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Telespazio signs a contract worth 123 million euro with the European Space Agency for the Moonlight programme and future missions to the Moon

- **Telespazio heads a consortium of European companies creating the first satellite constellation capable of providing navigation and communication services for upcoming space missions**

Telespazio, a joint venture between Leonardo (67%) and Thales (33%), signed a 123 million euro contract today in Milan with the European Space Agency (ESA) for the implementation of the first phase of the Moonlight programme.

Leading a consortium of European companies, Telespazio will oversee the development of a constellation of satellites providing navigation and communication services for future lunar missions. The consortium includes Telespazio as prime contractor responsible for the overall system as well as a pool of companies including Hispasat, Viasat, Thales Alenia Space Italia, SSTL, Qascom, MDA, KSat, Telespazio UK, Telespazio Iberica, SDA Bocconi, PLIMI, CRAS and SI for the design, implementation and operational qualification of the system.

Positioned in cislunar orbit, the Moonlight infrastructure will leverage the advanced technology developed from Europe's navigation and communications industry, optimized to provide reliable connectivity and accurate positioning even on the Moon. These services will be critical to ensuring safe exploration of the moon's surface, permitting continuous monitoring of activities from Earth and improving the missions' operational management.

The Moonlight program aims to provide communication and navigation services to institutional missions of the European Space Agency and other space agencies as well as commercial users, thus contributing to the creation of a solid lunar economy. In addition, interoperability with LunaNet, a standard shared by the most important international space agencies, will ensure cooperation between various service providers, increasing the reliability of the entire system.

The Moonlight infrastructure will be divided into three key segments: the *Lunar Space Segment*, which includes satellites in lunar orbit providing communication, navigation and time synchronisation services; the *Lunar Earth Ground Segment*, which includes the control stations and ground infrastructures necessary for service provision and for the management of operational activities, and the *Lunar User Segment*, composed of the terminals necessary to validate the service once the constellation is in orbit. As the system is based on international standards defined by NASA, ESA and JAXA, it will support lunar navigation and communication terminals according to the standard.

The initial configuration includes one satellite for communications and four for navigation, with the aim of ensuring broad coverage of the lunar South Pole, a crucial area for future exploratory

Telespazio, a Leonardo and Thales 67/33 joint venture, is one of the world's leading operators in satellite services. Its activities range from the design and development of space systems to the management of launch services, from in-orbit satellite control to Earth observation, from integrated communications, satellite navigation and localisation services to scientific programmes. Telespazio plays a leading role in the reference markets harnessing technological experience acquired over the years. Since its establishment, the company has participated in major European space programmes such as Galileo, EGNOS, Copernicus and COSMO-SkyMed. In 2022, Telespazio generated sales of EUR 650 million while employing more than 3,000 people in 15 different countries.

missions. The architecture has been developed taking into account the needs of users and the requirements established by the ESA, and provides for a progressive implementation plan with deployment of the constellation in two phases.

"The Moonlight programme represents much more than a technological infrastructure for lunar missions," said **Gabriele Pieralli**, CEO of Telespazio. "Telespazio is proud to have been selected by the European Space Agency as the leader of the Moonlight project. This project marks a decisive step towards a new era in space exploration, in which the ability to provide reliable communication and navigation services on the Moon will become the mainstay of future extraterrestrial economies. As leader of a prestigious pan-European team, Telespazio is committed to creating the conditions for a stable and secure presence on the Moon, while opening up extraordinary new business opportunities for Europe in cislunar space. We are convinced that the participation of companies from the different ESA member countries will strengthen interest in and support for the programme, especially in view of the 2025 Ministerial Conference. We are proud to play a crucial role in a programme that will not only represent a milestone in present and future space challenges, but will also be a key element in promoting synergies between the ESA and other international space agencies."

"ESA is taking the crucial step in supporting the future commercial lunar market, as well as ongoing and future lunar missions. We are extremely proud to be working with industry and Member States to ensure that our technological capabilities can support and foster cooperation on the Moon with our international partners," said **Josef Aschbacher**, ESA Director General.

About ESA's Moonlight programme

The European Space Agency (ESA) is Europe's gateway to space, coordinating the financial and intellectual resources of its Member States to conduct space programmes and activities. ESA is working with industrial and institutional partners on the Moonlight programme to establish reliable autonomous communication and navigation infrastructure for the Moon. This multi-directorate initiative, led by Connectivity and Secure Communications (CSC) with support from Navigation (NAV) and Human and Robotic Exploration (HRE), opens a path for the development of technologies to support the permanent presence and sustainable return to the Moon and beyond. Moonlight will benefit upcoming ESA, international and commercial lunar missions by lowering barriers, increasing mission scientific return and pushing the boundaries of human knowledge and exploration.

Learn more at

https://www.esa.int/Applications/Connectivity_and_Secure_Communications/Moonlight

