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Committee of Experts on Global Geospatial Information Management Fourteenth session New York, 7–9 August 2024 Item 3 of the provisional agenda* Enhancing global geospatial information management arrangements

Enhancing global geospatial information management arrangements

Note by the Secretariat

Summary

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

At its thirteenth session, held in New York from 2 to 4 August 2023, the Committee of Experts adopted decision 13/101, in which it commended the significant efforts in continuing to take strategic and practical actions to continue to strengthen and enhance the coordination and coherence of global geospatial information management arrangements and related interlinkages for Member States, as aligned to the implementation of Economic and Social Council resolution 2022/24. The Committee noted the ongoing budgetary process associated with the adoption of resolution 2022/24 by the Council and the inclusion of performance measures and results focused on accelerated implementation of the United Nations Integrated Geospatial Information Framework within the strategic objectives and elements of the Department of Economic and Social Affairs of the Secretariat, and in this regard underscored the importance of continued advocacy and awareness-raising within and among Member States and their permanent missions in the next steps and final negotiations for adequate and sustainable resources within the Secretariat, and requested an update on the outcomes of the process.

The Committee of Experts expressed its appreciation to the Government of India for the successful convening of the second United Nations World Geospatial Information Congress, in Hyderabad, India, in October 2022, and welcomed the invitation of the Government of Mexico to host the seventh High-level Forum on Global Geospatial Information Management, in Mexico City in October 2024, with the theme "Accelerating implementation: achieving resilience", and confirmed the support of the Committee of Experts in the development and implementation of the programme of the Forum.

The Committee also welcomed and supported the commitment from Saudi Arabia to host and establish the United Nations Global Geospatial Ecosystem Centre of Excellence in Riyadh, and encouraged the Bureau and the Secretariat to work with Saudi Arabia to clarify and refine the scope and remit of the Centre to ensure that it aligns with the programme of work of the Committee of Experts and complements the activities and established agendas of the United Nations centres in Deqing, China, and Bonn, Germany, in order to avoid duplication. The Committee also noted the progress and efforts made to finalize the modalities for the establishment of the United Nations Global Geospatial Knowledge and Innovation Centre in Deqing and the United Nations Global Geodetic Centre of Excellence in Bonn, as tangible means to develop and expand global geospatial

capacity and capability and to strengthen geospatial information management arrangements in countries, especially developing countries, and looked forward to ongoing updates on the operations of the Centres at future sessions of the Committee of Experts, further noting that cooperation and coordination between the three centres of excellence would be key to their success.

The Committee of Experts recognized the efforts of developing countries to enhance and support the leadership roles within national geospatial and mapping agencies to ensure that effective geospatial information management contributes to increased geospatial capacities and capabilities, and shared knowledge for geospatial enablement across and within Member States, and supported the suggestions to integrate the subjects of gender equality, inclusion and diversity into the Committee's agenda items, and encouraged its functional groups and thematic networks to integrate that topic into their work plans.

In this present report, the Secretariat provides information on efforts and progress to continue to strengthen and enhance the coordination and coherence of global geospatial information management arrangements and the effectiveness of the Committee of Experts, in particular for the achievement of its operations focused on the Sustainable Development Goals and the United Nations Integrated Geospatial Information Framework, and ensure its continued effectiveness and benefits to all Member States. The Secretariat also informs the Committee of the outcomes of the budgetary process associated with the adoption of resolution 2022/24 by the Council and the establishment of a secretariat for the Committee dedicated to the Committee's normative and implementation work on global geospatial information management. The Secretariat discusses the existing extrabudgetary funding from Member States, through the means of trust funds, as well as expert secondments and other sources, as appropriate, that supported the activities of the Committee of Experts.

Also in this report, the Bureau informs the Committee of the outcomes of its in-person meeting that included its expanded bureau members in January in Aguascalientes, Mexico, where, inter alia, the Bureau discussed and reviewed the provisional agenda and preparations for the fourteenth session. The United Nations Global Geospatial Information Management regional committees, function groups and thematic networks were requested to focus on implementing the Committee's adopted global geospatial frameworks, norms, principles and guides. The Bureau also requested functional groups and thematic networks to include diversity, equity and inclusion into their work and activities. In this regard, the Bureau welcomed the offer from the United Nations Global Geospatial Information Management Regional Committee for Europe to prepare a background document to bring diversity, equity and inclusion perspectives into the Committee's programme, to be considered by the Committee at its fourteenth session.

In this report, the Secretariat and the Bureau inform the Committee of Experts on the preparation and progress for the convening of the seventh High-level Forum on United Nations Global Geospatial Information Management, to be held in Mexico City from 8 to 10 October 2024, with the theme "Accelerating implementation: achieving resilience", including an advisory committee to work together with the host and the Secretariat in the development and implementation of a compelling programme for the Forum.

The Secretariat also provides information to the Committee of Experts on the progress made towards the operationalization of the United Nations Global Geodetic Centre of Excellence at the United Nations campus in Bonn, Germany, and the United Nations Global Geospatial Knowledge and Innovation Centre in Deqing, China. Together with their respective international advisory committees, the two Centres are updating the Committee on their activities and progress to support Member States, especially developing States, in strengthening and expanding their global geospatial capacities and capabilities and to enhance their national geospatial information management arrangements. In the report, the Secretariat also updates the Committee on its progress to realize the United Nations Global Geospatial Ecosystem Centre of Excellence based on the commitment by Saudi Arabia to host the centre in Riyadh.

The Secretariat, in this report, further reports on efforts to enhance the effectiveness of the Committee of Experts. This includes organizing expert consultations and capacity-development activities and coordinating with implementing partners. The aim is to foster coherence, collaboration and optimize resources. Those efforts support Member States in enhancing and sustaining leadership

roles within national geospatial, mapping and cadastral agencies. The goal is to strengthen and enhance geospatial capacities and capabilities and promote knowledge-sharing towards enhancing effective and inclusive integrated geospatial information management arrangements nationally. This fosters the efficient sharing and utilization of geospatial information, crucial for decision-making, policy formulation and innovation, playing a vital role in addressing global challenges and achieving the Sustainable Development Goals. The focus is on creating an enabling environment where geospatial information can be effectively leveraged to leave no one behind and for the greater good.

I. Introduction

- 1. The United Nations Economic and Social Council (ECOSOC), on 22 July 2022, welcomed and noted the Committee's comprehensive report on its implementation of its resolution 2016/27 on strengthening institutional arrangements on geospatial information management (E/2022/68). Further, the Council adopted resolution 2022/24 entitled 'Enhancing global geospatial information management arrangements.' The resolution reiterated the importance of strengthening and enhancing the effectiveness of the Committee of Experts, particularly for the achievement of its operations focused on the Sustainable Development Goals (SDGs) and the United Nations Integrated Geospatial Information Framework (UN-IGIF) to strengthen and ensure its continued effectiveness and benefits to all Member States. Resolution 2022/24 represents an unequivocal endorsement that the Committee Expert's work is important to the Council and Member States.
- 2. With rapid technological advancement, innovative applications and uses, and increasing usefulness of high-quality, accessible, timely and reliable geospatial information, strengthening and enhancing the effectiveness of the Committee of Experts on Global Geospatial Information Management (UN-GGIM) is critical for well-being of people and communities, sustainable development, addressing climate related challenges, and at times, urgent climate actions. The Committee must continue to play that pivotal role in this endeavor, fostering dialogue, collaboration and consensus amongst Member States, and between Member States and relevant stakeholders. By fostering an operating environment of shared knowledge and resources, the Committee aims to improve the availability, accessibility and application of cohesive and comprehensive geospatial information, which is essential for collectively addressing complex challenges faced by humanity.
- 3. The importance of geospatial information transcends borders and sectors. It is a foundational element that supports the achievement of all the Sustainable Development Goals (SDGs) and targets as agreed. Enhancing global geospatial information management is a global imperative that requires concerted efforts and strategic partnerships. The Committee's commitment and role in this is indispensable, acting as a catalyst for change and a beacon of innovation and cooperation in the quest for a more equitable and sustainable world.
- 4. For developing countries, the stakes are particularly high. Enhancing geospatial information management can lead to better policy-development and decision-making, allowing these countries to leapfrog into new development trajectories. It offers opportunities to manage natural resources and development more sustainably, plan more resilient infrastructures, and catalyze economic opportunities more effectively. The Committee's operations focused on the SDGs and the UN-IGIF seek to increase the capacity and capabilities of Member States, serving as a catalyst for developing countries in shaping their feasible path towards sustainable and resilient futures.
- 5. The Committee of Experts is invited to take note of this present report and to express its views on its implementation of ECOSOC resolution 2022/24. In this context, to also examine ways to strengthen and enhance the effectiveness of the Committee of Experts, ensuring that the global geospatial information community collectively contributes to efforts by Member States to improve and strengthen their national geospatial information management arrangements. The focus is on creating an enabling environment where geospatial information can be effectively leveraged to leave no one behind and for the greater good. Points for discussion and decision are provided in paragraph 60.

II. Bureau and the expanded bureau of the Committee of Experts

6. The bureau and its expanded bureau met in-person on the margins of the thirteenth session and discussed a number of items that the Committee and its bureau were invested in. The items included the proposal for the establishment of a secretariat for the Committee of Experts in the United Nations programme budget for 2024, the programme of work of

- the Committee for 2023 2024, the operationalization of the United Nations Global Geospatial Knowledge and Innovation Centre (UN-GGKIC) and the United Nations Global Geodetic Centre of Excellence (UN-GGCE), and the seventh High-level Forum on United Nations Global Geospatial Information Management. During the intersessional period, the bureau met virtually with the director of the Statistics Division regularly, at near monthly intervals. These virtual meetings followed-up on items related to the establishment of the secretariat, the programme of work of the Committee, the operations of the global geospatial centres of excellence, and the seventh High-level Forum.
- 7. The bureau and the expanded bureau met in person on 24 January 2024 in Aguascalientes, hosted by the National Institute of Statistics and Geography (INEGI) of Mexico. At this one-day meeting, the bureau had a substantial, varied agenda, and welcomed the opportunity to engage and discuss in person with its expanded bureau, the High-level Group of the Integrated Geospatial Information Framework (HLG-IGIF), and invited experts. The agenda included the usual items such as the programme of work of the Committee, events and activities of the Committee, the establishment of the secretariat, and the operations of the global geospatial centres of excellence.
- 8. At the meeting, the bureau congratulated the HLG-IGIF on successfully convening its third plenary meeting from 22-23 January and noted the continuing need for secretariat resources to complete the updates and refinement of the ten documents of the Implementation Guide of the UN-IGIF. The meeting congratulated the HLG-IGIF on its organized efforts to translate the UN-IGIF into languages other than English, further enhancing the utility and uptake of the UN-IGIF and its suite of resource materials.
- 9. The meeting received an update from the representative of the host country of the seventh High-level Forum. The High-level Forum is hosted by the National Institute of Statistics and Geography (INEGI) of Mexico, with the theme "Accelerating Implementation: Achieving Resilience" in México City from 8 10 October 2024. This seventh edition of the high-level forums will continue the Committee's regular high-level multi-stakeholder engagement and interaction on global geospatial information management through the convening of global forums aimed at promoting comprehensive dialogue among Member States and between Member States and relevant international organizations, United Nations system entities, and relevant stakeholders. The bureau agreed to establish an advisory committee to prepare and promote an engaging and substantive programme for the three days.
- 10. The bureau approved the establishment of the Task Team on Geospatial Information for Climate Resilience and its terms of reference. The bureau noted that Barbados, Tonga, and the United Kingdom are the co-convenors of the Task Team and also noted that the Task Team is working towards a concept paper as its deliverable to the fourteenth session. The bureau also approved the establishment of its Writing Team on the Future Geospatial Information Ecosystem, with its terms of reference and next steps. The bureau noted offers to support this effort of the bureau to elaborate and outline the fundamental elements and principles of the future geospatial information ecosystem for consideration by the Committee at its fourteenth session.
- 11. The five regional committees took turns and provided updates from their regions, highlighting their challenges in securing adequate resources to support capacity development and promote participation and contributions in strengthening national geospatial leadership in their regions. The bureau welcomed the decision of the five regional committees to take turns coordinating and preparing their reports for the annual sessions of the Committee of Experts, beginning with the fourteenth session. The four thematic networks also presented their activities and progress. The bureau thanked the thematic networks for bringing their perspectives and enthusiasm to the Committee. The bureau reminded the thematic networks that their principal focus is to contribute to the global geospatial information management agenda and to align their activities with the programme of work of the Committee.

- 12. The meeting concurred that a cross-cutting approach against a 'confined' approach ensures that diversity, equity, and inclusion (DEI) principles are integrated into every aspect of the Committee's programme of work. This holistic approach fosters a more inclusive culture that empowers all individuals, promotes a diversity of thought, and enhances the Committee's ability to innovate and embrace a rapidly changing global landscape. In this regard, the bureau welcomed an offer by the United Nations Global Geospatial Information Management Regional Committee for Europe (UN-GGIM: Europe) to inform the Committee of its efforts and to provide some perspectives for the consideration of the Committee of Experts at its fourteenth session.
- 13. The co-Chairs were invited to and participated in the coordination segment of ECOSOC from 31 January 1 February 2024, where the co-Chair from Mexico participated and contributed in-person on two panels convened by ECOSOC. The first panel was the "Conversation with Executive Secretaries of Regional Commissions and Chairs of Functional Commissions and Expert Bodies on Sustainable, Resilient, and Innovative Solutions to Accelerate the Implementation of the 2030 Agenda." The second panel was "Closing the Digital Divide towards Achieving a Global Digital Transformation." Both panels were held on 1 February. The co-Chairs were also invited to and participated in the management segment of ECOSOC from 5 6 June 2024, and the co-Chair from Belgium participated virtually and contributed to a roundtable discussion "Charting Progress: Follow up to the 2022 Review of ECOSOC Functional Commissions and Expert Bodies" on 6 June. An outcome of this meeting of ECOSOC subsidiary bodies, the Chair of the Commission on Science and Technology for Development, the Chair of the Statistical Commission and the co-Chair of the Committee of Experts agreed to exchange information on their respective activities in the important work area of data governance.

III. ECOSOC Resolution 2022/24 - Enhancing global geospatial information management arrangements

14. The United Nations Economic and Social Council, in its resolution of 22 July 2022, decided to enhance the institutional arrangements of the Committee of Experts as a subsidiary body of the Economic and Social Council in charge of all matters related to geospatial information, geography, land administration and related topics, in accordance with the terms of reference annexed to the resolution. The Committee comprises experts from all Member States and in appointing their national representatives, Member States will seek to designate experts with specific knowledge of geospatial information management and its many interrelated fields¹.

Establishment of a secretariat for the Committee of Experts dedicated to the Committee's normative and implementation work on global geospatial information management

- 15. The General Assembly, on 22 December 2023 adopted resolution 78/252 on the report of its Fifth Committee (A/78/662) and decided to establish a secretariat for the Committee of Experts in the 2024 programme budget comprising seven positions, six professionals and one general service. The General Assembly took note of the report of the Advisory Committee (A/78/7) that recognized the important functions of the Committee of Experts and the need to support Member States in implementing related technical recommendations to strengthen their geospatial information management capacities.
- 16. In January 2024, the terms of reference for the seven new positions were developed in accordance with the appropriate resolutions, reports, generic job profiles and administrative instructions. This newly established secretariat for the Committee of Experts will undertake substantial activities to support the Committee's global architecture and normative and implementation work on global geospatial information management, including implementing recommendations of the Committee approved by the Economic and

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¹ Geospatial sciences, geomatics, surveying, geography, land administration, geodesy, cartography and mapping, remote sensing, hydrography and oceanography, land/sea and geographic information systems and environmental sciences

Social Council and the General Assembly, the 2030 Agenda for Sustainable Development, and the UN-IGIF. The newly established secretariat will cover areas of work such as providing strategic and substantive leadership, supporting the programme of work of the Committee including new and emerging areas, supporting the 'global architecture' of the Committee with its regional committees, functional groups and thematic networks, and strengthening and enhancing geospatial information management capacities, capabilities and leadership.

- 17. Also in January 2024, the United Nations Secretariat, recognizing its financial outlook and liquidity situation for its fiscal year, instituted a hiring freeze for regular budget positions. However, five of these seven positions were finalized and advertised in late May 2024 through the United Nations Careers Portal. The closing date for all these five positions was 11 July 2024. Successful staff members will be appointed by the Secretary-General under regulations established by the General Assembly and qualifications include "the highest standards of efficiency, competence, and integrity", as per the United Nations Charter. The United Nations Secretariat is committed to achieving a 50/50 gender balance and geographical diversity in its staff. Female applicants were strongly encouraged and applicants from Member States that are unrepresented or underrepresented² in the United Nations Secretariat, were strongly encouraged to apply for these geographical posts. The remaining two positions, at the professional grade 2 level, will be advertised and filled when the hiring freeze has been lifted.
- 18. With the establishment of the secretariat for the Committee of Experts in the Statistics Division, the present Global Geospatial Information Management Section in the Environmental Statistics and Geospatial Information Branch of the Division will focus its expertise and efforts to strengthen and coordinate the Division's geostatistical work including to improve the standardization of geographical names; the methodological approaches for the disaggregation of statistics according to geography; and the application of geospatial information in the production, dissemination and visualization for official statistics. Within the proposed programme budget for 2025, DESA is proposing for the reassignment of the three existing statistician positions³ to geospatial information officer positions. All three staff members will be retained and will remain in the Section with this reassignment. Additional Secretariat staff resource⁴ is provided under the agreement for the operationalization of the UN-GGKIC.

Operations focused on the Sustainable Development Goals and the United Nations Integrated Geospatial Information Framework

19. Resolution 2022/24 reiterates the importance of strengthening and enhancing the effectiveness of the Committee of Experts, particularly for the achievement of its operations focused on the SDGs and the UN-IGIF, to strengthen and ensure its continued effectiveness and benefits to all Member States. The Secretariat initiated a series of expert consultations and meetings involving Member States to review and refine the country-own country-led approach for enhancing national geospatial information management and accelerating the achievement of the SDGs through the implementation of the UN-IGIF fully cognizant of national circumstances. The approach will also need to be broadened and embrace the recently operationalized or soon to be established global geospatial centres of excellence to ensure coordination, coherence and avoidance of duplication as required by the Committee of Experts.

² Andorra, Angola, Antigua and Barbuda, Bahrain, Belize, Brunei Darussalam, China, Cuba, Democratic People's Republic of Korea, Dominica, Equatorial Guinea, Germany, Grenada, Guinea-Bissau, Hungary, Indonesia, Israel, Japan, Kiribati, Kuwait, Lao People's Democratic Republic, Libya, Liechtenstein, Malta, Marshall Islands, Micronesia (Federated States of), Monaco, Nauru, Oman, Palau, Panama, Papua New Guinea, Paraguay, Qatar, Republic of Korea, Saint Lucia, Saint Vincent and the Grenadines, Sao Tome and Principe, Saudi Arabia, Singapore, Solomon Islands, Somalia, Thailand, Timor-Leste, Tuvalu, United Arab Emirates, United States of America, Vanuatu (as of March 2024)

³ Senior statistician (grade P-5), statistician (grade P-4) and statistician (grade P-3)

⁴ In the Statistics Division in New York comprising one geospatial information office (grade P-4), one geospatial information office (grade P-3) and one programme management assistant

- 20. These expert consultations and meetings engaged invited geospatial leaders from Member States, to listen, discuss, and understand key elements of their national efforts towards enhancing their geospatial information management arrangements, resources and capacities. It is expected that further expert consultations and meetings will be programmed to continue to listen, discuss and understand key elements of national efforts from other invited national expert representatives, to further listen, discuss, and understand key elements of their national efforts and to consider the review, refinement and improvement to the recommended approach and any related guides, resource materials and tools, supporting Member States in their national efforts towards enhancing national geospatial information management, resources and capacities, accelerating the achievement of the SDGs.
- 21. From the three consultations and engagements to date, in Addis Ababa, Bali and Aguascalientes, the participating expert representatives shared experiences and strategies to improve their national geospatial information programs, emphasizing the importance of leadership, effective communication, and good governance. The importance of multiagency collaboration and sustained government support for the formulated strategies, action plans and programs were highlighted. Participants considered the UN-GGKIC an important actor in the implementation of global geospatial frameworks, norms, principles and guides, especially the UN-IGIF. The importance of enhancing leadership roles in and by national geospatial, mapping and cadastral agencies was underscored by participants, especially from Africa.
- 22. Participants also looked forward to the staffing and resourcing of the secretariat for the Committee of Experts, noting that these dedicated Secretariat resources will be critical to support Member States in enhancing their national geospatial information management arrangements.

Strengthening and enhancing the effectiveness of the Committee of Experts

- 23. The Department of Economic and Social Affairs (DESA) in its subprogram on statistics within the proposed programme budget for 2025, will "develop, disseminate and support the implementation by Member States of statistical and geospatial information frameworks, standards and methods, especially those related to the SDGs, the UN-IGIF and other new emerging policy issues". One of the main performance measures for this subprogramme is the accelerated implementation of the UN-IGIF.
- 24. DESA's subprogramme on statistics, through the newly established secretariat for the Committee of Experts, will focus on strengthening and enhancing national geospatial information management arrangements and capacities in the Member States. This will be done through an integrated 'whole-of-government' approach to unlock the potential, utility and to share national geospatial information capabilities. Multi-stakeholder partnerships will be pursued and established, focusing on creating an enabling operating environment including to bridge the geospatial digital divide and reducing inequalities in accessing geospatial technologies, processes and data, which are fundamental to achieving the SDGs and national development priorities. This will include leveraging the global and regional meetings of the Committee of Experts to enhance national geospatial information management arrangements, foster a comprehensive approach to the implementation of consensus-based global geospatial frameworks, norms, principles, guides, and methods, particularly the UN-IGIF, in strengthening national geospatial information management arrangement and capacities in the Member States.
- 25. The Committee of Experts sets the agenda for geospatial information management at a global level. Embracing diversity, equity, and inclusion (DEI) in its deliberations is not just important it's essential. Diversity ensures a variety of perspectives are considered, reflecting the rich tapestry of human experience across different cultures, genders, and socioeconomic backgrounds. Equity guarantees that all voices, especially those underrepresented or marginalized, have equal weight in decision-making processes. Inclusion fosters a sense of belonging and respect, allowing for a collaborative environment

where every expert can contribute meaningfully. In this regard, considering DEI together with the framework of CARE (Collective Benefit, Authority to Control, Responsibility, and Ethics) and FAIR (Findable, Accessible, Interoperable, Reusable) data principles is essential to advance the global geospatial information management agenda. DEI ensures that the benefits of geospatial data are available fairly and equitably, supporting involvement and innovation of all communities, including Indigenous and underrepresented groups. The CARE principles advocate for data governance that respects the rights and interests of these communities, complementing the FAIR principles.

- 26. DEI should be prioritized, underscored by the increasing complexity of global challenges. Geospatial information, by its nature, must serve the needs of diverse global inhabitants. When DEI principles guide the Committee's work, the resulting decisions and outputs are more likely to be robust, fair, and universally applicable. This approach not only enriches the Committee's programme of work but aligns with the United Nations' broader goals of promoting peace, security, and sustainable development through shared and mutual understanding.
- 27. The Committee of Experts also recognizes the profound impact that high-quality, accessible, timely, reliable geospatial data can have on efforts to understand and monitor the environment and make informed decisions that enhance resilience. The integration of geospatial information into environmental decision-making is essential for sustainable development and to address key global challenges such as climate change, biodiversity loss and ecosystem degradation. Harnessing the integrative capacities and power of geospatial data, policymakers can visualize complex climate dynamics, assess the vulnerability of ecosystems, and identify areas most at risk.
- 28. There is a need for a concerted, coordinated and coherent approach to climate, environment and resilience by the Committee that is underpinned by strategic objectives to drive forward understanding of the role integrated geospatial information management can play, and should play, to support related policy-development and decision-making. Taking a 'joined up' approach to climate, environment and resilience presents an opportunity to identify common data and information needs across this work and potentially reduce duplication of effort. It also creates an avenue to consider the interlinked nature and the intersection between integrated geospatial information with societal and economic resilience. In many instances, will require similar geospatial information and data to assess risks, threats and vulnerabilities and inform decision-making.
- 29. The Committee's commitment to promoting the availability and application of high-quality, accessible, timely and reliable geospatial information will be important in supporting Member States to mitigate the impacts of our changing climate, protect the environment and develop a more resilient future for all. The report of the Secretariat, provided as a background document to this present report, underscores the importance of this effort and to catalyze actions amongst the Committee of Experts and relevant stakeholders. It is only through collective efforts, shared knowledge and effective partnerships that we can navigate the challenges ahead and chart our feasible path forward to a sustainable and resilient future for generations to come.
- 30. Artificial intelligence (AI), particularly through advanced models and generative capabilities, and other emerging technologies, have the potential to further enhance geospatial information management. When deployed responsibly, these technologies have the potential to process vast amounts of data, provide predictive analytics, and enhance decision-making processes. For countries looking to improve their geospatial information strategies and programme, the integration of emerging technologies such AI can lead to more actionable and timely information. This can improve efforts to achieve sustainable development and address climate-related challenges, such as taking urgent climate actions, and developing resilience.
- 31. Geospatial information management is likely to be significantly influenced by AI and associated technologies. There is an increasing call for clear legal, regulatory and policy

frameworks that ensure privacy, security, and responsible usage of AI-enabled geospatial technologies, models and applications. It is therefore essential to embed responsible governance and mechanisms from the outset in the design and deployment of these technologies, ensuring they serve the needs of everyone and the collective good. The Committee and the geospatial information community are advised to stay informed about legal and regulatory developments concerning AI in their respective countries. Active participation in shaping these laws and regulations is recommended. Additionally, organizations involved in creating or acquiring AI-powered geospatial technologies, models or systems must consider the potential implications of these legal and regulatory frameworks.

32. The Committee of Experts can play an important role in promoting understanding and setting the norms and principles in support of Member States adopting and deploying these technologies. By addressing the responsible, technical, and governance challenges associated with these technologies, the Committee can ensure that all countries benefit from the advancements in geospatial information management, its technologies and systems. This would not only improve national geospatial information management capabilities but also foster collaboration, necessary to collectively address global challenges. Collaboration across various sectors and stakeholders is necessary to navigate the complexities and harness the opportunities that these technologies present to enhance global geospatial information management arrangements.

IV. Strategic framework of the Committee of Experts

- 33. The Committee of Experts, at its twelfth session, in decision 12/101, supported the proposals for the revision of the Strategic Framework of the Committee and developing a short-term strategic plan for 2022–2024 that identifies the key activities and priorities of the Committee along with adequate resources and required outcomes. With the ongoing implementation of ECOSOC resolution 2022/24, the establishment of the secretariat for the Committee of Experts, and the operationalization of the two global geospatial information centres of excellence in Deqing (Huzhou) and the United Nations Campus in Bonn, the Committee may wish to consider an updated strategic framework for 2025-2030. This new framework could encompass the Committee's operational focus on the SDGs and the UNIGIF to effectively support Member States to enhance their national geospatial information management arrangements and contribute to national development priorities.
- 34. The Secretariat will analyze the most recent framework (2018 2022) against key activities and priorities of the Committee, identify any strengths, weaknesses, and gaps, and evaluate emerging trends and future needs. Based on these insights, an updated draft strategic framework will be prepared and provided to the bureau for initial consideration. It is expected that the bureau will consult the draft strategic framework with its expanded bureau, regional committees, functional groups, thematic networks and relevant stakeholders. The draft will be revised based on this feedback and the bureau is expected to recommend a new strategic framework for consideration by the Committee of Experts at its fifteenth session.

V. Global geospatial centres of excellence

- 35. At its twelfth session in August 2022, the Committee of Experts, in making decision 12/101, emphasized the importance of improving and strengthening national geospatial information capacity and capability, especially in developing countries, and called for appropriate national investments in this context, and highlighted the critical need to mobilize extrabudgetary resources at the global level to support regional and national efforts to bridge the geospatial digital divide.
- 36. The Agreement between the United Nations and the People's Republic of China "On the Operationalization of the United Nations Global Geospatial Knowledge and Innovation Centre" was signed on 20 May 2022. Also, the agreement "On the Operationalization of the United Nations Global Geodetic Centre of Excellence" between the United Nations and the

Federal Republic of Germany was signed on 4 November 2022. These agreements formalized the offer from China to host the UN-GGKIC in Deqing (Huzhou) and from Germany to host the UN-GGCE at the United Nations Campus in Bonn, Germany. The Federal Agency for Cartography and Geodesy of Germany, in a letter dated 17 May 2024, advised of the intention to extend the current agreement until 31 December 2030 ensuring a longer-term operation of the UN-GGCE.

- 37. A formal offer from the government of the Kingdom of Saudi Arabia, through its General Authority for Survey and Geospatial Information (GEOSA) to the United Nations was made on 20 June 2023 to host and establish a United Nations Global Geospatial Ecosystem Centre of Excellence in Riyadh. The letter of offer was brought to the attention of the Committee of Experts at its thirteenth session in August 2023 as requested, and the Committee expressed its views. In making decision 13/101(e) at its thirteenth session, the Committee of Experts welcomed and supported the commitment from Saudi Arabia to host and establish the Global Geospatial Ecosystem Centre of Excellence in Riyadh.
- 38. The United Nations and the Kingdom of Saudi Arabia carried out exploratory discussions in February 2024 including a visit to the UN House in Riyadh, to better understand the strategic, operational and substantive focus for another global geospatial centre of excellence. It is expected that the Riyadh Centre's strategic and operational focus will foster the growth and understanding of a global geospatial ecosystem that is inclusive, equitable, and future proof. This ecosystem will effectively harness multi-dimensional multi-faceted data models, emerging technologies such as machine learning, and generative artificial intelligence. This Riyadh Centre will further contribute to and enhance opportunities to develop and expand global geospatial information capacity, competence and capability, especially in developing countries.
- 39. As with any offers to establish a project office away from headquarters, the United Nations Secretariat continues its review of the offer and modality for operationalizing the proposed UN-GGECE in Riyadh. Once this review is completed, the United Nations and Saudi Arabia will work towards finalizing and formalizing an agreement on the operationalization of the United Nations Global Geospatial Ecosystem Centre of Excellence in Riyadh. The Committee should note that Saudi Arabia has represented its readiness for the UN-GGECE to embark on an initial programme of work upon the successful conclusion of the agreement to operationalize the Centre. This initial programme of work will be implemented by the newly established secretariat for the Committee of Experts pending the recruitment and onboarding of staff resources for the UN-GGECE in Riyadh.
- 40. The Committee of Experts focuses on the strengthening and enhancing of geospatial information management capacities and utilization in Member States, especially in developing countries. In its resolution 2022/24, 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.
- 41. These global geospatial centres of excellence, as project offices managed by DESA, play an important role in enhancing global geospatial information management arrangements and the effectiveness of the Committee. Each centre contributes to the operational focus of the Committee aligned with their respective mandates, substantive focus and expertise. Collectively, they leverage the overarching strategy of the Committee and its initiatives and global geospatial frameworks, norms, principles and guides that are consensus-based and adopted or endorsed by the Committee to guide and enhance effective geospatial information management across the world. The substantive focuses are
 - (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) Proposed United Nations Global Geospatial Ecosystem Centre of Excellence (Riyadh, Kingdom of Saudi Arabia)

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.

42. The Committee, at its thirteenth session, noted that cooperation and coordination between global geospatial centres of excellence will be key to their success. There is a need to ensure there is coordination and coherence including alignment with the Committee's overarching strategic focus, programme of work and activities. In the newly established secretariat for the Committee of Experts, the Head of the Secretariat has the responsibility to ensure this need for coordination and coherence including managing the designing, implementing and monitoring of extra-budgetary technical cooperation and capacity development projects and activities funded under the purview of the Committee of Experts, including through the UN-GGKIC, the UN-GGCE, and any additional global geospatial centres of excellence approved by the United Nations.

VI. Seventh High-level Forum on United Nations Global Geospatial Information Management

- 43. The Committee of Experts at its thirteenth session welcomed the invitation of the Government of Mexico to host the seventh High-level Forum on United Nations Global Geospatial Information Management, in Mexico City in October 2024, with the theme "Accelerating implementation: achieving resilience" and confirmed the support of the Committee of Experts in the development and implementation of the programme of the High-level Forum. The seventh High-level Forum seeks to bring together participants from governments and stakeholders at the highest level, and provides the convening, participatory and inclusive environment to enhance the knowledge, understanding, communication, and application of geospatial information to accelerate the implementation of the UN-IGIF as the overarching strategy at the country-level towards the achievement of the SDGs and addressing climate-related challenges.
- 44. After the meeting of the bureau in Aguascalientes on 24 January 2024, the Secretariat reached out and invited members of the expanded bureau and the Task Team on Geospatial Information for Climate Resilience to be on the advisory committee. An advisory committee was composed and will prepare and promote an engaging and substantive programme over

the three days. The host, the Secretariat and the advisory committee will work together to identify sub-themes and formats and to develop and deliver a compelling and substantive agenda for the three days. The advisory committee⁵ is chaired by the representative of the host country.

- 45. This High-level Forum presents a valuable opportunity for the global geospatial information community to come together with a diverse group of key stakeholders and focus on how geospatial information helps accelerate implementation as a means of achieving resilience. The forum aims to significantly enhance and strengthen national geospatial information management capacities across all countries, enabling evidence-based policy and decision-making for national development priorities and the 2030 Agenda. By bringing together all stakeholders, the forum will offer Member States and geospatial stakeholders a unique platform to exchange new ideas, methods, and strategies, fostering local to global uptake of geospatial information, technologies and innovation.
- 46. The objective of this seventh High-level Forum will be to discuss the integration of geospatial knowledge, platforms and services to facilitate informed decision making, and empower decision makers to sustainably manage and develop the Earth's finite resources. This will better enable and encourage governments, multilateral and international development organizations, academia, the private sector and civil society to pursue sustainable development initiatives using geospatial knowledge and services. It is hoped that the High-level Forum will serve to highlight the importance of these geospatial information, technologies and services to decision makers thereby strengthening political awareness and uptake on the use of geospatial data, systems and products.
- 47. Our changing climate and the stress on our environment are increasing the fragility of the most vulnerable countries, making adaptation, mitigation, and resilience development more difficult. While strengthening climate resilience is essential for all countries, it is especially crucial for Small Island Developing States (SIDS) that are hampered by their unique vulnerability to exogenous shocks due to their small size, geographical remoteness, and undiversified nature of their economies. Annual economic losses due to climate-related disasters average two to three percentage of gross domestic product (GDP). Developing resilience to the impacts of changing climate is vital, and geospatial information and improved integrated geospatial information management arrangements are crucial resources that can be leveraged by all countries to strengthen their resilience. The concept note for the seventh High-level Forum is provided as a background document to this present report.

VII. Third United Nations World Geospatial Information Congress

- 48. The first United Nations World Geospatial Information Congress (UNWGIC) was successfully held in November 2018 in Deqing, China, in collaboration with the Government of China through the Ministry of Natural Resources and the Zhejiang Provincial Government. At the conclusion of the UNWGIC, participants recognized the immense value that it brings to enhancing common understanding, developing geospatial capacity and innovation within governments and institutions, and galvanizing the global geospatial information community to advance the use of high-quality, accessible, timely, and reliable geospatial information for location-enabled decision-making in realizing national development priorities and the 2030 Agenda.
- 49. During its sixth meeting on 1 April 2019 in Amsterdam, the Netherlands, the expanded bureau of the Committee received an overview of the completed UNWGIC. The meeting discussed possible modalities for future High-level Forums and UNWGICs, agreeing to a 4-year cycle with alternating events every 2 years. This decision allows for

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⁵ Representatives from the host country with representatives from Belgium, Cote d'Ivoire, Mexico, Morocco (Bureau of the Committee of Experts), Barbados, Tonga, United Kingdom (Task Team on Geospatial Information for Climate Resilience together with Chile, Indonesia, Netherlands, South Africa, United States of America and UN Geospatial Network, Geospatial Societies, Academic and Private Sector Networks (thematic networks of the Committee)

hosting the UNWGIC again in 2022 and 2026, and the High-level Forum in 2020 and 2024. At its thirteenth session, the Committee expressed appreciation to the Government of India, specifically its Ministry of Science and Technology, for successfully hosting the second United Nations World Geospatial Information Congress in Hyderabad, India, in October 2022. The Committee also applauded the Congress's inclusion of young people, schoolchildren, and other underrepresented groups. Additionally, the Committee welcomed the invitation from the Government of Mexico to host the seventh High-level Forum in Mexico City in October 2024.

- 50. The Committee is requested to initiate preparations for the third United Nations World Geospatial Information Congress in 2026, preferably convening in October or November, following the sixteenth session of the Committee of Experts. The Committee should establish an open mechanism offering all Member States the opportunity to express interest in hosting the Congress in 2026. This process should include preparing for the selection process, issuing calls for expressions of interest, initial assessments, bid submissions and assessments, and subsequent selection and the Committee of Experts informed at its fifteenth session.
- 51. The secretariat encourages the Committee to consider the previously agreed-upon mechanism, process, and timeline, adapting it as necessary for the present context. The Secretariat will initiate a call to Member States, through their respective ministries or agencies responsible for geospatial information management, for expressions of interest via letter and an associated information note after the fourteenth session. Expressions of interest will be followed by requests for detailed proposals, accompanied by guidelines. Detailed proposals are expected by early 2025 and will undergo rigorous assessment against agreed criteria. The bureau together with the secretariat will finalize the assessment and report to the Committee of Experts during its fifteenth session.

VIII. Resources for enhancing national geospatial information management arrangements

- 52. ECOSOC Resolution 2022/24 appreciates the extra-budgetary funding and support from Member States and efforts to mobilize additional resources, including through trust funds, expert secondments, and other appropriate means, to support the activities of the Committee of Experts. The Committee of Experts has continued to highlight the critical need to mobilize extrabudgetary resources at the global level to enhance and support capacity development and leadership roles within national geospatial, mapping, and cadastral agencies. This ensures that effective and integrated geospatial information management contributes to increased national geospatial capacities, capabilities, and shared knowledge for geospatial enablement across Member States, bridging the geospatial digital divide
- 53. The secretariat for the Committee of Experts is established with regular budget support. Each global geospatial centre of excellence was established and operationalized with a dedicated trust fund to cover the cost incurred by the United Nations for the implementation of the Centre's annual programme of work. Resources to support the activities of the Committee including to enhance national geospatial information management are presently provided through the second China Trust Fund project for capacity development for the period 2018 2022 This trust fund project, extended by the Ministry of Natural Resources, China towards the end of 2022, will now conclude on 31 December 2024.
- 54. During the initial discussions and informal consultations leading up to ECOSOC Resolution 2022/24, some Member States expressed the need for regular budget allocations to support experts from developing countries to participate in the annual sessions of the Committee of Experts and key calendared technical meetings, including those for capacity development. Some Member States also advocated for dedicated United Nations conference management services, including interpretation and full support for the annual sessions of the

Committee of Experts. In the absence of these regular budget resources, the Committee of Experts may wish to consider mobilizing extrabudgetary resources, beginning in 2025, dedicated to supporting experts from developing countries to participate in the annual sessions and for editing and translating reports of the Committee.

- 55. It is important to acknowledge and appreciate that several Member States contribute critical resources to the work of the Committee, serving as Chairs, Co-Chairs, or members of core or task groups within functional groups of the Committee. They volunteer resources from their own organizations or agencies to support the work and activities of functional groups and, by extension, the Committee of Experts. This commitment is particularly evident during the completion of substantive work such as developing frameworks, norms, principles, guides, and resource materials. While these efforts may be considered expected by some, they represent significant and valuable in-kind and tangible contributions to the Committee of Experts' programme of work that deserve acknowledgement and appreciation.
- 56. Presently, there are no virtual secondments to the Global Geospatial Information Management Section to support the work of the Committee of Experts. However, as <u>reported</u> by the UN-GGCE, the Centre has several in-person and virtual secondments to support the work of the Centre and by extension, the Committee of Experts. Efforts are being made to secure a number of in-person national secondments to support the work of the UN-GGKIC.
- 57. The SDG Data Alliance, an international multi-stakeholder partnership with donor support, assists a group of developing countries to address national and global requirements to enhance their national geospatial information management arrangements including monitoring and reporting on the SDGs through a geospatial lens, and with a specific focus on SDG 10. The Alliance has received additional donor support that allows it not only to continue working with the group of developing countries, but also extending support to additional countries and SIDS during the upcoming intersessional period.
- 58. Multi-stakeholder partnerships play a crucial role in advancing global geospatial information management. These partnerships bring together diverse expertise and perspectives from government, the private sector, academia, and civil society, fostering collaborative approaches and integrating Indigenous knowledge towards comprehensive and inclusive geospatial programmes and activities. A strategic implementation partnership arrangement for enhancing global geospatial information management arrangements would be beneficial. Such partnerships harness the collective expertise and resources of stakeholders. By uniting around shared goals, the effectiveness of the Committee and its operations and activities can be enhanced towards comprehensive real-world solutions and inclusive outcomes driven by global collaboration and leaving no one behind.
- 59. The Committee of Experts could consider and mobilize additional resources to support its efforts and activities, particularly for the achievement of its operations focused on the SDGs and the UN-IGIF, benefiting all Member States. This includes developing and expanding global geospatial capacity, competence, capability and leadership, and enhancing nationally integrated geospatial information management in countries, especially developing countries. The Committee of Experts is invited to consider and express its views on how to mobilize extra-budgetary resources to enhance the effectiveness and activities of the Committee of Experts including at the regional level with its regional committees.

IX. Points for discussion

- 60. The Committee of Experts is invited to:
 - (a) Take note of the present report and express its views on the efforts of the bureau, the expanded bureau and the Secretariat in implementing strategic and practical actions to strengthen and enhance global geospatial information management arrangements and the Committee's operations focused on the SDGs and UN-IGIF;

- (b) Take note of and express its view on the implementation of resolution 2022/24 and the establishment of a secretariat dedicated to the Committee's normative and implementation work on global geospatial information management;
- (c) Take note of, express its views and provide guidance on efforts of the Secretariat to foster coherence, collaboration and optimal resource utilization in the Committee's programme of work and activities, those of the UN-GGKIC and the UN-GGCE and any new global geospatial centres of excellence, as well as considerations related to i) diversity, equity and inclusion; ii) the climate, environment and resilience; and iii) artificial intelligence and emerging technologies;
- (d) Take note of and appreciate the extension of the current agreement on the operationalization of the United Nations Global Geodetic Centre of Excellence until 31 December 2030 thereby ensuring a longer-term operation of the UN-GGCE;
- (e) Take note of and express its views on progress and efforts towards establishing the United Nations Global Geospatial Ecosystem Centre of Excellence in Riyadh, Saudi Arabia;
- (f) Express its views on the preparation and progress of, and provide guidance for, the seventh High-level Forum from 8-10 October 2024 in Mexico City with the theme "Accelerating implementation: Achieving Resilience";
- (g) Express its views and provide guidance to the Secretariat and the bureau to initiate preparations for the third United Nations World Geospatial Information Congress, to be convened after the sixteenth session of the Committee of Experts in 2026; and
- (h) Reiterate the importance of strengthening and enhancing national geospatial information management arrangement, capacity, capability and leadership, and urge appropriate national investments in this context and emphasize the critical need to mobilize extrabudgetary resources at the global level to support national efforts and the activities of the Committee.

Committee of Experts on Global Geospatial Information Management Fourteenth session

New York, 7–9 August 2024 Item 3 of the provisional agenda*

Enhancing global geospatial information management arrangements

Annex 1
The bureau of the Committee of Experts since its establishment in 2011

First Session (2011)	
Co-Chairs	Seong-An Leem (Republic of Korea)
	Vanessa Lawrence (United Kingdom of Great Britain and Northern Ireland)
Rapporteur	Esteban Toha Gonzalez (Chile)
Second session (2012)	
Co-Chairs	Mansoor Ahmed Al Malki (Qatar)
Co-Chairs	, To f
	Vanessa Lawrence (United Kingdom of Great Britain and Northern Ireland)
Rapporteur	Derek Clark (South Africa)
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Third session (2013)	
Co-Chairs	Eduardo Sojo Garza-Aldape (Mexico)
	Vanessa Lawrence (United Kingdom of Great Britain and Northern Ireland)
Rapporteur	Derek Clark (South Africa)
Fourth session (2014)	VID (GU)
Co-Chairs	Li Pengde (China)
	Eduardo Sojo Garza-Aldape (Mexico)
	Vanessa Lawrence (United Kingdom of Great Britain and Northern Ireland)
Rapporteur	Sultan Mohamed Alya (Ethiopia)
Fifth session (2015)	
Co-Chairs	Li Pengde (China)
	Rolando Ocampo (Mexico)
	Tim Trainor (United States of America)
Rapporteur	Abdoulaye Belem (Burkina Faso)
Sixth session (2016)	
Co-Chairs	Li Pengde (China)
Co-Chairs	Rolando Ocampo (Mexico)
	Tim Trainor (United States of America)
	Tim Tramor (Office States of America)
Rapporteur	Abdoulaye Belem (Burkina Faso)

Co-Chairs	Li Pengde (China)
	Dorine Burmanje (the Netherlands)
	Tim Trainor (United States of America)
Rapporteur	Fernand Guy Isseri (Cameroon)
T. F.	
Eighth session (2018)	
Co-Chairs	Fernand Guy Isseri (Cameroon)
	Li Pengde (China)
	Dorine Burmanje (the Netherlands)
Rapporteur	Macarena Pérez Garcia (Chile)
Ninth session (2019)	
Co-Chairs	Fernand Guy Isseri (Cameroon)
	Dorine Burmanje (the Netherlands)
	Rosamond Bing (Tonga)
Rapporteur	Macarena Pérez Garcia (Chile)
T. (1. (2020)	
Tenth session (2020)	I 'III I D I (DI')
Co-Chairs	Ingrid Vanden Berghe (Belgium)
	Fernand Guy Isseri (Cameroon)
	Rosamond Bing (Tonga)
Rapporteur	Macarena Pérez Garcia (Chile)
Eleventh session (2021)	
Co-Chairs	Ingrid Vanden Berghe (Belgium)
	Paloma Merodio Gomez (Mexico)
	Rosamond Bing (Tonga)
Rapporteur	Kamal Outghouliast (Morocco)
Twelfth session (2022)	
Co-Chairs	Ingrid Vanden Berghe (Belgium)
	Tulu Besha Bedada (Ethiopia)
	Paloma Merodio Gomez (Mexico)
Rapporteur	Kamal Outghouliast (Morocco)
Thirteenth session (2023)	
Co-Chairs	Ingrid Vanden Berghe (Belgium)
	Fernand Eanes Bale (Côte d'Ivoire)
	Paloma Merodio Gomez (Mexico)
Rapporteur	Kamal Outghouliast (Morocco)
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