

Rome, 8 October 2009

Finmeccanica takes part in the conference “From Galileo to GALILEO: understanding the Universe to improve life on Earth” (Luxembourg, 8-9 October 2009)

The first meeting of the two-day conference entitled “From Galileo to GALILEO: understanding the Universe to improve life on Earth” has taken place today in Luxembourg. The initiative, promoted by the Italian Embassy in Luxembourg, the Luxembourg Education and Research Ministry and ASI, the Italian Space Agency, aims to stimulate debate on the contribution that the space industries of the two countries can give to the sector at European and global level.

The first day’s work, at the Luxembourg Chamber of Commerce, has been dedicated to the issues of telecommunications and earth observation, with the help of Finmeccanica companies operating in the space sector. These companies bear witness to the long tradition of excellence that Italy has developed in this field, from the creation of the country’s first satellites to the GALILEO European satellite navigation programme. Speakers at the event will include Giorgio Zappa, Chief Operating Officer of Finmeccanica, Giuseppe Veredice, CEO of Telespazio, Luigi Pasquali, Chairman and CEO of Thales Alenia Space Italia and Fabrizio Giulianini, Deputy CEO of SELEX Galileo and CEO of Galileo Avionica. The University of Luxembourg will be the venue of the second day, which will focus on how space sector technology can be applied to biomedicine and biotechnology, and how it can be used to prevent and manage environmental emergencies.

The space sector has become very important to a country’s economy, because it develops innovative technologies that bring significant economic and social benefits to other sectors, such as communications, territorial monitoring, management of environmental emergencies and mobility information services, as well as serving defence and security needs. In this context, the presence of Finmeccanica’s space companies at the Luxembourg conference has given us an opportunity to review the role of Italy’s space industry within the GALILEO programme. The origins of the programme were in an agreement between the European Union and the European Space Agency (ESA) to equip Europe with a satellite navigation system independent of the US GPS system, which would be able to meet the needs of a large number of sectors, from transport (air, rail, road, sea) and telecommunications to homeland security. The constellation will comprise 30 satellites on a medium circular orbit (to a height of around 24,000 kilometres), and will provide permanent global coverage, with ground stations managing the programme’s mission.

In his speech, Giorgio Zappa – Finmeccanica’s Chief Operating Officer – recalled how Italy, with its space industries, has traditionally been one of the biggest players – both at national and ESA level – in supporting space technology research and promoting the applications that derive from it, contributing the necessary investment and developing skills and infrastructure. “Italy and its industry”, he emphasised, “have clearly perceived the strong potential for technological development and economic growth that the GALILEO system offers, developing skills in manufacturing and in controlling the constellation and the mission, and in supplying services related to the programme”.

Finmeccanica plays a leading role in the global aerospace and defence industry, and participates in some of the sector’s biggest international programmes through its group companies and well-established alliances with European and USA partners. A leader in the design and manufacture of helicopters, defence and security electronics, civil and military aircraft, aerostructures, satellites, space infrastructure and defence systems, Finmeccanica is Italy’s leading high-tech company. It also boasts significant manufacturing assets and skills in the transport and energy sectors; it is listed on the Milan stock market and operates via a number of group companies and joint ventures. It has over 73,000 employees, with more than 12,600 working in the USA, about 10,100 in the UK and over 3,600 in France. As part of its drive to maintain and build on its technological excellence, Finmeccanica spends 12% of its revenues on Research and Development.

Telespazio's role

Telespazio is Finmeccanica's key operator in satellite navigation and localisation services. At its Fucino centre Telespazio is completing the construction of one of the Control Centres that will manage the 30 satellites of GALILEO constellation, and is also contributing to the development in Rome of the Galileo Test Range, the laboratory which will trial new services and applications. In addition, the company supplied the launch services and is currently involved in the operational management of the GIOVE-B mission, developed by ESA for in-orbit validation (IOV) of the technological solutions that will be used on board the Galileo satellites. Telespazio will supply the in-orbit operational and integrated logistics services for the IOV phase of the Galileo programme, which will see the launch of the first four operational satellites of the constellation. With regard to the European Geostationary Overlay Navigation System (EGNOS), Galileo's precursor, which integrates and improves the performance of navigation systems already in existence, Telespazio is involved in the development and testing of innovative services and applications

Thales Alenia Space's role

Thales Alenia Space, joint venture between Thales (67%) and Finmeccanica (33%), is involved in GALILEO mission at several levels: it is prime contractor for the System and Engineering Segment as well as for the Ground Mission Segment; it participates in the 4 Galileo IOV (In Orbit Validation) satellites construction, including the supply of strategic and complex parts such as the navigation signal generator, the thermal and mechanical structure and the power subsystem; it is responsible of the assembly, integration and test (AIT) of the full satellites at the Satellite Integration Centre in Rome where also GIOVE-B satellite, utilized for the IOV (In Orbit Validation) phase of new technologies and successfully launched in April 2008, has been integrated and tested. Thales Alenia Space is also the industrial prime contractor for EGNOS, the precursor of Galileo, leading a team of 50 partners coming from 11 European countries.

SELEX Galileo's role

Each satellite of GALILEO constellation will be fitted with a very-high-precision atomic clock developed and produced by SELEX Galileo, company which ranks among the first European ones in the Defence Electronics sector. The Passive Hydrogen Maser (PHM) is the most precise clock ever conceived for space applications giving the time signal known as "Galileo time". It has, in fact, a precision equivalent to a difference of one second over a period of time of 3 million years. The Maser atomic clock has been developed in different phases in the framework of programmes funded by the European Space Agency. The physic package of the Maser, has been subcontracted to the Swiss company Spectra Time. For GIOVE-B SELEX GALILEO will also be providing: 2 IRES-NE asset sensor and 6 Solid State Power Amplifiers (SSPA) for the transmission of the satellite signal. The contract awarded to the group for activities relating to GIOVE B and for the first four satellites in the initial phase of the Galileo constellation (IOV) is worth a total of around EUR 36 million.