

Leonardo-Finmeccanica will develop the largest array of solar panels in the history of Space exploration for the JUICE mission

- **Leonardo's array of solar panels will power the JUICE spaceship on its journey to Jupiter to discover the secrets of the planet and its moons, which could harbour life**
- **At 97 square metres, it will be the largest photovoltaic array ever developed for planetary exploration and will operate at a distance of over 750 million km from the Sun**
- **The size of the array exceeds that of the Rosetta mission, setting a new record and reinforcing Leonardo's place at the forefront of hi-tech space equipment and sensors**

Farnborough, 13 July 2016 – Leonardo-Finmeccanica has been awarded a contract by Airbus Defence and Space, the world's second largest space company, to develop the photovoltaic power generator for the JUICE Space mission. With ten solar panels forming a total surface area of just over 97 square metres, the array will be the largest in the history of exploring the Solar System. The previous record was held by Leonardo's array for the Rosetta mission, which measured 64 square metres. The company has provided numerous such systems to power Space missions and is considered a leader in the field.

Scheduled for launch in 2022 and expected to reach Jupiter in October 2029, the JUICE (JUperiter ICy moon Explorer) spacecraft is being designed and built by Airbus Defence and Space, prime contractor. The European Space Agency mission – with an important contribution from the Italian Space Agency (ASI) - will study Jupiter and its three large, icy moons - Ganymede, Callisto and Europa. Discovered by Galileo Galilei in 1610, the moons are of great interest because they are thought to have vast oceans of water beneath their surfaces, making them potentially habitable environments. The mission will explore the surface and inner layers of the moons, investigating the conditions for the emergence of life.

Leonardo's array uses Gallium Arsenide (GaAs) solar cells, crystals that convert sunlight into electric current. These are optimised for low intensity lighting and low temperatures, which is important because at such a great distance from the Sun less than one twenty-fifth of the sunlight you would get on Earth will reach the spacecraft and the solar panel will reach temperatures of -230°C.

The photovoltaic power generators are not Leonardo's only contribution to the JUICE mission: the company is also involved in the development of the JANUS instrument. Funded by the Italian Space Agency (ASI) and involving an international team led by Parthenope University in Naples and Italy's National Institute for Astrophysics (INAF), JANUS is a high definition camera that will make it possible to further explore Jupiter, its large moons, and its ring system. Leonardo is also collaborating on the mission's MAJIS (Moons And Jupiter Imaging Spectrometer) instrument, lead by the French IAS (Institut d'Astrophysique Spatiale) and developed by an international team with the participation of the INAF and the support of ASI.

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.

This new contracts reinforces Leonardo's leading role in the Space market. The company offers a wide range of skills, the ability to develop hi-tech equipment and sensors, the provision of satellite services and the manufacture of satellites and orbital structures. Leonardo is at the forefront of major international space missions.