

Expert Consultation and Meeting on Enhancing Geospatial Information Management Arrangements and Accelerating Implementation of the Sustainable Development Goals, and the Sub-regional Workshop on the United Nations Integrated Geospatial Information Framework (UN-IGIF) for Central Asia, South Asia, and neighboring countries

Implementing geospatial strategies: challenges and opportunities

Astana, Kazakhstan
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Enhancing Geospatial Information Management arrangements Accelerating the Implementation of the SDGs

Sub-regional Workshop on UN-IGIF for the Central Asia, South Asia and Neighboring Countries

Kyrgyzstan

STATE AGENCY FOR LAND RESOURCES, CADASTRE, GEODESY AND
CARTOGRAPHY UNDER THE CABINET OF
MINISTERS OF THE KYRGYZ REPUBLIC



**DIGITAL
& SPACE**
MINISTRY

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Where is your country today in enhancing the management and use of geospatial information?

Kyrgyzstan is in the early-to-intermediate stage of aligning with IGIF:

- Governance & institutions: Some formal structures exist, but need strengthening to ensure all ministries share and update geospatial data.
- Data & standards: Cadastre and land-use data are being digitized; open data policies are still limited.
- Capacity & partnerships: Strong reliance on donor support; need for local technical expertise and sustainable funding.
- Innovation: Interest in using satellite data (e.g., Copernicus, regional Earth observation programs) for agriculture, water management, and climate resilience.



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Where does your country aim to be in the next five years?

Kyrgyzstan's 5-Year Geospatial Goals

Full NSDI Implementation - Establish a **national geospatial data** portal where ministries, local governments, private sector, and citizens can access up-to-date spatial information. Achieve interoperability across cadastral, environmental, statistical, and emergency data systems.

Policy & Governance Alignment - Adopt a clear **national geospatial policy** in line with **the UN IGIF's nine pathways**. Strengthen inter-ministerial coordination to avoid data duplication and ensure efficiency.

Open Data & Transparency- Provide **open access** to non-sensitive geospatial datasets, encouraging innovation, entrepreneurship, and evidence-based decision-making. Support digital government initiatives where geospatial data is a backbone for public services.

Capacity Building & Innovation - Develop a pool of **GIS and remote sensing professionals** through local universities and training programs. Encourage startups and research projects using **satellite imagery, drones, and AI** for agriculture, disaster resilience, and environmental monitoring.

Regional & Global Integration - Strengthen participation in **UN-GGIM Asia-Pacific** and regional initiatives for data sharing and climate monitoring. Position Kyrgyzstan as a **Central Asian hub** for geospatial cooperation and knowledge exchange



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What do you see as the main challenges in reaching this “ideal” situation within the next five years?

- **Governance & Institutions** – unclear leadership, fragmented responsibilities, weak legal frameworks.
- **Data Issues** – outdated/incomplete datasets, lack of standards, limited open data culture.
- **Technology & Infrastructure** – insufficient ICT/cloud systems, low interoperability, donor-dependency.
- **Capacity & Skills** – shortage of geospatial experts, limited training, brain drain.
- **Finance & Sustainability** – low budget priority, overreliance on external support.
- **Policy & Awareness** – low recognition of geospatial value in national strategies and decision-making.



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What potential opportunities could help address some or all of these challenges?

- **Strong Political Support** – align NSDI with national digital transformation and e-government strategies.
- **International Partnerships** – leverage UN-GGIM, World Bank, UNDP, and regional cooperation for funding & expertise.
- **Open Data & Innovation** – promote data sharing, civic tech, and private sector innovation using geospatial platforms.
- **Capacity Building** – invest in university programs, training, and regional knowledge exchange.
- **Technology Leapfrogging** – adopt cloud platforms, satellite imagery, AI, and open-source GIS to bypass legacy systems.
- **SDGs & Climate Agenda** – position NSDI as a key enabler for disaster risk reduction, climate adaptation, and sustainable development monitoring.



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How familiar are you with UN-GGIM, the UN-GGKIC, the IGIF, and the CAP?

Please describe:

- Any interactions you might have had with UN-GGIM and/or the UN-GGKIC (e.g., attending sessions, receiving technical support, etc.);
- If and how you have been using, or are planning to use, the IGIF and/or the CAP in your country.

- **UN-GGIM** – Participated in regional sessions & workshops; using guidance to align NSDI.
- **UN-GGKIC** – Engaged via webinars/resources; opportunity for innovation & knowledge exchange.
- **IGIF** – Adopted as guiding framework for NSDI roadmap; focus on governance & policy.
- **CAP** – Not yet implemented; planned as tool to operationalize IGIF and mobilize support.



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What kind of support would you like to receive from UN-GGIM, UN-GGKIC, or other partners?

Please describe the type of support you would like to receive to help address the current challenges observed in your country regarding the management and use of geospatial information.

- **Policy & Governance** – guidance on legal frameworks & coordination.
- **Capacity Building** – training, workshops, academic partnerships.
- **Technical Assistance** – IGIF/CAP implementation, data standards, interoperability.
- **Technology & Innovation** – access to open-source tools, pilots with AI & EO.
- **Financial Support** – resource mobilization & co-funding.
- **Knowledge Exchange** – regional/global best practice sharing.



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Kyrgyzstan – Country-level Action Plan (CAP) with UN-IGIF



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