

Committee on the Peaceful Uses of Outer Space

Scientific and Technical Subcommittee

Vienna, 6–17 February 2023

Statement of Italy on item 6

Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment

Mr. Chair, distinguished delegates,

as every year, the Italian delegation is pleased to report on the latest developments of its activities in the field of remote sensing. Indeed, remote sensing of the Earth is the field in which Italy has made its major investments.

As a confirmation of the importance that my country attaches to this particular domain, a relevant part of the funds dedicated to space of the post-Covid-19 pandemic National Plan for Recovery and Resilience has been allocated to the realization of **a new program called IRIDE**. It will consist of a so-called “constellation of constellations” of satellites in low Earth orbit carrying on board different types of sensing technologies. The first contracts have been signed last December.

Mr. Chair, distinguished delegates,

the X-band radar satellite constellation COSMO-SkyMed is continuing to serving Italian institutions needs and those of numerous users around the world, also through our commercial partners. Allow me also to mention the fruitful bilateral collaborations established by the Italian Space Agency with the Argentinian space agency CONAE and with the Japan Aerospace Exploration Agency JAXA to share the respective satellite radar data for disaster management purposes. Such collaborations confirm their value each time a natural disaster strikes our countries, like the deadly flood and landslides that hit the town of Casamicciola, on the Italian island of Ischia, last November. I take advantage of this occasion to thank again CONAE and JAXA for their prompt support with their SAOCOM and ALOS-2 data.

Mr. Chair, distinguished Delegates,

Let me recall that part of the data of the COSMO-SkyMed constellation are devoted to the international scientific community, through the so-called International Open Call, launched by the Italian Space Agency in 2015, with no expiry date so far. I warmly invite interested delegations to inform their scientific community about this opportunity.

Mr. Chair, distinguished Delegates,

This morning, the ASI expert, Mr. Giorgio Licciardi, made a technical presentation entitled "*Hyperspectral data exploitation: the ASI PRISMA SCIENZA programme*". For those who could not attend, allow me to spend few words on such ASI programme.

The PRISMA SCIENZA programme intends to support and promote the scientific use of data from the PRISMA mission by the Italian universities, public research institutions, industries, in order to support the full data exploitation of the mission and promote the development of the Italian know-how. Indeed, PRISMA can offer the opportunity to develop new skills in the frontier sector of hyperspectral data processing and to test products that can provide a unique and significant added value to Earth Observation applications, including through integration with other remote sensing data. Let me remind you that the PRISMA satellite is not only able to distinguish the geometric characteristics of the observed objects, but also the chemical-physical composition of the surface of the Earth.

In the short term, The PRISMA SCIENZA program will contribute to the establishment of a first group of skilled users. Over time, the initiative is expected to stimulate users interested in an application and not just a scientific use of the products.

Among the 23 proposals that satisfied the call requirements, ASI financed the first 15, that are focused on different topics of national interest, such as agriculture, inland and coastal waters, air quality, ecosystems structure and composition, vegetation and forestry, ice and snow, raw materials, cultural heritage and natural hazards. Most of these projects have been proposed by

teams consisting of both academic and industrial partners, with a proportion of 41% of universities, 35% research centres, and 24% of small and medium enterprises, and this facilitates the technology transfer process.

I would like to remind delegations that PRISMA data are open and free of charge and available for the international community by just accessing the PRISMA portal and registering.

I thank you very much for the attention.