

**Committee on the peaceful uses of Outer Space  
Scientific and Technical Subcommittee Sixty-first session**

Vienna, 29 January–9 February 2024

**Item 7: Space-system-based disaster management support**

Madam Chair, Distinguished delegates,

Italy has long recognized the pivotal role that space-based technologies play in disaster prevention and management, given the unique physical characteristics of our national territory and the many natural calamities endangering our population, from earthquakes to floods and droughts.

Spearheading these efforts is Italy's **COSMO-SkyMed constellation** composed by 5 radar satellites in orbit. The system is instrumental in bolstering our national Civil Protection efforts and providing assistance to countries facing with various disasters.

The COSMO-SkyMed radar images offer unparalleled capabilities in disaster response and recovery; they are crucial for providing timely and accurate information for damage assessment, situational awareness, and decision-making during crisis situations. The high spatial resolution and all-weather capabilities of COSMO-SkyMed enable a comprehensive understanding of disaster-affected areas, facilitating swift and effective response measures.

Italy's commitment to international collaboration in disaster management is evident, through agreements such as the **SIASGE (Italo-Argentinian system of satellites for emergency management)** between the Italian Space Agency and the Argentinian Space Agency (CONAE). The exchange of data between the Italian COSMO-SkyMed and the Argentinian SAOCOM constellation underscores the global significance of cooperative cross-borders efforts in exploiting space assets for emergency response.

Additionally, ASI collaborates with JAXA in the "**Mutual Cooperation for Satellite Support to Disaster Risk Management.**" Such a partnership aims at enhancing the accessibility of critical information by facilitating the COSMO-SkyMed data-sharing with Japan's Alos-2 during emergencies.

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Madam Chair,

ASI's commitment extends beyond bilateral partnerships, demonstrated by the active participation in the **Committee on Earth Observation Satellite (CEOS)**. Within the CEOS Working Group on disasters, ASI join forces with other agencies, fostering a collective approach to leveraging Earth observation satellites for enhanced disaster management capabilities.

Besides COSMO-SkyMed, Italy invests in cutting-edge Earth Observation technologies through programmes like **PRISMA**. This hyper-spectral technology aims to detect the chemical and physical characteristics of objects on the Earth's surface, providing invaluable insights for disaster response and environmental monitoring.

Moreover, Italy is developing the IRIDE program in collaboration with ESA. IRIDE is one of the most significant European Earth Observation satellite space programs and is scheduled for completion by 2026, thanks to the EU post-pandemic recovery and resilience fund. IRIDE is an end-to-end system consisting of a set of sub-constellations of LEO satellites, from the operational infrastructure on the ground to the services for the Italian Public Administration. Based on various instruments and detection technologies, the constellation will be unique in its capacity, encompassing microwave imaging, optical imaging at various spatial resolutions, and different frequency ranges—from panchromatic to multispectral, hyperspectral, and infrared bands. Therefore, IRIDE can be considered as “a constellation of constellations”.

Madam Chair, Distinguished delegates,

Allow me to deeply thank UNOOSA for inviting the Italian Space Agency to jointly organise the open session of the 19<sup>th</sup> UN-Space that took place in Brindisi, Italy, with the title “Earth observation and integrated applications for disaster risk management and sustainable development”, which brought together representatives of the UN agencies and the Italian

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public and private actors from the space sector for a fruitful discussion and sharing of best practices on such topics.

In conclusion, Italy stands at the forefront of promoting satellite technology for comprehensive disaster management. Through active collaborations, investments in advanced Earth observation programmes, and the exploitation of cutting-edge technologies, Italy demonstrates a resolute commitment to enhancing global resilience in the face of disasters.

I thank you for your attention.