One UN Geospatial Situation Room

People, Places and Planet

UN GEOSPATIAL NETWORK

UNITED NATIONS COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL INFORMATION MANAGEMENT

ONE UN GEOSPATIAL SITUATION ROOM

"Timely and high-quality data are more essential than ever. Indeed, data are being widely recognized as strategic assets in building back better and accelerating the implementation of the SDGs. What is needed now are new investments in data and information infrastructure, as well as human capacity to get ahead of the crisis and trigger earlier responses, anticipate future needs and design the urgent actions needed to realize the 2030 Agenda for Sustainable Development."

UN Secretary General SDG Report, 2021

Context and Relevance

The relevance of Data, and in particular Location Data, is evident to fulfil the responsibilities and mandates of the United Nations. Indeed, the access to timely, disaggregated, and high-quality geospatial data, and its related infrastructure and services, has become a critical success factor for the acceleration of achievement of the 2030 Agenda for Sustainable Development.

In-line with the Networks' Strategy, the [Blueprint](#), and its transformation pathways, the Network discussed the steps to implement the United Nations Geospatial Network Data Hub. The Hub and its delivery are designated as the "*One UN Geospatial Situation Room*", as federated services, platforms and mechanisms to enable the United Nations system to coordinate the collection, management, use and sharing of geospatial information.

The Blueprint highlights the activities that are relevant and guide the implementation of the One UN Geospatial Situation Room. This is implemented through the transformation pathways and represents the "services, data, standards, policies, contracts, adopted documents, best practices and tools." The One UN Geospatial Situation Room is the delivery mechanism to the stakeholders and users such as Member States, decision-makers, analysts and geospatial professionals in the United Nations Secretariat, Heads of respective Specialized agencies, Funds and Programmes, and the general public.

As a tentative roadmap for implementation, the Network intends to set the foundation in the period of the implementation of the Blueprint (2020-2025) and finally achieve a full-fledged Situation Room and federated Hub to influence and support the 2030 Agenda for Sustainable Development (2025-2030).

The remaining section of the present document details the One UN Geospatial Situation Room implementation including (1) contributing activities from the Blueprint' Strategy and pathways, the overarching Principles, (2) the High-Level Architecture and priority themes, as well as (3) Delivery and Use Cases in its implementation phases. The document concludes on opportunities and institutional mainstreaming for the UN-GGIM.

Contributing activities from the Blueprint´ Strategy and Pathways

The Blueprint contains several activities, from which the One UN Geospatial Situation Room emerges as a concrete integrated delivery and outcome. The referenced activities in the Blueprint towards the One UN Geospatial Situation Room relate in particular to the transformation pathways of the Blueprint on policies, governance, data and standards, partnerships and outreach. Relevant activities in the Blueprint are as follows:

(Activity 9) Prepare and establish **data custodianship [...] for the development of a governance model** on geospatial information management, in accordance with existing mandates and responsibilities. The governance model will ensure currency, consistency, quality, availability, and best usage, in collaboration with relevant standards development organizations (SDOs) and Member States.

(Activity 13) Develop further **enterprise contracts** and provision agreements of geospatial data that can be shared within United Nations entities, in coordination with relevant procurement offices of the Organization.

(Activity 16) Establish the **data custodians and related governance** for the establishment of a governance model and strategy on geospatial information management within the United Nations system, in accordance with existing activities and mandate, including leadership and responsibilities for coordination, collection, management, maintenance and dissemination.

(Activity 17) Define and make **priority geospatial dataset available and accessible**, through the Hub, under the supervision of the Technical Review Board on geospatial data, and establish data characteristics for each geospatial data category, such as access, privacy, protection and restrictions, spatial accuracy, coverage, standards and regulations, to ensure they can be used properly.

(Activity 18) Develop further **common acquisition activities and methods** to collect once, but use many times, including through enterprise contracts and provision agreements of geospatial data.

(Activity 19) Coordinate the **collection of geospatial data with/from Member States**, in particular through Member States from UN-GGIM, and relevant UN-GGIM Subcommittee, Working Groups, Expert Groups and Networks to coordinate actions, practices and standardization activities on methods, tools and dissemination of geospatial information management.

(Activity 34) Liaise with and **coordinate activities with international and regional organizations related to geospatial data and earth observation** including geospatial data systems, acquisition, processing and distribution.

(Activity 48) Conduct **fund raising activities, based on agreed overarching data governance**, implementation priorities and agreed action items of the Network.

Principles for the Implementation of the One UN Geospatial Situation Room

The One UN Geospatial Situation Room is to be informed, rooted and guided by the frameworks, practices, norms and standards developed by the Committee of Experts on Global Geospatial Information Management (UN-GGIM), in particular the implementation of the Integrated Geospatial Information Framework (IGIF), and fully aligned to the UN Secretary-General's Data Strategy, the Secretary-General's Strategy on New Technologies and the Secretary-General's Roadmap for Digital Cooperation.

The One UN Geospatial Situation Room should also be fully aligned with the drivers of change for the "Our Common Agenda", namely, the Data and Communication, Innovation and Digital Transformation, and the Strategic Foresight (prevention, response and recovery) guidelines specified in that report.

In addition to these guiding frameworks, the principles for the implementation of the One UN Geospatial Situation Room include to:

- Recognize the One UN Geospatial Situation Room as the implementation of the UN Geospatial Network Data Hub.

- Implement the One UN Geospatial Situation Room as the geospatial component of the UN Data Hub for the nexus of the United Nations.

- Build on an implementation framework focused on the nexus of pillars of the United Nations (Peace and Security, Sustainable development, Human Rights, International Law and Humanitarian aid).

- Build on synergies of existing data, systems and platforms across UN system (integrating geospatial, statistics, other data and documents).

- Build on the frameworks, practices, norms and standards of the Committee of Experts, in particular the Integrated Geospatial Information Framework (IGIF).

- Implement a federated data system approach, with clearly identified Data Hubs and Spokes, leveraging existing organizational mandates, responsibilities, capabilities, and systems.

- Contribute directly to Use Cases of the implementation of the Secretary General's Data Strategy (e.g., UN Data Hub and UN Peace and Security, UN Operations and Crisis Centre platforms); and,

- Use a scalable and phased approach for the implementation plan.

- Ensure the data, platforms and services are fit for purpose, inclusive, open, and contribute to *Leaving no one behind*.
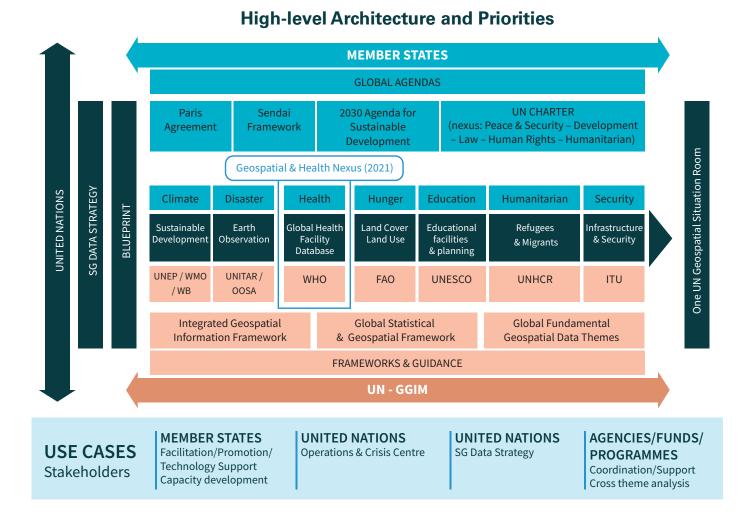
High-level Architecture and Priorities

As presented in the principles, the One UN Geospatial Situation Room resides at the intersection of the global agendas, priorities of the United Nations on Data and the UN-GGIM guidance and frameworks. The One UN Geospatial Situation Room guides the *Priority geospatial data themes* in addressing priority agenda and the requirements from decision-makers, heads of agencies, and needs of operations and crisis faced by the United Nations. The overall intersections of these wider priorities and guidance are summarized in Figure 1 – *One UN Geospatial Situation Room: High-level Architecture and Priorities*.

Figure 1 - One UN Geospatial Situation Room: High-level Architecture and Priorities

In specific terms, the One UN Geospatial Situation Room is implementing the UN Geospatial Network Data Hub:

By implementing *institutional mandates and responsibilities* as anchored in the UN-GGIM intergovernmental proceedings on geospatial information management, the UN system specifically the SG Data Strategy and the global agendas adopted by Member States.

High-level Architecture and Priorities

MEMBER STATES

GLOBAL AGENDAS

| Paris Agreement | Sendai Framework | 2030 Agenda for Sustainable Development | UN CHARTER (nexus: Peace & Security – Development – Law – Human Rights – Humanitarian) |

Geospatial & Health Nexus (2021)

Climate	Disaster	Health	Hunger	Education	Humanitarian	Security
Sustainable Development	Earth Observation	Global Health Facility Database	Land Cover Land Use	Educational facilities & planning	Refugees & Migrants	Infrastructure & Security
UNEP / WMO / WB	UNITAR / OOSA	WHO	FAO	UNESCO	UNHCR	ITU

| Integrated Geospatial Information Framework | Global Statistical & Geospatial Framework | Global Fundamental Geospatial Data Themes |

FRAMEWORKS & GUIDANCE

UN - GGIM

UNITED NATIONS • SG DATA STRATEGY • BLUEPRINT

One UN Geospatial Situation Room

| **USE CASES** Stakeholders | **MEMBER STATES** Facilitation/Promotion/ Technology Support Capacity development | **UNITED NATIONS** Operations & Crisis Centre | **UNITED NATIONS** SG Data Strategy | **AGENCIES/FUNDS/ PROGRAMMES** Coordination/Support Cross theme analysis |

By using a *systems approach* to implement and deliver to Member States, across the UN system and using the leverage of responsibilities related to the UN Geospatial Network mission to "strengthen the coordination and coherence of geospatial information management within the United Nations system, including its overarching trends, technology, practices, data, needs, capacity building, and partnerships, ultimately to promote synergies and enable the United Nations system to "Deliver as One".

By selecting focused *Priority geospatial data themes*, drawing from the Fundamental Geospatial Data Themes and other relevant topics for the United Nations, on Imagery and Earth Observation, Land Cover/Land Use, Educational facilities and planning (Physical Infrastructure), Global Health Facilities (Physical Infrastructure), Refugees and Migrants (related to Population), Infrastructure and Security, and Sustainable Development (including Climate).

By enabling *Data Hubs and Spokes* (Custodianship, leads and interlinked sources) as aligned with respective mandates, responsibilities and building on the leadership of geospatial capabilities, tools and platforms, already existing in a number of Network entities. Respective UN entities are to lead or co-lead each Priority geospatial data themes as described in Figure 1 and as follows:

- UNOOSA/UNITAR: Imagery and Earth Observation
- FAO: Land Cover/Land Use, working with Advisory Group 13 organized by ISO TC 211
- UNESCO: Educational facilities and planning
- WHO: Global Health Facilities
- UNHCR/IOM: Refugees, Migrants, and Internally Displaced Persons
- UNEP/WMO: Sustainable development & Climate
- World Bank: Socio-economic
- ITU: ICT infrastructure

By implementing respective Priority geospatial data themes through the Blueprint transformation pathways on policies, governance, data & standards, innovation, outreach, and capacity building, and in close cooperation with Member States of UN-GGIM.

By implementing at global, regional, national and field level including in the context of United Nations operations across the nexus.

By implementing with partners from Member States, Academia, Private Sector, Geospatial Societies and the civil society at large.

The list of Priority geospatial data themes is not exhaustive and only includes current priorities that will be expanded upon in the near future, as part of the *scalable and phased* approach implementation plan.
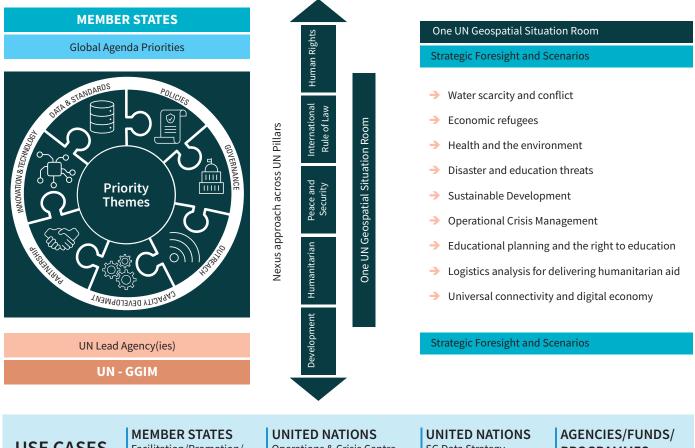
Service Delivery and Use Cases

As supported in an overarching Architecture and following implementation by Priority geospatial data themes, the One UN Geospatial Situation Room is focused on a delivery model with Use Cases which demonstrate its relevance.

The One UN Geospatial Situation Room purpose is to provide added value data and inter-disciplinary analysis for strategic foresight, use cases and decision-making. As such, each service delivery should be a nexus of the United Nations Charter pillars (Peace and Security, Sustainable development, Human rights, International Law and Humanitarian aid) and enable data-driven decision-making.

The overarching delivery model will provide nexus analysis and visualization on specific scenario to the One UN Geospatial Situation Room with delivery approach and stakeholders summarized in Figure 2 –*One UN Geospatial Situation Room: Service Delivery and Use Cases.*

The One UN Situation Room will focus its services according to several Priority geospatial data themes in the Hub (as described in the previous diagram) and using a delivery modality of strategic analysis and scenarios or Use Cases.

Service Delivery and Use Cases

One UN Geospatial Situation Room

Strategic Foresight and Scenarios

→ Water scarcity and conflict

→ Economic refugees

→ Health and the environment

→ Disaster and education threats

→ Sustainable Development

→ Operational Crisis Management

→ Educational planning and the right to education

→ Logistics analysis for delivering humanitarian aid

→ Universal connectivity and digital economy

Strategic Foresight and Scenarios

USE CASES Stakeholders	MEMBER STATES Facilitation/Promotion/ Technology Support Capacity development	UNITED NATIONS Operations & Crisis Centre	UNITED NATIONS SG Data Strategy	AGENCIES/FUNDS/ PROGRAMMES Coordination/Support Cross theme analysis

In a first phase of implementation, there will be 2 Core Services and a set of *Use Cases*:

Core Services:

- Support and enable the **UN Data Hub**, described in the SG Data Strategy, with geospatial services and backbone across the UN system.

- Provide thematic data, analytics and dashboards to the **UN Operational Crisis Control Centre** across the nexus, using the synergies across UN system from the UN Geospatial Network.

Use Cases:

- Develop and facilitate geospatial capacity development activities for **Member States**, in particular low and middle incomes countries, as they relate to the Priority geospatial data themes.

- Ensure the availability of cross-pillar analytics and contribute to the wider data ecosystem for the benefit of lead **Offices, Departments, Specialized agencies, Funds and Programmes of the UN System**.

The different use cases will use a *Nexus approach*, intending to deliver their services not for one, but a combination of various UN *pillars* (peace and security, humanitarian, development, international rule of law, and human rights).

The Use Cases will also try to implement a risk management and "strategic foresight" approach providing a prevention, response and recovery value chain, and using, when possible, analysis of scenarios in the exploration of the Data, on top of providing analysis of past data and trends.
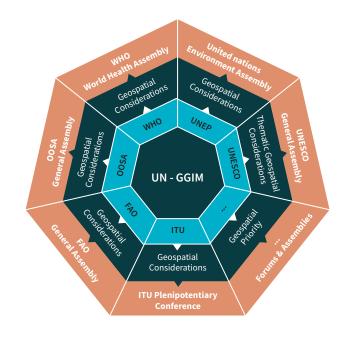
Mainstreaming and Institutionalizing geospatial priorities and UN-GGIM agenda

Finally, the UN System as a whole and the priorities of the One UN Geospatial Situation Room can be an excellent opportunity for UN-GGIM to investigate the importance of geospatial information and "location data" in other specialized and theme-based approach mandates. Delegates from UN-GGIM can, using the representatives of respective UN entities, investigate the minimal geospatial requirements that are necessary to fulfil responsibilities and mandates given to the wider UN System by Member States in their respective forums. This opportunity to gather minimal requirements on geospatial also contributes to investigating issues related to privacy, security, sensitivity, between Member States and the UN system.

This opportunity for the UN-GGIM to consider the One UN Geospatial Situation Room as an enabler and catalyst, building on its convening power across 38 entities of the UN system to impact in a scalable way with other forums, is summarized above in Figure 3 – *One UN Geospatial Situation Room: Mainstreaming and Institutionalizing Geospatial Information Management.*

Figure 3 - One UN Geospatial Situation Room: Mainstreaming and Institutionalizing Geospatial Information Management

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Acronyms

EOSG Executive Office of the Secretary-General

DESA Department for Economic and Social Affairs

OICT Office of Information and Communications Technology

DSS Department of Safety and Security

OCHA Office for the Coordination of Humanitarian Affairs

OLA Office of Legal Affairs

DRR Office for Disaster Risk Reduction

ODC Office on Drugs and Crime

OHCHR Office of the United Nations High Commissioner on Human Rights

OOSA Office for the Outer Space Affairs

ECA Economic Commission for Africa

ECE Economic Commission for Europe

ECLAC Economic Commission for Latin America & the Carribeans

ESCAP Economic & Social Commission for Asia and the Pacific

ESCWA conomic & Social Commission for Western Asia

UNDP United Nations Development Programme

UNEP United Nations Environment Programme

UNFPA United Nations Population Fund

UN-Habitat United Nations Human Settlements Programme

UNICEF United Nations Children's Fund

WFP World Food Programme

UNITAR United Nations Institute for Training and Research

UNHCR United Nations High Commissioner for Refugees

UNOPS United Nations Office for Project Services

UN Women United Nations Entity for Gender Equality & the Empowerment of Women

FAO Food and Agriculture Organization

ICAO International Civil Aviation Organization

IFAD International Fund for Agricultral Development

ILO International Labour Organization

ITU International Telecommunication Union

UNESCO United Nations Educational, Scientific and Cultural Organization

UNIDO United Nations Industrial Development Organization

WHO World Health Organization

WMO World Meteorological Organization

World Bank World Bank Group

IAEA International Atomic Energy Agency

IOM International Organization for Migration

ISA Interational Seabed Authority

UNOPS
WMO
OHCHR
unitar

ICAO · OACI · ИКАО
OCHA
UNODC
ILO
WHO

UNESCO
UNEP
WFP
UNODC

UNOOSA
IFAD
UNHCR
UN HABITAT
ESCAP

ESCWA
UN WOMEN
IOM
ECLAC

CTBTO
DSS
UNFPA
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unicef
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