

th International Space Forum at Ministerial Level

The Mediterranean Chapter

"Space Technology and Applications meet Mediterranean Needs"

ASI Statement

Ministers, Authorities, Distinguished Delegates and colleagues,

It is with great pleasure that I welcome you today in the beautiful city of Reggio Calabria for the 4^{th} edition of the **International Space Forum 2019** – **The Mediterranean Chapter** - in my capacity of President of the Italian Space Agency (ASI), co-founder with the International Astronautical Federation (IAF) of the International Space Forum initiative since the first edition in 2016 in Trento followed by Nairobi in 2017 and Buenos Aires in 2018. Different chapters for different regions of the world to increase the relations and the number of the Academicians and Universities in the space programs.

At the outset, I would like to warmly thank the Rector of the University Mediterranea of Reggio Calabria, Prof. Santo Marcello Zimbone, and all his Team for the excellent work in organizing this international Forum as well as the President of the Regional Council of Calabria for hosting today this event in this prestigious Regional Council Hall and the Mayor of the Metropolitan City of Reggio Calabria for his availability to welcome the international space community.

This year edition of the International Space Forum is focused on the Mediterranean needs and perspectives, aiming at developing a greater cooperation network among Universities, Research Centers and Academia in general of the region. We are all aware that space provides a precious contribution for the sustainable development of the Mediterranean region: from maritime surveillance to the blue economy, from space knowledge and space education, cooperation, the three main topics of our discussion today.

Let me briefly present some programs and activities that ASI is pursuing in the above three topics.

Maritime surveillance: satellites for Earth observation provide precious and unique information on "objects" at sea as ships, boats, people, harmful materials and threats.



The geo-localization data monitoring represents an important contribution for the commercial activities, civil and illegal movements, security operations to guarantee safe and controlled activities at sea.

In this field, the Italian Space Agency since 2010 has coordinated the **BLUMASSMED** project of the European Commission for the maritime surveillance in the Mediterranean, followed by the new **EUCISE 2020** project that represented a test bed for the creation of a maritime Common Information Sharing Environment in the 2020 perspective. EUCISE 2020 is part of the Action Plan of the European Maritime Security Strategy, it finished in March 2019 and involved 60 partners, including maritime authorities, universities, research centers and oceanographic institutes of 16 different European Countries. As an in-kind contribution to this project, ASI provided satellite data of the Italian COSMO-SkyMed radar satellite constellation, which allowed near real time satellite services for maritime surveillance.

Space and Blue Economy: The so-called "blue economy" comprises all the economic and commercial activities related to oceans, seas and coasts that cover a wide range of sectors (fisheries, coastal tourism, maritime transport, coastal and environmental protection, etc).

Space has a crucial role for the development of this essential economy in the Mediterranean. In fact, Earth observation data, integrated with positioning and Communication data and technologies, can be considered as an intelligent tool in the implementation of a sustainable blue economy in the Mediterranean.

As mentioned before, the Italian **COSMO-SkyMed** constellation is a unique dual system composed of four Synthetic Aperture Radar (SAR) satellites, with very-high revisit time, capable to acquire data, night and day, under any atmospheric condition, thanks to the high-resolution X-band radars.

Next December, Italy will launch the fifth satellite of the constellation, the first of the **Second-Generation** to ensure the operational continuity of the system, while achieving a generational step ahead in terms of functionality and performances.

Let me recall here that COSMO-SkyMed stands for *COnstellation of small Satellites for Mediterranean basin Observation*, originally conceived in 2007 for the observation of the Mediterranean region and then extended to worldwide observation and applications.



In more than 10 years of activity, COSMO-SkyMed has acquired a tremendous amount of data all over the world including the Mediterranean area. To encourage the scientific utilization of such data, in 2015 ASI issued an "Open Call", with no expiry date, addressed to the national and international scientific community. For the projects selected within this Call, ASI provides COSMO-SkyMed data free of charge. I warmly invite the scientific community, gathered here today, to take advantage of this opportunity that represents a significant contribution to the scientific progress and to the international cooperation in the Mediterranean region.

COSMO-SkyMed is also a contributing mission to the European Union Earth observation program **Copernicus** and to its services to monitor the environment and its natural resources and for the management or disaster risk mitigation.

In addition, with the launch of the **PRISMA** hyperspectral satellite, in March this year, ASI has acquired another important tool to improve its capability to observe the maritime environment. PRISMA is the first European Earth Observation system with innovative hyperspectral optical instrumentation able to perform chemical and physical analysis from Space. In fact, one of the main fields of application of hyperspectral data regards inland and coastal waters, such as water quality, chlorophyll monitoring, alga bloom, etc.

Finally, you are all invited to view the exhibition with pictures of COSMO-SkyMed set up in front of this Hall.

Space Education, Cooperation and Scientific Knowledge means to contribute to the culture for the new generations. Academia and Universities are called to play a key role in the dissemination of space knowledge and education, in the development of new space curricula, Courses and disciplines linked to the new space applications and products. Among its missions, ASI promotes and financially support research and academic projects all over Italy, courses of studies for students in Italy and abroad through agreements, fellowships, different contributions and, in particular, the expertise and knowledge of its personnel.

In this regard, I am particularly pleased to announce that just a few minutes ago ASI has signed an Agreement with the University Mediterranea of Reggio Calabria to support the project to offer a new Space curriculum dedicated to the Mediterranean needs for which every contribution is welcome.

Thank you for your kind attention.