TEMPLATE A
RESPONSE FOR SOLUTIONS: "Space2030" Agenda Mid-term Review

For Member States and
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: Enhance space-derived economic benefits and strengthen the role of the space sector as a major driver of sustainable development

Overarching objective [1]	Actions [1.4. 1.8.]
Country/Observer Organization	Republic of Korea
Project partners	KASA(Korea AeroSpace Administration)
Short Project summary and goals	The Space Industry Cluster is a collaborative initiative designed to foster innovation and commercialization within the space sector. Launched by KASA, the cluster brings together space-related industries, research institutions, and government agencies. Its primary goal is to establish a dynamic ecosystem that facilitates the development and commercialization of space technologies across sectors such as satellite communications, space exploration, and Earth observation. The cluster promotes the growth of space startups and encourages cross-sector collaboration, aiming to position the ROK as a global leader in space innovation.
Relevant SDGs	8 (Decent Work and Economic Growth): Promotes job creation in the space sector 9 (Industry, Innovation, and Infrastructure): Supports innovation in the space industry 12 (Responsible Consumption and Production): Encourages sustainable practices within space industries
Space/Satellite solution:	The cluster includes satellite technology development, Earth observation services, and space exploration initiatives to support agricultural monitoring, disaster management, and industrial innovation.
Project impact	– Enhanced collaboration between public and private sectors, fostering technological innovation. – Supported the commercialization of space-based solutions, boosting the Republic of Korea's global competitiveness.
Reference	https://www.kasa.go.kr/eng/sub02_05.do

Overarching objective 2: Harness the potential of space to solve everyday challenges and leverage space-related innovation to improve the quality of life

Overarching objective [2]	Actions [2.3. 2.4. 2.5.]
Country/Observer Organization	Republic of Korea
Project partners	KASA(Korea AeroSpace Administration), KARI(Korea Aerospace Research Institute)
Short Project summary and goals	The Republic of Korea utilizes satellite-based Earth observation technology for environmental monitoring and disaster management. The program aims to enhance national and regional disaster preparedness, response, and recovery by using satellite imagery to monitor environmental conditions such as air quality, water resources, forest cover, and urban infrastructure. In addition, the system provides early warning capabilities for natural disasters such as floods, landslides, and wildfires, improving response times and minimizing human and material loss.
Relevant SDGs	13 (Climate Action): Supports climate monitoring and disaster response 9 (Industry, Innovation, and Infrastructure): Promotes the use of innovative space technologies for infrastructure monitoring 11 (Sustainable Cities and Communities): Enhances urban planning and resilience to natural disasters
Space/Satellite solution:	The program leverages high-resolution satellite images to track environmental changes, monitor pollution levels, and predict disaster risks. This includes using data for agricultural assessments, deforestation monitoring, and identifying areas prone to natural disasters. Space-based technologies also assist in managing resources during emergencies and enhancing recovery operations.
Project impact	– Improved Disaster Response: Enabled faster response and recovery during natural disasters by providing real-time satellite data. – Enhanced Environmental Monitoring: Helped track air and water quality, forest cover, and climate change indicators. – Increased Public Safety: Contributed to disaster preparedness through early warning systems, reducing loss of life and property.
Reference	https://www.kari.re.kr/eng/contents/191

Overarching objective 3: Improve access to space for all and ensure that all countries can benefit socioeconomically from space science and technology applications and space-based data, information and products, thereby supporting the achievement of the Sustainable Development Goals

Overarching objective [3]	Actions [3.4. 3.7.]
Country/Observer Organization	Republic of Korea
Project partners	KASA(Korea AeroSpace Administration), KARI(Korea Aerospace Research Institute), UNOOSA
Short Project summary and goals	– "Space for Women" Program: Supported by KASA, this initiative focuses on increasing the participation of women in the space sector. The "Space for Women" Toolkit offers resources for creating inclusive space programs and initiatives.

	– KARI's International Space Education: KARI offers educational programs, workshops, and training sessions aimed at fostering space education globally. KARI focuses on building capacity in emerging nations through space science and technology training.
Relevant SDGs	4 (Quality Education): Expands access to space science and technology education globally. 5 (Gender Equality): Promotes gender equality by encouraging women's participation in the space sector. 10 (Reduced Inequalities): Addresses gender and regional disparities in space education and access. 17 (Partnerships for the Goals): Strengthens global cooperation on space education and capacity-building.
Space/Satellite solution:	"Space for Women" export meeting focus on empowering women by offering educational opportunities and workshops aimed at increasing their participation in space activities. International Space Education offers space science education to a global audience, particularly in emerging nations. This includes online workshops, space technology training, and educational resources that help participants learn how to utilize space data and technologies to address local challenges.
Project impact	– Empowered Women in Space: The "Space for Women" Program has led to increased participation of women in space science, technology, and leadership roles globally. – International Capacity Building: KARI's International Space Education has trained students and professionals from developing nations, expanding their space-related knowledge and skills. – Strengthened Global Partnerships: Both KASA and KARI have collaborated with international organizations, universities, and space agencies to increase space-related educational opportunities.
Reference	https://space4women.unoosa.org/sponsorship https://www.kari.re.kr/eng/contents/129

Overarching objective [3]	Action [3.1]
Country/Observer Organization	Republic of Korea
Project partners	Korean Astronomical Society (KAS), Korea Astronomy and Space Science Institute (KASI)
Short Project summary and goals	Share the wonder of the Universe and inspire the curiosity for astronomy and space science with young generation in under-privileged regions (in terms of astronomy and science education). KAS has been organizing and supporting the International Astronomy Education Program in Cambodia since 2016 through its International and Education Outreach Committee.
Relevant SDGs	4 (Quality Education) 17 ((Partnerships for the Goals)

Space/Satellite solution:	Source of inspiring the youth's interest in science including astronomy and space science. Harnessing the remote live video lecture (by many scientists based at Korea Astronomy and Space Science Institute) to visualize the real difference that space-based internet could make for a geographically remote place, and its possible impact to its Dark and Quiet Sky condition.
Project impact	After the recent education run in 2023, a survey showed that a majority (about 57% of 39 participants) has an opinion that Astronomy program should be established at the Royal University of Phnom Penh (RUPP). One RUPP student has entered Astronomy program at Seoul National University in 2025, as part of this international cooperation program.
Reference	Project Report (only available in Korean)

Overarching objective 4: Build partnerships and strengthen international cooperation in the peaceful uses of outer space and in the global governance of outer space activities

Overarching objective [4]	Actions [4.5. 4.6. 4.7. 4.8.]
Country/Observer Organization	Republic of Korea
Project partners	KASA(Korea AeroSpace Administration), Korea Astronomy and Space Science Institute (KASI)
Short Project summary and goals	The Republic of Korea is actively contributing to global space sustainability by developing recommendations for spacecraft design and operation to mitigate space debris. These recommendations are based on the UN Guidelines on Space Debris and the Long-Term Sustainability Guidelines. Additionally, KASI has led the development of the National Space Situational Awareness Organization (NSSAO), which monitors space debris, near-Earth objects (NEOs), and other potential space hazards. The ROK has also developed a Basic Plan for Space Risk Mitigation to prepare for and mitigate the impact of space hazards, contributing to global efforts to ensure the long-term sustainability and safety of space activities.
Relevant SDGs	9 (Industry, Innovation, and Infrastructure): Promotes responsible innovation in space technology and infrastructure for sustainability. 12 (Responsible Consumption and Production): Ensures the responsible use of space resources and sustainable space operations. 17 (Partnerships for the Goals): Strengthens global partnerships and cooperation in space governance and sustainability efforts.

Space/Satellite solution:	Spacecraft Design and Operation: Spacecraft developed under this initiative are designed to adhere to the UN Guidelines on Space Debris and LTS Guidelines. They include features such as controlled deorbiting mechanisms and active debris removal systems. Space Hazard Monitoring: The National Space Situational Awareness Organization (NSSAO) tracks and monitors space debris, NEOs, and other space hazards using advanced satellite technologies. NSSAO provides early warnings to prevent potential collisions and protect both space assets and the space environment. Space Risk Preparedness Plan: The ROK has established a comprehensive national plan that aligns with international efforts to assess and prepare for space risks, including potential collisions, space weather events, and other space hazards.
Project impact	– Reduction in Space Debris: The development of spacecraft with built-in debris mitigation features has contributed to the reduction of space debris. – Enhanced Space Safety: The NSSAO provides crucial data to prevent space collisions, increasing the overall safety of space missions. – Strengthened National and International Regulations: The ROK's compliance with international guidelines has strengthened global space safety standards.
Reference	**https://www.nssao.or.kr/eng/**