand, ground observatories and highly qualified people within governments and universities all around the world are needed.

- 17. The Plan outlines how to strengthen the supply chain in three phases. In Phase 1, Member States, partners and the UN-GGCE are urged to take action to avoid further degradation of the global geodesy supply chain. In Phase 2, Member States, partners and the UN-GGCE are encouraged to build a more reliable supply chain which enhances the reliability for geodetic products essential for Member States' operational requirements. Phase 3 looks to the future, and the next-generation supply chain requirements for improved accuracy of geodetic products required for assist in addressing scientific and societal challenges. The Plan is provided as a background document to this present report.
- 18. A key activity being led by the UN-GGCE is the design of a fit for purpose global geodesy supply chain. The UN-GGCE understands that for Member States to invest in the global geodesy supply chain they need a clear explanation of what a fit for purpose global geodesy supply chain is and an implementation plan which articulates how to develop it. To guide its work, the UN-GGCE is undertaking a maturity assessment of the current state of the supply chain across the following domains: Engagement and Collaboration, Governance and Strategy, Data Management, Data Products and Software, Asset and Infrastructure Management and Innovation and Development. The UN-GGIM community and scientific community will be consulted on the next steps of this maturity assessment later in 2025.

Raising awareness about the importance of the global geodesy supply chain

- 19. The UN-GGCE has been consulting with GNSS providers who operate GNSS satellites to explain the weaknesses in the global geodesy supply chain and the potential impacts for satellite operations including GNSS.
 - At the 18th International Committee on GNSS (ICG) meeting in Wellington, New Zealand (November 2024), a UN-GGCE representative highlighted weaknesses in the global geodesy supply chain; in particular, issues relating to the reliability of geodetic products such as Earth Orientation Parameters (EOP) and future realisations of the International Terrestrial Reference Frame which are essential to the operation of GNSS satellites. In a Joint Statement of the meeting, ICG members "openly acknowledged the risks highlighted by the UN-GGCE and recognized strengthening the global geodesy supply chain should be prioritised to ensure GNSS services are more robust." 1
 - The UN-GGCE staff have also had targeted consultation sessions with representatives from the United States and the European Commission to discuss how Member States can work together to make the global geodesy supply chain robust. The major discussion topics are the reliability of the ground observatories, in particular Satellite Laser Ranging (SLR) and Very Long Baseline Interferometry (VLBI), and the overreliance on universities and scientific institutions to perform the critical analysis work for geodetic products required to ensure satellites are operating accurately and reliably.
 - At the United Nations Internet Governance Forum in Oslo, Norway on 23 June 2025, the Head of Office shared the stage with three government

¹ Joint Statement from the 18th meeting of the International Committee on GNSS (2024).

Ministers to explain the importance of geodesy. The keynote presentation at the Forum was a great opportunity to raise awareness – in particular, the role geodesy plays to support critical infrastructure systems – to a number of high-ranking government officials from around the world. The key message was, "modern society is powered by satellites and therefore modern society is powered by geodesy."

Policy briefs

- 20. The UN-GGCE has released two policy briefs in the intersessional period:
 - 'Geodesy is critical for climate science' which outlines the ways geodesy is essential for climate science by enabling precise measurements to track sea level change, land motion, ice loss, ocean currents, and atmospheric dynamics. The brief provides evidence of how a weak global geodesy supply chain jeopardizes the accuracy of satellite data and limits the ability of scientists and policymakers to respond effectively to climate change. The brief urges countries to treat geodesy as critical infrastructure, improve governance, raise awareness, and increase investment in the global geodesy supply chain. The policy brief is provided as a background document to this report.
 - Safeguarding VLBI Radio-Frequencies' describes the essential role Very Long Baseline Interferometry (VLBI) a geodetic technique that uses global radio telescopes to achieve high-accuracy positioning by observing cosmic radio waves plays in modern society. The brief explains that radio frequencies currently utilized for geodetic VLBI observations are not adequately protected under the existing radio regulations of the International Telecommunication Union (ITU). Member States are invited to take steps to safeguard geodetic VLBI through international regulatory frameworks and national policies. The policy brief is provided as a background document to this report.

Joining Land and Sea

- 21. From 2 to 6 December 2024, the UN-GGCE implemented the International Workshop on the Integration of Terrestrial, Maritime, Built and Cadastral Domains "Joining Land and Sea" in collaboration with Badan Informasi Geospasial, Indonesia in Bogor, Indonesia. In this workshop, 81 participants including experts from the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), Expert Group on Land Administration and Management (EG-LAM), Working Group on Marine Geospatial Information (WG-MGI), Working Group on Policy and Legal Frameworks, Subcommittee on Geodesy, International Hydrographic Organization (IHO), Open Geospatial Consortium, and the UN-GGCE came together to discuss, and share ideas, on how to integrate data across terrestrial, maritime, built and cadastral domains.
- 22. The participants from the workshop resolved to continue working together to develop guidance material for Member States on joining land and sea. This includes a guidance document aligned with the strategic pathways of the UN Integrated Geospatial Information Framework (UN-IGIF) and a technical document being developed by the UN-GGCE for geospatial professionals which outlines how to use geodetic datums to integrate geospatial datasets.
- 23. Furthermore, participants recognized the importance of the global geodesy supply chain as being a foundation for accurate and reliable land and sea data collection needed by governments to manage and mitigate climate change and natural disasters; the need to grow the next generation of geospatial professionals; the need to build awareness on the importance of strong geospatial foundations in terms that policymakers and the public can understand; and, the importance of connection people together so they have a network of people to help them.

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Geodesy Capacity Development Workshops

- 24. In the intersessional period, the UN-GGCE have designed, developed and implemented Geodesy Capacity Development Workshops on Transitioning to a Modern Geospatial Reference System (GRS). To date, the workshops have been undertaken in:
 - Europe 17 to 21 February 2025 (Bonn, Germany) (47 participants)
 - Africa 19 to 23 May 2025 (Nairobi, Kenya) (61 participants)
 - Asia-Pacific 30 June to 4 July 2025 (Bangkok, Thailand) (60 participants)
- 25. The workshop for the Americas will take place in Santiago, Chile from 3 to 7 November 2025 and the Arab States in February 2026 (TBD).
- 26. The workshops provide technical guidance on how to develop a 'modern' GRS, that is, one which is aligned with the reference frame of satellites. This enables Member States to make effective and efficient use of Global Navigation Satellite Systems and Earth Observation data. In addition to providing concrete steps on how to create, access, use and sustain a modern GRS, the workshops provide practical guidance on how to communicate the importance of geodesy to decision-makers to increase investment in geodetic infrastructure and establish governance structures to oversee and manage the modernization of a country's GRS.
- 27. All presentations from the workshops are available on the UN-GGCE website and recorded presentations and discussions from the Africa and Asia-Pacific workshops are available on the UN-GGCE YouTube channel².

Efforts towards stronger governance for global geodesy

- 28. The UN-GGCE developed and implemented the Multilateral Memorandum of Understanding (MMOU) on Strengthening the Global Geodesy Supply Chain which became operative on 10 March 2025 at the Fifth Plenary Meeting of the UN-GGIM Subcommittee on Geodesy. As of 15 June 2025, the MMOU has 43 participants.
- 29. The MMOU is a shared recognition by Member State government departments and agencies, private sector companies, organizations, associations, and academic institutions, together with the UN-GGCE, that action is required to strengthen the global geodesy supply chain and make the foundations of positioning, navigation, and timing services reliable. The MMOU allows participants to demonstrate to leaders and policymakers that the global geodesy supply chain is dependent on international cooperation and collaboration, and there is an international 'coalition of the willing' who consider this to be a problem we must work on together. Participants are welcome to join the MMOU at any time. A copy of the MMOU is provided as a background paper to this report.
- 30. In recognition of the importance to strengthen governance arrangements for global geodesy, the UN-GGCE is developing an Options Paper exploring international governance models for a reliable global geodesy supply chain which includes (but is not limited to):
 - On-going Member State financial and resourcing commitments,
 - Resourcing for global basic geodetic network to support all people,

² https://www.youtube.com/@UN-GGCE

- Resourcing for the people who perform data collection and analysis roles,
- Open access to geodetic products to support operational government requirements.
- 31. The Options Paper will be made available to the UN-GGIM Subcommittee on Geodesy for consultation later in 2025.

Next steps and recommendations

- 32. Member States are encouraged to act on the proposed Member State activities in the First Joint Development Plan on Global Geodesy to take action to mitigate further degradation of the global geodesy supply chain. In particular, Member States should consider strengthening national geodetic engagement and coordination by establishing a national geodesy committee or working group which includes defence, science and policy representatives.
- 33. Member States are encouraged to take note of the Multilateral Memorandum of Understanding and consider joining.
- 34. Member States are encouraged to consider the development of binding bilateral or multilateral agreements with other Member States. If Member States require guidance on how to undertake this, the UN-GGCE are willing and able to provide support.
- 35. Member States are encouraged to consider contributing to the UN-GGCE through either funding via trust funds, or secondments (in-person or virtual).

IV. United Nations Global Geospatial Knowledge and Innovation Centre (UN-GGKIC)

International Advisory Committee

- 36. In April 2024, ahead of the fourteenth session of the Committee of Experts, the 2024 International Advisory Committee of the UN-GGKIC was focused on advancing the Strategic Plan and work programme of the Centre. The Strategic plan was adopted by the IAC in July 2024, soon followed by the endorsement of the Committee of Experts during the fourteenth session held in August 2024 at the United Nations Headquarters.
- 37. During the intersessional period, the UN-GGKIC continued to engage its IAC towards the preparation and approval of a first version of its operational workplan. The work plan was agreed to by the IAC in January 2025 as a guide for the operations of the UN-GGKIC for 2024-26, and beyond.
- 38. Owing to logistical challenges and the difficult overall financial prospect in the United Nations, the decision was taken to organize the annual meeting of the International Advisory Committee (IAC) through a two-step hybrid meeting with a virtual segment convened online on 7 and 8 May 2025 and an in-person segment to be convened, in the United Nations Headquarters on 3 August, on the margins of the fifteenth session of the Committee of Experts.
- 39. During the online segment, the discussions focused on reviewing progress against the agreed work plan, identifying opportunities to enhance the Centre's visibility and communication, and refining the format and scope of the flagship "UN GeoNow" initiative. The IAC emphasized the importance of strengthening regional engagement and supporting innovation-driven capacity development.
- 40. The Steering Committee of the UN-GGKIC is tentatively scheduled for September 2025, conveniently after the IAC has taken place to continue providing its strategic advice concerning the activities of the UN-GGKIC, and reviewing annual progress reports and budgetary plan.

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Current staffing and partnerships

- 41. As of July 2025, the UN-GGKIC has a total of six staff located in Deqing, China. The recruited staff include the Head of Centre, a senior programme officer, three geospatial professionals and one general service staff. Two professional and one general service positions are still pending recruitment. The Centre also provides three staff positions at the United Nations Headquarters under the agreement for the operationalization of the UN-GGKIC.
- 42. The Centre is currently actively establishing consultancies to support the implementation of UN-IGIF and the development of Country-level Action Plan. The UN-GGKIC has also established a close relationship with the Centre for Spatial Data Infrastructures and Land Administration of the University of Melbourne in the context of the development of a geospatial leadership programme.

Activities of the Centre

43. The activities of the UN-GGKIC in the intersessional period are summarised below:

UN Geospatial Knowledge & Innovation week, UN GeoNow in Deqing, China (October 2024)

44. The Centre successfully convened the United Nations Geospatial Knowledge and Innovation Week (UN GeoNow 2024), held from 21 to 24 October 2024 in Deqing, China. Under the theme "Geospatial IDEAS Benefiting Our World," the event featured a suite of knowledge-sharing and capacity development activities including the UN Geospatial Information Application Conference, the high-level policy dialogues under the "Moganshan Talks" series, the International Symposium on Leadership Development; and thematic workshops co-organized with ESCAP on disaster risk reduction and with UN DESA on digital governance. The event attracted over 1,000 participants from more than 50 countries, representing government, academia, the private sector, and the United Nations system.

Seventh High-Level Forum on UN-GGIM in Mexico City, Mexico (October 2024)

45. The Centre actively participated in the Seventh High-Level Forum on Global Geospatial Information Management, where it presented its contributions toward global capacity development through the implementation of the UN-IGIF, particularly in developing countries.

Regional committee meetings of Asia and the Pacific and Arab States in New Delhi, India (November 2024) and in Jeddah, Saudi Arabia (Febraury 2025)

46. The Centre participated in the Third Plenary Meeting of UN-GGIM: Asia and the Pacific in November 2024 and in the Fifth Plenary Meeting of UN-GGIM: Arab States in February 2025, presenting its ongoing efforts to collaborate with regional committees and supporting the attendance of Member States to the regional committees. In New Delhi, the UN-GGKIC also provided extensive presentations on its implementation of the UN-IGIF towards the development of country-level action plans. In Jeddah, the UN-GGKIC also provided a detailed presentation of its work programme under its five main goals on developing leadership, addressing national priorities, progressing geospatial knowledge, enabling innovation, and enhancing communication and awareness.

Expert Consultation and Meeting on the operationalization of the United Nations Integrated Geospatial Information Framework in Deqing, China (November 2024).

The meeting aimed to consolidate consultations and meetings focused on operationalizing the UN-IGIF at the country level. The primary objective was to review existing documents, guides, and resource materials, and to evaluate progress in efforts toward accelerating the implementation of the UN-IGIF by leveraging the United Nations' developed modality and approach to enhancing global geospatial information management arrangements E/RES/2022/24, particularly in developing countries. The consultation and meeting brought together the group of resource persons and consultants whom the United Nations Statistics Division and SDG Data Alliance had engaged since 2019 for the development and operationalization of the UN-IGIF at the country level, along with a few geospatial leaders and substantive officers from the Secretariat, to map out feasible practical next steps and to identify needed refinements and improvements to the UN-IGIF and its suite of documents and resource materials. This collaborative effort aimed to support the sustained adoption of geospatial information management capabilities and the effective operationalization of the UN-IGIF according to national circumstances.

Expert consultation and meeting on enhancing geospatial information management arrangements and accelerating the implementation of the SDGs with the Sub-regional Workshop on UN-IGIF in Fiji (November 2024) and Mozambique (March 2025)

48. In November 2024, the Centre contributed a sub-regional consultation and training event for Pacific Island countries and territories, focusing on capacity building and geospatial governance challenges specific to Small Island Developing States (SIDS). The event was organized in close cooperation with the SDG Data Alliance, the Pacific Community (SPC), Pacific Geospatial and Surveying Council (PGSC), and Secretariat. In March 2025, the Centre also co-organized an expert consultation and regional workshop on UN-IGIF implementation in Maputo, Mozambique, in collaboration with the Economic Commission for Africa (ECA), the SDG Data Alliance, national partners and the Secretariat. The workshop targeted Member States in Sourthern Africa, including Small Island Developing States and Land-locked Developing Countries (LLDC).

Fifth plenary meeting of the High-level Group on the UN-IGIF and the meeting of the Bureau and its Expanded Bureau, Jeddah, Saudi Arabia (February 2025)

49. In February 2025, the Centre presented its Strategic Plan and Work Programme 2025 at the Fifth Plenary Meeting of the High-level Group on the UN-IGIF, held in Jeddah, Saudi Arabia. The presentation introduced the vision, mission of UN-GGKIC and emphasized the Centre's alignment with the strategic priorities of the Committee and its role structured on emporwering Member States, implementing the UN-IGIF, and promoting knowledge and innovation. The presentation also noted the role of UN-GGKIC as a platform for innovation, partnerships, and implementation support for Member States.

Geospatial Leadership training and Global Forum for the Next Generation of the Sustainability Agenda in Melbourne, Australia (April 2025)

50. The event brought together over 200 participants and featured 12 technical sessions and 35 presentations by experts from over 50 countries. The event focused on geospatial knowledge and innovation and explored the role of geospatial intelligence in tackling global sustainability challenges, with a strong emphasis on the Sustainable Development Goals (SDGs). The event also aimed to accelerate the deployment of geospatial solutions for climate adaptation, disaster risk reduction, and sustainable resource management. The event was also part of the

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ongoing effort of the UN-GGKIC to exchange and scope the development of a geospatial leadership capacity development programme, in accordance to its workplan.

Seminar on Spatiotemporal Intelligence in Geospatial Information and National Governance in Deging, China (June 2025)

51. In June 2025, the Centre co-hosted the Seminar on Spatiotemporal Intelligence in Geospatial Information and National Governance in Deqing, China, in partnership with UN-GGIM: Asia and the Pacific, drawing over 70 participants and featuring 19 expert presentations, the topics included exploring digital transformation in land surveying, urban governance, disaster response, smart agriculture, and SDG monitoring.

High-Level Political Forum on Sustainable Development in New York, USA (July 2025)

52. During the 2025 session of the High-level Political Forum on Sustainable Development, the UN-GGKIC contributed to a high-level side event highlighting the power of geospatial information towards monitoring and advancing the implementation of the SDGs. The use case taken from China's innovative approach showcased how a variety of data can be used for monitoring globally to locally leveraging data disaggregation opportunities offered from Earth observation and geospatial data, including for sustainable urban development.

Next Steps and recommendations

- 53. In the coming period, the UN-GGKIC intends to organize the following activities for furthering the implementation and adoption of the UN-IGIF:
- 54. UN-IGIF Workshop at regional committees: in close partnership with the Secretariat and the regional committees, the UN-GGKIC intends to convene UN-IGIF workshops at the annual plenary of regional committees in the latter half of 2025. These efforts aim to raise awareness and share knowledge on developing geospatial strategies to address national priorities and to assist Member States in advancing the implementation of the United Nations Integrated Geospatial Information Framework (UN-IGIF), while reinforcing geospatial information management and accelerating progress toward the Sustainable Development Goals.
- 55. UN-IGIF Workshop in subregional and groups of countries: in close partnership with the Secretariat and the regional committees, the UN-GGKIC intends to convene UN-IGIF sub-regional workshops in the latter half of 2025, in efforts to advance and operationalize the United Nations Integrated Geospatial Information Framework (UN-IGIF) and developing Country-level Action Plans, fostering regional cooperation.
- 56. UN GeoNow 2025: the event will be held in October 2025, serving as a global forum promoting advanced geospatial applications and stimulating sustainable development, digital governance, and industry integration. UN GeoNow 2025 aims to build a collaborative environment involving government, industry, academia, and research sectors. Designed as an annual event, future iterations of GeoNow will be complementary of other UN-GGIM events and foras such as the World Geospatial Information Congress or High-level Forums. UN GeoNow 2025 supports the mission and goals of the UN-IGIF to raise awareness at senior level and serves as a high-level international platform for sharing practical experiences, technologies, and partnerships, helping countries develop country-level action plans, develop national geospatial leadership, and showcase successful use cases of geospatial benefits for the Sustainable Development Goals.

- 57. Geospatial applications for national priorities: The Centre is dedicated to promoting the real-world application of geospatial information to address pressing national and global challenges. In close collaboration with its strategic and international partners, the Centre will develop a demonstration and showcase of integrated Earth observation (EO), geospatial, statistics and big data into geospatial knowledge hubs to facilitate decision-making, knowledge exchange and capacity development. These real-world examples of data and technology for monitoring can be used as a template for national implementation and will focus on topics such as smart agriculture, environment assessment, food security, early warning and policy planning. Once fully developed, the policy briefings, use cases and applications platform will be made openly available to Member States, reinforcing the Centre's commitment to inclusivity, innovation, and the operationalization of the United Nations Integrated Geospatial Information Framework (UN-IGIF).
- 58. **Knowledge sharing and capacity development:** In the coming period, the Centre intends to strengthen the relationship with the UN-GGIM thematic networks, including UN system entities, and beyond with local and international strategic partners to organize more capacity development activities. These activities aim to raise awareness on the use of a variety of data including satellite and Earth observation, Unmanned Aerial Vehicles (UAVs), and geospatial information for the SDGs such as coastal zone management, cultural heritage, or environmental assessment. The list of upcoming workshops and seminar (webinar) is being prepared for the intersessional period.
- 59. Empowering the UN System with geospatial information: the Centre aims to deepen collaboration with UN system entities to deliver innovative, geospatially enabled solutions that strengthen operational effectiveness in domains across the UN system including agriculture, environment, peacekeeping, humanitarian, climate and disaster risk reduction, ultimately supporting Member States through the capacity development activities of its offices, departments and specialized agencies. These activities and collaboration aim to embed geospatial knowledge as a core asset in the UN system. Anchored in its guiding philosophy, "Geospatial knowledge benefiting our world", the Centre remains steadfast in advancing data-driven, collaborative solutions for global impact.

V. Background Documents

- 60. The following documents are provided as background documents to the present report:
 - UN-GGKIC Strategic Plan and Logical Framework;
 - UN-GGKIC Annual Work Plan;
 - UN-GGKIC Capacity Building Workplan;
 - UN-GGCE First Joint Development Plan for Global Geodesy;
 - UN-GGCE Multilateral Memorandum of Understanding;
 - UN-GGCE Policy brief on "Geodesy is critical to climate science";
 - UN-GGCE Policy brief on "Safeguarding VLBI Radio-Frequencies".

VI. Points for Discussion

- 61. The Committee of Experts is invited to:
 - (a) Take note of the present report, of the work and progress of the United Nations Global Geospatial Centres of Excellence, including capacity

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- development activities and events to implement ECOSOC resolution 2022/24 entitled 'Enhancing global geospatial information management arrangements';
- (b) Take note of the background documents related to the governance, workplan and activities related to the operationalization of the United Nations Global Geospatial Centres and provide guidance on the critical orientation and activities the Centres should undertake in line with their substantive focus;
- (c) Take note of the efforts of the United Nations Global Geospatial Centres of Excellence to raise awareness, enhance the understanding and importance of advancing global geospatial geospatial information for Member States, including through implementing the UN-IGIF and strengthening the global geodesy supply chain;
- (d) Provide guidance in advancing global geospatial knowledge, innovation, technology and infrastructure through the UN-GGKIC to advance the SDGs, the implementation of the UN-IGIF, and bridge the digital divide:
- (e) Take note of the First Joint Development Plan for Global Geodesy and provide views on how the UN-GGCE could best support Member States with implementation efforts; and
- (f) Take note of the need to strengthen global geodetic governance and provide views on: (i) the development of bilateral or multilateral Memorandums of Agreement, and (ii) take steps towards the establishment of an international organization.