



## Concept Note

# Expert meeting on operation of global and regional geospatial data hub for disaster risk reduction and sustainable development

## Background

Utilisation of geospatial information covering satellite imagery and earth observation data is critical for monitoring, analysing, and effective policy planning for actions in support of sustainable development goals (SDGs). Geospatial information is one of the big data sources and is essential for promoting regional cooperation to address development challenges beyond national boundaries such as increasing sea level, hazard-exposed transport, shipping, energy and communication routes, and disaster risk reduction in the Asia-Pacific region.

Key challenges to the effective utilization of geospatial data or information are: (1) scattered into siloes; (2) not publicly available and shared; (3) proactive curated and managed by a managing organization; and (4) not guided by regional intergovernmental agreement or framework arrangement which sets out the scope, benefits, and responsibilities of regional data integration. Addressing these challenging will lead to



long-term solutions to meeting SDGs from increased problem-solving capacity with heightened understanding of regional development challenges.

Following this, the ESCAP secretariat has organised a series of in-person meetings and online workshops to inform, engage, and consult the geospatial experts from the members of the UN-GGIM-AP on the potential idea of a geospatial data hub (or centre) and platform to support the implementation of SDGs in the Asia Pacific region. Expert feedback and inputs were received on the conceptualisation of the data hub and platform and additional concerns for data governance, privacy, and security.

In continuation, the ESCAP secretariat is organising an expert meeting for consultative discussion sessions to set up a regional data hub and platform in the Asia Pacific region which integrates data across a network of participating countries and cross sectionally. The sessions are expected to contribute substantively to the long-term initiative to build and fully operationalize an “Asia Pacific Networked Geospatial Data Hub”. The meeting will provide guidance for developing, integrating, strengthening, and maximizing geospatial information management and related resources in all countries. It will assist countries in bridging the geospatial digital divide, secure socio-economic prosperity, and to leave no one behind.

## Goals

1. To conceptualise an Asia Pacific networked geospatial data hub (or centre) to plan, build, and operate.
2. To share experiences of use cases, practices of geospatial data and/or information sharing, operational guidelines, and models.
3. To cooperate and promote global and regional collaboration in geospatial data sharing.

## Objectives

1. Enrich the master plan of the Asia Pacific networked geospatial data hub (or centre), intergovernmental agreement, and regional framework of operational principles.
2. Strengthen understanding and knowledge of the current and future landscape of UN initiatives of geospatial datahubs and centres.
3. Enhance basic design for developing geospatial data networking algorithm.
4. Enhance partnerships with global data management and geospatial agencies.



## Expected Outcomes

1. Regional kick-off meeting to introduce the project to policymakers, international organizations, and other regional/subregional working groups.
2. Conduct a high-level expert meeting involving participating countries to share geospatial information/applications for disaster management and regional development.
3. Establish a regional community of experts and technical operators of Pandora equipment.

## Venue and Date/Time

Venue(s):

UNGSC Valencia Base  
Avinguda Comarques del País Valencià, 2  
46930 Quart de Poblet  
Valencia, Spain

UNGSC Brindisi Base  
Piazza Giovanni del Vento 1  
72100 Brindisi c/o Aeroporto Militare "O. Pierozzi,"  
Brindisi, Italy

Date/Time: 10:00-17:30 (UTC+1), 26 February -1 March 2024

## Co-organizers

- United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
- United Nations Global Service Center (UNGSC)

## Participants

Experts from the field of geospatial data and information, such as:

- National Geographic Information Institute (NGII)
- General Authority for Survey and Geospatial Information (GEOSA) (TBC)
- United Nations Global Service Center (UNGSC)
- Regional experts from Asia and the Pacific



## Draft Programme

The programme is divided into 2 parts (28 February is transit):

- Part1: 26 – 27 February, at UNGSC in Valencia, Spain
- Part2: 29 February – 1 March, at UNGSC in Brindisi, Italy

Day 1: Monday 26 February 2024		
Time (UTC+1)	Topics	Venue
08:45 – 09:30	Transport to UNGSC	UNGSC Valencia
09:30 – 10:00	<p><b>Session 1. Opening session</b></p> <p><b>Moderator:</b> Mr. Kais Zouabi, Chief of Client Solutions Delivery Section, UNGSC</p> <p>Opening remarks by:</p> <ul style="list-style-type: none"> <li>- Mr. Michel Bergeron, Chief of Service for Geospatial, Information and Telecommunications Technologies, UNGSC</li> <li>- Ms. Tiziana Bonapace, Director, ICT and Disaster Risk Reduction Division (IDD), ESCAP</li> <li>- Dr. Woosug Cho, Director General, National Geographic Information Institute (NGII), Republic of Korea</li> <li>- GEOSA (TBC)</li> </ul> <p>Photo session</p>	
10:00 – 10:30	Tea Break	
10:30 – 12:00	<p><b>Session 2. Introduction (1): Vision and expectation of the expert meeting</b></p> <p><b>Moderator:</b> Mr. Kyoung-Soo Eom, Senior Expert, (former Chief Geospatial Information Section, UNHQ)</p>	



	<p>Presentations by:</p> <ul style="list-style-type: none"> <li>- Scale up geospatial information applications for disaster risk reduction and sustainable development, by Ms. Tiziana Bonapace, Director, ICT and Disaster Risk Reduction Division (IDD), ESCAP</li> <li>- UN geospatial operations and support services, Mr. Kais Zouabi, Chief of Client Solutions Delivery Section, UNGSC</li> <li>- GEOSA (TBC)</li> <li>- Enhancing effective sharing of the geospatial information through a regional networked data hub, by Mr. Chul Min Lee, Associate Economic Affairs Officer, IDD, ESCAP</li> </ul> <p>Discussions (20-30 minutes)</p>	
12:00 – 13:00	Lunch Break	
13:00 – 14:30	<p><b>Session 3. Introduction (2): Current major operations &amp; activities, and constrains &amp; challenges</b></p> <ul style="list-style-type: none"> <li>- Satellite imagery and analysis</li> <li>- Geospatial data collection and sharing platforms</li> </ul> <p><b>Moderator:</b> Mr. Kyungwoong Nam, Director, NGII</p> <p>Presentations by:</p> <ul style="list-style-type: none"> <li>- Introduction to NGII and Earth Observation Satellite, by Ms. Suyoung Park, Senior Researcher, NGII</li> <li>- UN Maps, Mr. Diego Gonzalez Ferreiro, Chief Solutions &amp; Support Unit, UNGSC</li> </ul> <p>Discussions (20-30 minutes)</p>	
14:30 – 15:00	Tea Break	
15:00- 16:30	<p><b>Session 4. Technical site visit (UNGSC-Valencia)</b></p> <ul style="list-style-type: none"> <li>- Geospatial operations &amp; activities of UNGSC Valencia</li> </ul>	



	- Data Centre and Telecommunication facilities of UNGSC Valencia	
16:30 – 17:00	Wrap up	
19:30 – 21:00	Welcome Dinner	
<b>Day 2: Tuesday 27 February 2024</b>		
Time (UTC+1)	Topics	Venue
08:15 – 08:00	Transport to UNGSC	
09:00 – 10:20	<b>Session 5. Introduction of UNGSC services</b> <ul style="list-style-type: none"> <li>- Service Management</li> <li>- Geospatial Intelligence</li> <li>- Groundwater Service</li> <li>- Data Pipeline</li> <li>- Hosting services</li> <li>- Smart Camp, etc.</li> </ul>	UNGSC Valencia
10:20 – 10:40	Tea Break	
10:40 – 12:00	<b>Session 6. Roundtable Discussion: Identifying challenges &amp; constraints supporting major operational demands</b> <ul style="list-style-type: none"> <li>- Major operational demands (such as disaster management &amp; response, pandemic monitoring &amp; response, climate change mitigation &amp; adaptation, environmental monitoring &amp; conservation, agriculture &amp; food security, capacity building &amp; training, data accessibility &amp; sharing, and collaboration and knowledge sharing)</li> <li>- Identify the gaps, challenges and constraints on satellite imagery, data, technology &amp; solutions, data sharing &amp; dissemination platforms, interoperability &amp; standard,</li> </ul>	



	<p>capacity &amp; skill gaps, political factors, and funding &amp; financial sustainability</p> <ul style="list-style-type: none"> <li>- National areas of focus for developing geospatial data/information</li> </ul> <p><b>Moderator:</b> Mr. Kyoung-Soo Eom, Senior Expert</p>	
12:00 – 13:00	Lunch Break	
13:00 – 14:30	<p><b>Session 7. Roundtable Discussion: Desired future for effective global &amp; regional geospatial operations and services</b></p> <ul style="list-style-type: none"> <li>- Effective support to the global and regional demands</li> <li>- Areas of competency and interest to leverage the existing capabilities creating synergy for global and regional geospatial centre/data hub</li> <li>- Potential technical or governance solutions for data sharing.</li> <li>- Experiences of intergovernmental geospatial data sharing</li> <li>- Opportunities and challenges to intergovernmental geospatial data sharing and potential solutions</li> <li>- Mapping of global and regional geospatial centres and data hubs in the UN system</li> <li>- Thematic areas of focus for linking each centre &amp; data hub</li> <li>- How to ensure the geospatial information sharing is undertaken in a transparent and defensible manner: role of Member States in governance, funding and program management</li> <li>- Why regional geospatial centre(s) should be created when global geospatial centre(s) already exists?</li> <li>- Centralized, de-centralized or federated: a network of centers hosted by various member States working under coordinated/federated governance model.</li> </ul> <p><b>Moderator:</b> Mr. Kyoung-Soo Eom, Senior Expert</p>	
14:30 – 15:00	Tea Break	



15:00 – 16:30	<b>Session 8. Roundtable Discussion (cont.)</b>  <b>Moderator:</b> Mr. Kyoung-Soo Eom, Senior Expert	
16:30 – 17:00	Wrap Up	
<b>Day 3: Wednesday 28 February 2024</b>		
Time (UTC+1)	Topics	Venue
10:00 – 17:00	Transit to Brindisi, Italy (UNGSC Brindisi)	
<b>Day 4: Thursday 29 February 2024</b>		
Time (UTC+1)	Topics	Venue
08:20 – 09:00	Transport to UNGSC	
09:00 – 10:30	<b>Session 9. Introduction of UNGSC (SGITT) services</b> <ul style="list-style-type: none"> <li>- Geospatial operations &amp; activities of UNGSC Brindisi,</li> <li>- Environmental, Virtual Operations Centre, Digital Twin</li> <li>- ESCAP “AP Transportation Network”</li> <li>- Field Infrastructure Management Monitoring Service (FIMMS)</li> </ul>	
10:30 – 12:00	<b>Session 10. Technical site visit (UNGSC-Brindisi)</b> <ul style="list-style-type: none"> <li>- Data centre</li> <li>- NCC</li> <li>- Telecommunication</li> <li>- 3D Printing</li> <li>- Logistics facilities of UNGSC Brindisi</li> </ul>	UNGSC Brindisi
12:00 – 13:00	Lunch Break	





13:00 – 16:00	<p><b>Session 11. Bi-lateral Meetings</b></p> <ul style="list-style-type: none"> <li>- Explore collaboration opportunities</li> <li>- Partnership focusing on UN Maps and innovative geospatial technologies</li> </ul> <p>Meetings between:</p> <ul style="list-style-type: none"> <li>- NGII</li> <li>- UNGSC</li> <li>- UNESCAP</li> </ul>	
16:00 – 16:30	Wrap up	
19:00 – 21:00	Dinner	
<b>Day 5: Friday 1 March 2024</b>		
Time (UTC+1)	Topics	Venue
08:20 – 09:00	Transport to UNGSC	
10:00 – 12:00	<p><b>Session 12. Develop a strategy for establishing Global and Regional Geospatial Data Hub (or Centre)</b></p> <ul style="list-style-type: none"> <li>- Define the Mission and Objectives</li> <li>- Governance and Partnerships</li> <li>- Operational framework</li> <li>- Data acquisition and Management</li> <li>- Data accessibility and Sharing</li> <li>- Technology infrastructure</li> <li>- Disaster management and Pandemic response</li> <li>- Funding and Financial sustainability</li> <li>- Global &amp; regional collaboration</li> </ul> <p><b>Moderator:</b> Mr. Kyoung-Soo Eom, Senior Expert</p>	UNGSC Brindisi
12:00 – 14:00	Lunch Break	



14:00 – 16:00	<p><b>Session 13. Desired future for effective global and regional geospatial operations and services</b></p> <ul style="list-style-type: none"> <li>- Seamless global &amp; regional collaboration</li> <li>- Realtime data accessibility</li> <li>- Interoperability and standardization</li> <li>- Advanced analytics and AI &amp; Innovative technology integration</li> <li>- Efficient disaster and pandemic response</li> <li>- Capacity building and Training</li> <li>- Positive impact on society, improving disaster resilience, public health, environmental sustainability, and overall quality of life</li> </ul> <p><b>Moderator:</b> Mr. Kyoung-Soo Eom, Senior Expert</p>	
16:00 – 16:30	<p><b>Courtesy meeting with Director UNGSC</b></p> <p>Wrap up and Closing</p>	

