

Europe takes us back to the Moon: Leonardo-Finmeccanica signs with ESA to develop the PROSPECT laboratory with The Open University

- Following its development of drills for the Rosetta and ExoMars missions, Leonardo will help analyse the Moon's soil in preparation for Human habitation
- Moretti: "Cutting-edge technological instruments that fully express the ingenuity the Leonardo name stands for"
- PROSPECT will work up to two metres deep in extreme conditions, in vacuum and at temperatures 170 degrees centigrade below zero

Farnborough, 12 July 2016 – Today at the Farnborough Air Show, Leonardo-Finmeccanica has signed a contract with the European Space Agency (ESA) to develop the system that will allow Europe to analyse the Moon's subsoil. The project will see Leonardo engaged for two years in the design, construction and testing of the PROSPECT prototype, a key European contribution to Luna-Resurs, a partnership between ESA and Roscosmos (the Russian Space Agency) with support from the Italian and UK Space Agencies. Luna-Resurs should land a probe weighing approximately one tonne on the Moon in 2021, to search for water and raw materials that might be used for building a future permanent base.

PROSPECT (Package for Resource Observation, in-Situ analysis and Prospecting for Exploration Commercial exploitation and Transportation) is an automatic laboratory consisting of a robotic drill and a suite of scientific instruments. Leonardo will develop PROSPECT in collaboration with the UK's Open University. The system will drill down into the Moon's soil to depths of up to two metres, taking material samples and distributing them to the scientific instruments aboard the probe for analysis. It will be tested by Leonardo in an environment that mimics the environment of the Moon's South Pole where it will operate, in vacuum and at temperatures 170 degrees centigrade below zero.

"This contract, which follows our provision of similar systems for the Rosetta and ExoMars missions, reinforces our global leadership in Space drilling and sampling equipment. These are cutting-edge instruments that fully express the ingenuity that Leonardo, our new name, stands for", said Mauro Moretti, Chief Executive Officer and General Manager of Leonardo. "Our Space technologies – Moretti added – allow us to explore the Universe on board spacecraft such as Rosetta, Juno, JUICE and Cassini, monitor the environment through the Copernicus programme, study gravitational waves with the LISA Pathfinder and supply services that benefit all via the Galileo constellation. We are aboard the ExoMars mission searching for traces of life on Mars and we are eager to take this opportunity to explore the secrets of the Moon."

"Delivery of PROSPECT on the lunar surface at the beginning of the next decade will demonstrate ESA's strong interest to become an important player in an international effort to sustainably explore the

Note

Following the process of the reorganisation of the **Leonardo-Finmeccanica** Group's companies, it should be noted that from January 1st 2016: the "Helicopters" division has absorbed the activities of AgustaWestland; the "Aircraft" division has absorbed part of the activities of Alenia Aermacchi; the "Aero-structures" division has absorbed part of the activities of Alenia Aermacchi; the "Airborne & Space Systems" division has absorbed part of the activities of Selex ES; the "Land & Naval Defence Electronics" division has absorbed part of the activities of Selex ES; the "Security & Information Systems" division has absorbed part of the activities of Selex ES; the "Defence Systems" division has absorbed the activities of OTO Melara and WASS.

Leonardo-Finmeccanica is among the top ten global players in Aerospace, Defence and Security and Italy's main industrial company. As a single entity from January 2016, organised into business divisions (Helicopters; Aircraft; Aero-structures; Airborne & Space Systems; Land & Naval Defence Electronics; Defence Systems; Security & Information Systems), Leonardo-Finmeccanica operates in the most competitive international markets by leveraging its areas of technology and product leadership. Listed on the Milan Stock Exchange (LDO), at 31 December 2015 Finmeccanica recorded consolidated revenues of 13 billion Euros and has a significant industrial presence in Italy, the UK and the U.S.

surface of the Moon”, said David Parker, ESA Director for Human and Robotic Exploration. “Moon is one of the destinations of the exciting ESA space exploration strategy and programme which calls for sustained human operations in Low Earth Orbit and an integrated approach for exploring Moon and Mars. Assessing the feasibility of economically exploiting local resources is critical for sustaining future human exploration endeavours and PROSPECT will deliver critical knowledge in this regard”.

With a wide range of skills, from the development of hi-tech space equipment and sensors to the supply of satellite services, to the production of satellites and orbiting structures, Leonardo has a leading role in all the most significant international space missions.