# **TEMPLATE A**

# RESPONSE FOR SOLUTIONS: "Space2030" Agenda Mid-term Review

## For Permanent Observer Organizations with COPUOS

NOTE BY SECRETARIAT: the following template is designed to allow Member States of the United Nations and permanent observer organizations with COPUOS to provide standardized responses to any of the 4 Overarching Objectives, and showcase their space solutions

Overarching objective [1-4]	All objectives and multiple actions. (Indicated for each entry below)
Country/Obse rver Organization	United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
Organization Project partners	Key partners listed in alphabetical order:  ESCAP has a long-standing Regional Space Applications Programme for Sustainable Development (RESAP), with the active participation of space and geospatial information agencies in 34 members and associate members in Asia and the Pacific, as well as a number of research institutes and universities, UN agencies and international/regional organizations.
	Key project partners include the national space administration, survey and mapping agencies of Bangladesh, China, Fiji, India, Indonesia, Japan, Kyrgyzstan, Mongolia, the Philippines, the Russian Federation, the Republic of Korea, Singapore, Sri Lanka, Thailand, Tonga, Uzbekistan, as well as the Aerospace Information Research Institute of the Chinese Academy of Sciences (AIRCAS), Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP), United Nations University, United Nations Satellite Centre, United Nations Global Geospatial Knowledge and Innovation Centre, Asian Institute of Technology, Asian Disaster Preparedness Center, etc.
	In addition, ESCAP hosts the Secretariat of the UN-GGIM-AP since 2018.
Short Project summary and goals	Through the implementation of the Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018-2030), Member States in the Asia-Pacific region can access, use and develop space science, technology and its applications to the fullest extent at the national and regional levels to achieve the goals set out in the 2030 Agenda for Sustainable Development.
Relevant SDGs	2, 11, 13, 15, and 17

# Space/Satellit e solution:

#### Under objective 1:

- 1.1. Publish a biennial compendium of geospatial practices (2020, 2022, 2024) as well as an online geospatial applications database to share knowledge and encourage replication of space applications.
- 1.2. ESCAP members and associate members adopted the <u>Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018-2030)</u> to support the implementation of priority SDGs through enhanced regional cooperation and ESCAP resolution 75/6.
- 1.6. Working with the space agency and university in Pakistan to improve accuracy in monitoring changes in forest cover; develop an early warning system for illegal logging and land-use changes; and develop reliable data for international reporting progress on SDG 15 (life on Earth) using satellite data.
- 1.7. Built institutional capacities in Cambodia, Lao People's Democratic Republic, and Thailand to use a cloud-based crop monitoring system. Also working with the governments of China, Indonesia, Malaysia and the Philippines to promote crop biodiversity through innovative space applications.

#### Under objective 2:

- 2.2. Working with the government of Uzbekistan to enhance understanding and detection of soil salinity using satellite data.
- 2.3. Rolled out <u>SATGPT</u>, an AI-powered tool for rapid flood mapping to improve disaster risk knowledge in low-capacity, high risk countries, along with training support and partnerships. Supported Mongolia and Kyrgyzstan in developing national monitoring systems for drought.
- 2.5. Facilitate sharing of high-resolution satellite data during major disasters to guide rapid damage assessment and early response.
- 2.7. Worked with the governments of Indonesia and Thailand to demonstrate the use of satellite data to support evidence-based design of poverty reduction programmes for slum areas and for reducing deaths due to traffic-related accidents. Until the end of 2024, working with the governments of Cambodia, Lao People's Democratic Republic, Mongolia, Philippines, and Thailand to enhance institutional capacities to access and utilize new data sources from Pandora and Geostationary Environment Monitoring Spectrometer (GEMS) instruments for air pollution monitoring.
- 2.8. Initiated discussions to develop a plan for a regional geospatial data hub to enhance the management of geospatial data-sharing for disaster risk reduction and sustainable development.

## Under objective 3

- 3.1. Since 2020, convening an annual youth forum on innovative geospatial information applications.
- 3.4. Since 2018, providing annual fellowships for 5 to 6 young professionals from developing countries to obtain post-graduate certification in GIS and remote sensing. Also providing several free online courses on big Earth data, cloud computing and artificial intelligence
- 3.7. Ensuring that at least 30 per cent of participants in ESCAP capacity-building activities on space applications are women.

## Under objective 4

4.10. Regularly participating in the annual sessions of COPOUS as well as its scientific and technical subcommittee meetings. Actively support and provide inputs to the annual report of the Secretary-General to the General Assembly on coordination of space-related activities within the United Nations system.

Project	ESCAP members and associated members have implemented over
impact	600 geospatial practices in support of SDG implementation.
	Over 3, 000 public sector professionals have benefited from capacity development organized by ESCAP during the reporting period, including 40 who obtained post-graduate certification in GIS and remote sensing.  Operational field projects in more than a dozen countries to facilitate adoption of geospatial solutions for air pollution, drought, floods, and urban poverty.
	The online Geospatial Good Practices Database and Dashboard, which is a regional knowledge-sharing platform that highlights how various space applications, geospatial information, and digital innovations are used across the Asia-Pacific to advance the 2030 Agenda for Sustainable Development, has recollected over 3,800 actions taken by countries in six thematic areas of the Plan of Action, namely (a) disaster risk reduction and resilience; (b) management of natural resources; (c) connectivity; (d) social development; (e) energy; and (f) climate change.
Reference	More information about three major thematic areas of ESCAP work contributing to Space2030 Agenda:
	Asia-Pacific Plan of Action on Space Applications for Sustainable Development: <a href="https://www.unescap.org/our-work/ict-and-disaster-risk-reduction/asia-pacific-plan-action-space-applications">https://www.unescap.org/our-work/ict-and-disaster-risk-reduction/asia-pacific-plan-action-space-applications</a>
	Innovative Geospatial Applications: <a href="https://www.unescap.org/our-work/ict-disaster-risk-reduction/gis-resilience">https://www.unescap.org/our-work/ict-disaster-risk-reduction/gis-resilience</a>
	Geospatial Applications Research and Knowledge Sharing:

sharing