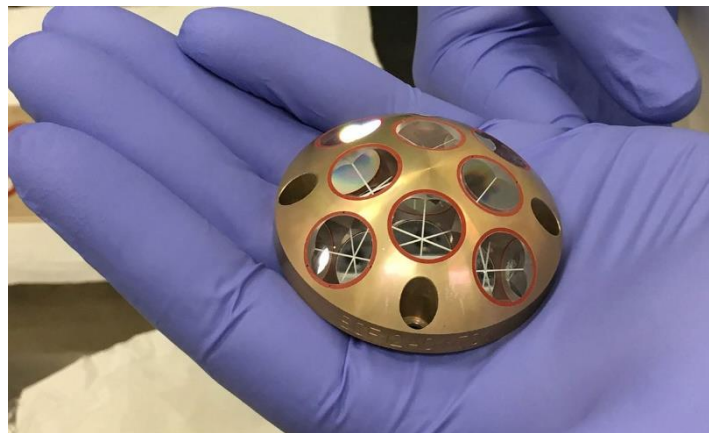


Press Release

January 17th, 2025
ispace, inc.**ispace-EUROPE and the Italian Space Agency (ASI) Sign Payload Services Agreement to Transport a Laser Retroreflector Array (LaRA2) on the Moon Surface***Agreement Marks Significant Step Towards Increasing Italy's Contribution to advancing Lunar Exploration*

LUXEMBOURG – January 17th, 2025. ispace EUROPE S.A. (ispace-EUROPE), the Luxembourg-based subsidiary of ispace, inc., and the Italian Space Agency (ASI) have signed a Payload Services Agreement to transport to the Moon a Laser Retroreflector Array (LaRA2) enabling accurate position measurements via laser ranging, the two organizations announced today.

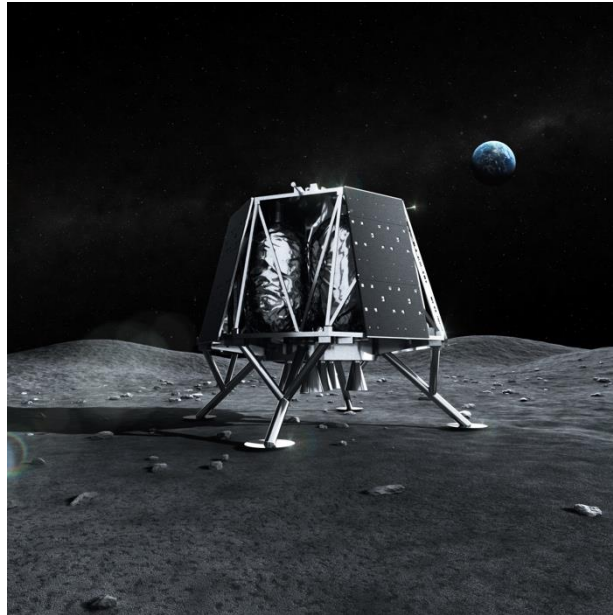
LaRA2 is a small, robust, and lightweight instrument built to work without any power source and to survive the harsh conditions on the lunar surface for an extended period of time. It features a precise array of retroreflectors (corner cube prisms) designed to reflect laser beams directly back to their source, regardless of the angle of incidence. The same instrument is installed on NASA's Perseverance rover, currently exploring Mars and similar units will be embarked on future surface elements, with the aim to create a network of reference points on planetary surfaces. The continued and accurate measurement of their position allows applications in several fields, like in space navigation, and can provide scientific contributions, for instance in fundamental physics through high precision tests of General Relativity. A primary role at global level in this field is held by the Italian National Institute of Nuclear Physics – INFN, that designed and developed LaRA2 for ASI.



The LaRA2 instrument, a palm-sized dome array of retro reflectors

The LaRA2 instrument will be integrated into the APEX 1.0 lunar lander as part of ispace technologies U.S. (ispace-U.S.) Mission 3, currently scheduled to land in the Schrödinger Basin (far side of the Moon, South Pole) in 2026. After landing, LaRA2 is expected to be observed by current and future lunar orbiting lasers.

By coupling the LaRA2 measurements with data obtained by other retroreflectors of the same family already deployed on the Moon surface, ASI scientists expect to gather valuable data that will help mapping the Moon and improve navigation and positioning on the lunar surface.



A computer-generated image of the APEX 1.0 lunar lander on the lunar surface.

“This collaboration with the Italian Space Agency is a great example of how commercial companies are enablers to lunar science led by space agencies. Adding LaRA2 to the existing retroreflectors deployed on the Moon will open new possibilities of mapping the surface for scientific research and will help refining navigation capabilities to enable future missions” said Julien Lamamy, CEO of ispace-EUROPE.

“We are extremely excited and impatient to see LaRA2 on the ispace M3 lander and then on the Moon” said Raffaele Mugnuolo, Head of the Exploration and Orbiting Infrastructure Office of ASI “Italy has a consolidated heritage in the field of planetary laser reflectors whose technology is quite mature, as recently demonstrated by the successfully observation, by LOLA laser of NASA LRO orbiter, of the small array provided by INFN to Change’6 mission. Future operational activities on the surface of the Moon will strongly benefit from the precise localization allowed by laser reflectors which, being passive instruments, can be used over long periods of time”.

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About ispace, inc. (<https://ispace-inc.com>)

ispace, a global lunar exploration company with the vision, “Expand our planet. Expand our future.”, specializes in designing and building lunar landers and rovers. ispace aims to extend the sphere of human life into space and create a sustainable world by providing high-frequency, low-cost transportation services to the Moon. The company has business entities in Japan, Luxembourg, and the United States with approximately 300 employees worldwide. ispace is leveraging its global presence through its three business units in Japan, the U.S., and Luxembourg, for the simultaneous development of Mission 2, currently planned to be launched in January 2025, led by its Japanese entity, as well as Mission 3, currently planned to be launched in 2026 and led by its U.S. entity, and Mission 6, which will utilize the Series 3 lander and is scheduled to be launched by 2027. For more information, visit: www.ispace-inc.com and follow us on X: @ispace_inc.

About ASI ([ASI | Agenzia Spaziale Italiana](#))

ASI, the Italian Space Agency, was established in 1988 as a national authority with the task of drawing up and enacting Italian space policy in compliance with governmental guidelines.

The Agency has established itself as one of the world's foremost players in space science, satellite technology and the development of vehicles for exploring the cosmos. Today, ASI is a leader at the European and global levels. It has a close collaborative relationship with NASA and has participated in many of the most interesting scientific missions of recent years. One such project was the construction and operation of the International Space Station, which is currently home to several Italian astronauts. Thanks to ASI, Italy is at the forefront of this exemplary human endeavor.

Contatti

ASI: stampa@asi.it tel. 06 8567 432 / 887 / 655

ispace: a-ames@ispace-inc.com tel. +81-080-6061-4619

