



## ITALIAN SPACE AGENCY'S PRISMA SATELLITE SUCCESSFULLY LAUNCHED

Take-off occurred at 2.50am aboard VEGA Italian launcher

PRISMA will provide hyperspectral images of Earth

**Rome, March 22<sup>nd</sup>, 2019** – Starting tonight Italy's PRISMA satellite has begun its mission orbiting Earth. Its *hyperspectral eyes* will soon observe and acquire new images of Earth giving insight into its natural resources. PRISMA is an Italian Space Agency's satellite demonstrator. National industries and many Small and Medium Enterprises (SME) contributed to its design, launch and data receipt. Using the VEGA launcher, it took off from the European base of Kourou in French Guyana at 2.50 am GMT+1.

Now the satellite will face three months of verifications; its operational activity will start in June 2019. PRISMA's full program cost 126 million Eur. It will produce significant industrial and scientific benefits for the national community and around the planet.

"PRISMA has brought into orbit the Italian ability 'to make Space'. It represents the first European hyperspectral mission," said Professor Piero Benvenuti, Commissioner of Italian Space Agency. "As such, it represents a unique opportunity to develop advanced know-how and test the innovative contribution expected from hyperspectral data in Earth Observation applications. Furthermore, PRISMA plays a strategic role in the future hyperspectral operational mission within Sentinel missions of Copernicus European Program".

PRISMA will complete the current Italian Space Agency offer of Earth Observation space segment, now primarily based on the Synthetic Aperture Radar of COSMO-SkyMed constellation. Thanks to its hyperspectral innovative optical sensor, PRISMA is able to acquire images of Earth surface to see the chemical and physical composition and provide information for several applications. PRISMA hyperspectral technology observes each object with its spectral signature, a real digital footprint: a unique combination of colours associated with each object, which reflects and absorbs solar light in specific bands of Visible spectrum and of near Infrared (NIR-SWIR).

PRISMA, a satellite of the Italian Space Agency (ASI), represents an excellence deriving from the scientific and industrial ability of Italy to work as a team. PRISMA was developed by a Temporary Joint Venture of companies, led by **OHB Italia**, responsible for the mission and management of the three main segments (ground, flight and launch) and **Leonardo**, which built the electro-optical hyperspectral instrumentation in addition to on-board equipment such as solar panels and power supply unit. The launch took place aboard the **ESA's** launcher designed and conceived in Italy: **VEGA** produced by **AVIO**. **Telespazio** (Leonardo 67%, Thales 33%) set up the mission control centre at Fucino Space Centre, while data acquisition and processing will take place at the **ASI Matera Space Centre**.





"Leonardo's technology is at the heart of this mission: our hyperspectral camera, the most advanced and most powerful in the world, will equip Italy with the ability to study the Planet like never before" - said Alessandro Profumo, Chief Executive Officer of Leonardo. "Our Fucino Space Centre will follow the LEOP and in-orbit tests to guarantee the scientific community access to valuable data for sustainable development. Leonardo puts forth its best efforts to face this major challenge, with the energy, skills and dedication of women and men strongly committed to technological innovation".

"The launch of PRISMA confirms OHB Italia system integrator capabilities; thanks to this mission, OHB Italia has acquired competences unique in Europe to develop future projects, already under study, which will make space closer to the citizens and to their needs," said Roberto Aceti CEO OHB Italia.

"Vega VV14 flight," states Giulio Ranzo, AVIO Managing Director, "represents an important step for the Italian space industry as it strengthens the capability of autonomous access to Space of Europe, in particular in low orbits where satellites of Earth observation operate. We are extremely proud to put our experience at the service of PRISMA mission, putting into evidence that Italy owns technological abilities in all segment of Space".

The satellite will be operational for 5 years and will make available to a national and international community of users images of great scientific interest. The data will provide a crucial contribution to the development of research as well as to the testing in many fields of Earth Observation applications: monitoring, the management of agriculture and natural resources, the control of pollution, and the study of climatic and environment changes (support to emergency management).

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