The future geospatial information ecosystem

Note by the Secretariat

The Secretariat has the honour to bring to the attention of the Committee of Experts on Global Geospatial Information Management the report on the future geospatial information ecosystem prepared jointly with the Bureau and the writing team on the future geospatial information ecosystem that was convened by the Bureau, which will be available in the language of submission only from the relevant web page of the Committee of Experts (http://ggim.un.org/meetings/ggim-committee/14th-session).

The Committee is invited to take note of the report and to express its views on how the global geospatial community and Member States can be more adequately prepared for the rapidly evolving geospatial information management and its operating environment.

Summary of the report

At its thirteenth session, held from 2 to 4 August 2023, the Committee adopted decision 13/104, in which it welcomed efforts at continuing to discuss and explore the future geospatial information ecosystem to assist Member States and national geospatial information agencies in their thinking on current and future geospatial environments, in which technological developments and innovative applications would play a crucial role. The Committee of Experts noted that new and emerging technologies and the growth of wider digital and data ecosystems, of which geospatial data and services are a part, provided further opportunities to create, manage and access geospatial information in innovative ways, and that geospatially integrated data would support the immediacy of the United Nations global digital compact and, in the future, provide critical context to the sustainable development frameworks beyond the 2030 Agenda for Sustainable Development.

The Committee of Experts agreed that the definition and development of future geospatial ecosystems was an opportune activity for the Committee of Experts to undertake but that it required further scoping and consensus to identify and describe...
what the foundations of future geospatial information ecosystems would encompass within the purview of the Committee, and in that regard suggested that further structure and detailed work on defining the Committee’s understanding could take place and progress into general principles, and that the further work on the concept should emphasize that geospatial information is an integrated component in different digital ecosystems and in many cases is not an ecosystem in itself. In that regard, the Committee supported the proposals to entrust the Bureau, supported by a writing team, with developing a position paper on determining the scope and an outline on the fundamental elements and principles of the future geospatial information ecosystem for the consideration of the Committee of Experts at its fourteenth session. The Committee further reiterated the need to reduce the growing geospatial digital divide between developed and developing countries and to ensure that the future geospatial ecosystem gives priority to the needs of developing countries and small island developing States, including to keep promoting the systematic and comprehensive frameworks that make geospatial data, services and technology available to decision makers.

In the report, the Secretariat and Bureau report on their efforts to update the Committee of Experts on the development of the position paper, aimed at defining the scope and outline the fundamental elements and principles of the future geospatial information ecosystem. The report includes information on a series of virtual meetings and discussions held to explore and consider the various dimensions of this future state. The Bureau and its writing team have focused on identifying and embracing the nexus of policies, actors, users, standards and practices that contribute to the future geospatial information ecosystem. They aim to leverage opportunities associated with the latest trends, rapid technological developments and innovations affecting the wider digital ecosystem, which forms the foundation of the geospatial information ecosystem.

In the report, the Secretariat and Bureau present the initial work on defining the scope and outlining the fundamental elements and principles of the future geospatial information ecosystem for the Committee’s consideration. They also highlight the need for this future ecosystem to strengthen the delivery of current and future global development agendas, provide insights to national geospatial information agencies on the latest technology trends and address the growing geospatial digital divide.

The global geospatial information community should be well prepared to adapt to the rapidly changing landscape of geospatial information management and its operating environment. The United Nations Integrated Geospatial Information Framework offers a forward-looking strategy and approach that fosters an enabling environment, allowing Member States to collaborate on, develop, enhance and advocate for the efficient production and effective utilization of geospatial information. Such information is crucial for formulating policies on the basis of evidence, making informed decisions and fostering innovation. This is particularly relevant in the current context with the emergence of new geospatial applications powered by machine learning, deep learning techniques and artificial intelligence.