

Rome, 26 November 2014

## **Finmeccanica Innovation Prize 2014 awarded today in Rome**

*On the tenth anniversary of the Finmeccanica Prize for the best innovative ideas in its own business areas, the awards were assigned to **Alenia Aermacchi**, **Selex ES** and **Telespazio**.*

- **Approximately 15% of the Group's present patent portfolio comprises innovative solutions that participated in the Finmeccanica Innovation Prize contest**
- **In these ten years, the number of proposals submitted have trebled: almost 25,000 Finmeccanica employees throughout the world have worked on roughly 8,500 technological innovation projects**
- **This year the proposal submitted by Alenia Aermacchi also won the National Innovation Prize awarded by the Government at the National Foundation for Technological Innovation, COTEC, the most important Italian prize awarded to *Made in Italy* products**

Today Finmeccanica celebrated the tenth edition of the **Finmeccanica Innovation Prize Award** in its Auditorium. **Gianni De Gennaro**, Finmeccanica's Chairman and **Mauro Moretti**, Chief Executive Officer and General Manager, assigned the prizes to the three best projects, which were selected on the basis of several criteria such as originality, cost reduction and competitive advantage. The winning proposals, selected out of the almost one thousand submitted, were evaluated by an Examination Board chaired by Prof. Luigi Nicolais, President of the Italian National Research Council, CNR.

The Finmeccanica Innovation Prize 2014 was awarded to:

**Alenia Aermacchi** for its “**Thermographic system for fault detection for composite materials in aeronautical structures**”. This system represents a significant step forward compared to traditional detection methods such as, for example, the ultrasound technique which, although capable of detecting the presence of faults in the structure, is unable to outline the shape and size of the fault. Thermographic detection relies on the use of temperature chambers and scanning systems and data acquisition and processing software, which make it possible to accurately quantify the fault and reduce testing costs as it reduces the number of steps in the diagnostic process which, in some cases, may compromise the integrity of the part tested.

**Selex ES** for “**Minimetris: metamaterials for the miniaturization of microwave components**”. Metamaterials cannot be defined as proper materials, as they cannot be found in nature, but are rather artificially engineered structures developed in order to obtain specific optical and electromagnetic features. They make it possible to design devices and systems endowed with innovative characteristics and properties impossible to obtain through conventional methods. The Minimetris project uses metamaterials for the miniaturization of devices installed in our microwave systems such as, for example, several components used in the miniaturization of printed antennas. With Minimetris, the use of metamaterials makes it possible to reduce component size by 20-30% compared to conventional devices, offering evident advantages in terms of volume and weight. The introduction of metamaterial solutions paves the way for innovative devices with state-of-the-art performance features such as, for example, negative refractive indexes not present in nature.

**Telespazio** for “**e-GEOS 3D Smart**”. This is an evolution of the geo-information platform already used for 3D cartographic representations. The solution integrates monitored environment representation modes with highly innovative functions such as the quantification of atmospheric visibility, 3D sound propagation models, the detection of electromagnetic interference, the analysis of traffic flows and security applications for low visibility environments. Through 3D Smart, e-GEOS enhances the value of its 3D products and services, enabling new and increasingly advanced and customised geo-information services for different market segments: for example, note should be taken of the innumerable applications that can be offered thanks to data generated by the Cosmo-SkyMed Earth observation satellite system.

The Examination Board also awarded the **Patent of the Year Award** to:

**Selex ES** for “**IR Detector System and Method**”, an InfraRed (IR) detection system used to detect potential threats which integrates the IR image sensor grid with a processor capable of determining the position of the threat/target detected directly inside the image captured by the sensor. The system thus reduces the time needed to process the signal captured and shortens the time necessary to accurately position the potential threat detected, with evident advantages in terms of a comprehensively quicker response capacity. The innovation presents potentialities that arise not only from the development of new generations of infrared detectors for the military sector but also for other fields of application of sensor-based technologies such as, for example, surveillance missions and law enforcement operations.

### **The Finmeccanica Innovation Award: a breeding ground for ideas and patents**

The Innovation Prize is an international initiative that, ever since 2004, has been addressed to all Finmeccanica employees wanting the present innovative ideas for the business areas covered by the Group's companies. Finmeccanica considers **the innovation of products and processes and individual capabilities** crucial competitive factors in the high-tech sector. This is why every year the Group launches a call for proposals not only among skilled technicians, engineers or other workers in the field of basic and applied research, but also among the personnel of all corporate divisions, as it is convinced that every single individual is the custodian of a heritage of skills and capabilities which can engender innovative ideas that can become a common resource for the entire Group and that, in many cases, find concrete industrial applications.

The Innovation Prize envisages two phases: the **Company Innovation Prize** which is organised within each company of the Group, and the **Group Innovation Prize** which is assigned to one of the three winners of each Company Prize. The innovative ideas are required to meet the largest possible number of the following parameters: originality, cost reduction, a competitive advantage for the company, and industrial relevance in respect of the activities carried out by the Finmeccanica Group. The evaluation also considers other qualifying elements such as collaboration with partner companies and suppliers and with Universities and Research Agencies, a possible “dual” application of the technology, its social and environmental relevance and, lastly, intercompany collaboration through the creation of project-dedicated teams from different geographic and corporate backgrounds. Every year the proposals are evaluated by an Examination Board formed by members of Corporate and by representatives of public scientific research.

The Innovation Prize, over its ten-year history, has produced tangible and measurable results: the proposals submitted have been converted into new and effective applications, often obtaining industrial patent rights. At present, approximately **15% of the patent portfolio** of the Finmeccanica Group is made up of industrial applications arising from the innovative ideas developed for the Innovation Prize and subsequently transformed into projects carried out by the Group's laboratories. Ever-growing participation is the key to the success of this initiative: in the past ten years, the number of proposals presented has trebled and has involved roughly **25,000 people** from the whole Finmeccanica Group who have worked on almost **8,500 projects** aimed at technological innovation. The geographic origin of the projects is highly significant: the 10 proposals that in 2014 came from companies outside of Italy rose to 465 in 2014, bearing witness to the capacity of the Innovation Prize to involve **international-level** resources and projects.

Every year a candidate for the National Innovation Prize, also known as the “**Premio dei Premi**”, which is awarded by the Government at the National Foundation for Technological Innovation, COTEC, is chosen among the winners of the Finmeccanica Innovation Prize. This year the Group Prize winning project presented by Alenia Aermacchi also won at national level in the “Industry and Services – Big Companies” category.

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### **Notes for editors**

**Finmeccanica** is Italy's leading manufacturer in the high technology sector and ranks among the top ten global players in Aerospace, Defence and Security. In 2013 Finmeccanica generated revenues of 16 billion Euro and obtained orders for 17.6 billion euro, with about 64,000 employees operating in 362 sites (of which 138 industrial facilities) in 22 countries worldwide. Listed on the Milan Stock Exchange (FNC IM; SIFI.MI), Finmeccanica is a multinational group which boasts permanent industrial and commercial establishments in four domestic markets (Italy, United Kingdom, United States and Poland) and a significant network of partnerships at international level. Finmeccanica is active, through controlled companies and joint ventures, in the following sectors: Helicopters (AgustaWestland), Defence Electronics and Security (Selex ES, DRS Technologies), Aeronautics (Alenia Aermacchi, ATR, SuperJet International), Space (Telespazio, Thales Alenia Space), Defence Systems (Oto Melara, WASS, MBDA) and Transportation (Ansaldo STS, AnsaldoBreda, BredaMenarinibus).