Concept Note

Workshop on enhancing the sharing of geospatial information and support to the users in developing countries

Background

Geospatial information covering high-resolution satellite imagery and earth observation data is vital for monitoring, analyzing and effective policy planning for substantial actions in support of the sustainable development goals including climate change actions. For example, out of 50 essential climate variables, 26 can be measured from space. These include sea level monitoring, polar ice extent and greenhouse gas emissions in all layers of the atmosphere. In particular, geospatial information as one of the big data sources, is essential for promoting regional cooperation to address development challenges beyond national boundaries such as extreme weather patterns, expanded tracts of arid zones, melting polar ice caps and increasing sea level, inter-connected hazard-exposed transport, shipping, energy and communication routes, and disaster risk reduction in the Asia-Pacific region.

Key challenges in using geospatial information are that these data are (1) scattered among data holders, data users, and sub-regional networks at the country/sub-reginal levels; (2) not fully open, shared, sometimes partial, and managed by various ministries/sectors that do not connect properly to each other; (3) no integrated regional data stakeholders, platforms and data network under one umbrella in the region; and (4) not led by an intergovernmental agreement or framework arrangement that sets out the scope, benefits and responsibility of regional data integration and provides a clear mandate that promotes networked and integrated geospatial information.

During the 4th Ministerial Conference on Space Applications for Sustainable Development in Asia and the Pacific[1], held on 26 October 2022 in Jakarta, Indonesia, member States requested further enhanced substantive cooperation on space science and technology and their applications, and to specific elements centred on leveraging innovative digital applications, managing data and information more effectively, engaging end users and enhancing partnerships with national, regional and global stakeholders, through the Jakarta Ministerial Declaration on Space Applications for Sustainable Development in Asia and the Pacific[2].

In addition, during the 11th Plenary Meeting of the Regional Committee of the United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP), held on 14 October 2022, in Hyderabad, India, member countries of the UN-GGIM-AP requested the secretariat to continue to explore possible options (in a cost neutral manner) for building an UN-GGIM-AP geospatial information service centre with all interested Member States for practical provision of geospatial services and products to member countries of UN-GGIM-AP, considering cooperation with the United Nations GIS Service Centre of the United Nations Office on ICT (UN OICT) in Brindisi, Italy.

In this connection, the secretariat will organise a series of expert group meetings via online and hybrid format in 2022-2023 to (1) share experiences of existing geospatial information platforms at the national and global level and governance and data security aspects of these platforms; (2) discuss standard operational procedures to ensure easy access to and use of the geospatial information for disaster risk management, (3) explore options for a regional networked geospatial datahub for information sharing and capacity building. The meetings 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 leave no one behind.

Expected Outcomes

1. Shared experiences and lessons learnt by experts from different countries and geospatial information centres operated by the UN Secretariat

[1] https://www.unescap.org/events/2022/fourth-ministerial-conference-space-applications-sustainable-development-asia-and

[2] https://www.unescap.org/sites/default/d8files/event-documents/MCSASDL4E.pdf

2. Provided guidance to the secretariat to enhance support to the users from developing countries to easily access and use geospatial information.
3. Strengthened cooperation among the geospatial data and service providers to support the regional and global initiatives in integration of geo-statistical information.

Venue and Date/Time

Venue

- Online: https://zoom.us/j/91367116132

Date/Time:

- 09:00 – 12:00 (UTC +7), 15 December 2022
- 13:00 – 16:00 (UTC +7), 16 December 2022

Participating Countries

Member countries of the Regional Space Applications Programme for Sustainable Development (RESAP) Member States of the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP):

Draft Programme

Day 1: Thursday, 15 December 2022		
Time (UTC+7)	Topics	Venue
09:00 – 09:05	**Opening session** Welcome Remarks: 1. ESCAP secretariat, by Keran Wang Photo Session (online conference meeting screenshot)	Online
09:05 – 10:50	**Session 1: Experience on geospatial data sharing: existing initiatives and practices**	

	(1) iMap platform for covid-19 pandemic and concept of Sphere geospatial information platform, by Tatiya Chuentragun Geo-Informatics and Space Technology Development Agency (GISTDA) of Thailand (2) Global Geodetic Centre of Excellence in Bonn and Global Geospatial Knowledge and Innovation Centre in Deqing, by Greg Scott, UNSD (3) United Nations Global initiatives: Integrated Geospatial Information Framework and Global Statistical Geospatial Framework, by Greg Scott, UNSD (4) UN Global Service Centre (UNGSC), by Kyoung-Soo Eom, UN OICT (5) Global Partnership on Plastic Pollution and Marine Litter, by Murali Adapaka, UN OICT Enterprise Solution Service – Asia (ESS-Asia) (6) Structure and operation of the Bhuvan geoportal, by SS Rao National Remote Sensing Centre (NRSC), Indian Space Research Organization (ISRO) (7) Computable global seamless data cubes and application perspectives, by Peng Gong Hong Kong University, Hong Kong SAR, China (8) Q&A	
10:50 - 11:00	**Break**	
11:00 - 11:55	**Session 2: Governance of the geospatial information platform: algorithms and data security** (1) Data Security and practices, by Rick Miner, National Oceanic and Atmospheric Administration (NOAA), USA (2) Collaborative architectures and techniques, by Chul Min Lee, ICT and Disaster Risk Reduction Division, ESCAP (3) Open platform to sharing the GEMS data, by Dong Won Lee, National Institute for Environment Research (NIER) of Republic of Korea (video) (4) Q&A	
11:55 – 12:00	**Wrap Up**	

Day 2: Friday, 16 December 2022		
Time (UTC+7)	Topics	Venue
13:00 - 14:25	**Session 1 (cnt): Experience on geospatial data sharing: existing initiatives and practices** (1) One Map initiative, by Antonius B Wijanarto, Geospatial Information Agency (BIG) of Indonesia (2) Asia-Pacific Risk and Resilience portal, by ESCAP (video) (3) Geospatial data application for sustainable development assessment: a case study in Deqing, China, by Xiaoyang Zhang, Chen Jun Academician Workstation in Guangzhou Alpha Software Information Technology Co. Ltd, China (4) National geo-database and geo-portal for disaster risk reduction in Tajikistan, by Manzul Kumar Hazarika, Asian Institute of Technology (AIT) (5) Remote sensing for sustainable water management, by Diana Dushniyazova, Kazakhstan Gharysh Sapary (6) Geospatial network, by Zaffar Sadiq Mohamed-Ghouse, UN-GGIM Private Sector Network (7) APSCO Data Sharing Service Platform, by Xu Yansong, Asia-Pacific Space Cooperation Organization (APSCO) (8) Q&A	Online
14:25 – 15:10	**Session 2 (cnt): Governance of the geospatial information platform: algorithms and data security** (1) Data governance/data security: experience of Bhuvan by Arul Raj, NRSC, ISRO (2) DSS for Disaster Management, by Manzul Kumar Hazarika, AIT (3) Federated Learning as a Solution for Problems Related to Intergovernmental Data Sharing by Kilian Sprenkamp University of Zurich and Joaquin Delgado Fernandez University of Luxembourg (4) Q&A	
15:10 – 15:20	**Break**	

15:20 – 15:50	**Session 3: Proposal on regional geospatial datahub and service to the countries** Panel Discussion: ESCAP, AIT, ISRO (TBC), BIG, UN-GGIM-AP WG2 Chair 1. Defining needs to establish regional geospatial information datahub; and should it be centralised or decentralised? 2. How to connect the national geospatial information platforms and to be used by other countries? 3. Are there any standard operational procedures to be developed? And how? Moderated by ESCAP	
15:50 – 16:00	**Wrap up**	

Contact Information

Mr. Chul Min Lee
Space Applications Section
ICT and Disaster Risk Reduction Division
ESCAP
Email: chul.lee@un.org