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Statement of Italy

Item 6. Report of the Scientific and Technical Subcommittee on its fifty-eighth session

Thursday, 26 August

Mr. Chair, distinguished delegates,

The Scientific and Technical Subcommittee was the only body allowed to take place both in 2020 and in 2021 without interruptions. This allowed for import results to be achieved during the subcommittee 2021 session.
Italy would like to congratulate the Chair of the Subcommittee, Ms. Natalia Archinard, and the Secretariat, who were able to guide very well the first session of the pandemic period organized in a hybrid mode.

Mr. Chair, distinguished delegates,

During the subcommittee session, the Italian delegation made few statements on topics of our interest, such as Space technology for sustainable socioeconomic development, remote sensing, space debris, space weather, near Earth objects and, of course, the long-term sustainability of outer space activities.
Italy recalled its strong commitment in raising the awareness and fostering the use of space technology in support of development projects and informed about the most recent activities in that direction, such as those launched within the framework of the European Space Agency, to raise the awareness of international financial institutions, which are active in the field of cooperation for development.
We also informed about the project called "WildTrackCube-SIMBA" (which stands for "System for Improving the Monitoring of the Behavior of Animals"), a collaboration between the Sapienza University of Rome and some Kenyan

universities, which represents a good example of the application of space technology to the management of the environment.

Regarding remote sensing, my delegation mentioned the "Map Italy project", thanks to which the Italian Space Agency can acquire images every 16 days over the entire national territory, through the Italian radar satellite constellation COSMO-SkyMed, which is mainly designed for fast and prompt response to asynchronous & on-demand requests and can observe the Earth during day and night, regardless of weather conditions. Italy is also investing in a new Earth observation technology, the hyperspectral technology, and launched the PRISMA program in 2019. The workshop organized by the Italian Space Agency, in April, this year, which witnessed a wide international participation, with more than 800 registrations, testifies the strong interest in this new technology. Hyperspectral imaging is a remote sensing technology that acquires image data in hundreds of narrow contiguous bands, from the visible to the shortwave infrared, which allows, for instance, to identify minerals in rocks and soils, to analyse vegetation types and conditions, and to detect pollutants in water and air. Such technology is demonstrating its specificities and complementarities with other satellite remote sensing technologies and ASI expects that the use of its data in Earth monitoring will increase exponentially in the near future.
Allow me to recall once again that PRISMA data are open and free of charge and available for the international community by just accessing and registering on the PRISMA portal (https://prisma.asi.it).

Mr. Chair, distinguished delegates,
During the Subcommittee 2021 session, Italy also reiterated its engagement in providing an active contribution to the international activities addressing the space debris issue and in aligning its space activities to the UN LTS guidelines. Italy's activities in the field of the mitigation of spade debris started 20 years ago with its active role in the creation of the Interagency Space Debris Coordination Committee (IADC) and in its pioneering phase of activity. Among the on-going activities, let me just recall the one carried out in the framework of the European

Space Agency, which concerns the development and operation of the "Flyeye" telescope for Near Earth Objects. Indeed, this telescope will be used both for space debris and NEOs monitoring. The Flyeye has been realized by a network of companies led by the Italian industry and it is based on a revolutionary technology. It will be hosted in Sicily, in the south of Italy, and it will observe the sky in automated mode, allowing Europe to become one of the first contributors to NEOs discovery.

Mr. Chair, distinguished delegates,Italy has a long-standing tradition in the observation and investigation of Near-Earth Objects (NEOs), paying particular attention to the monitoring of hazardous asteroids for potential Earth impacts. In particular, ASI has supported the creation of the NEO Coordination Centre established at the ESRIN Center of the European Space Agency, located near Rome, Italy, which is actually one of the major worldwide contributors to the dissemination of the information on asteroids, providing daily updates on orbital parameters, as well as on the risk-list of potential Earth's impactors.
Allow me to recall that experts from ASI and the Italian space community continues to participate in, and contribute to the works of the International Asteroid Warning Network and the Space Mission Planning Advisory Group.

Mr. Chair, distinguished delegates,
Allow me to conclude by adding just few words on space weather, to recall that the Italian Heliophysics and Planetary Science communities are involved in several observational campaigns from space and from the ground, often with lead roles. We have a national dedicated working group headed by the Italian space Agency and our experts actively contribute to the works of the COSPAR Panel on Space Weather and of the Space Weather Expert Group.

Thank you very much for your attention.