



Leonardo-Finmeccanica and Bittium to demonstrate the first European cross-platform military radio technology for effective joint operations

Paris, 13 June 2016 - Leonardo-Finmeccanica, an international high-tech security company, and Bittium, a Finnish company providing modern tactical communications systems and reliable, secure communications and connectivity solutions, will demonstrate how the land and forces of different European countries will be able to communicate with each other in joint operations, linking up via a common waveform regardless of the actual radio platforms they use. In the demonstration, the two firms will show how Europe's ESSOR programme (European Secure Software defined Radio) has made it possible for each company's separate systems to interact seamlessly. Demonstrations will take place at the Eurosatory Defense and Security International Exhibition (Paris, June 13-17) at Leonardo's chalet D501 in the outdoor area.

Both systems will make use of the European High Data Rate Waveform (HDRWF), which was developed under the ESSOR to enable improved cooperation in joint, inter-country operations. In the demonstration, Leonardo's Swave SDR (Software Defined Radio) tactical radio and Bittium's Tactical Wireless IP Network™ (TAC WIN) system will form a network where a video stream will highlight the capabilities of the ESSOR HDRWF as well as showing off both systems.

Bittium's TAC WIN system is currently widely used by the Finnish Defence Forces and it enables fast, automated forming of wireless broadband IP network on the field, compatible with existing wireline and wireless infrastructure. Leonardo's Swave SDR is a vehicular 4-channel radio able to host a complete range of waveforms in the range from 2 MHz to 2 GHz.

"ESSOR is an important programme which will allow European forces to work more closely together, in the end helping them be more effective on joint missions. The ability to operate via a common waveform on different radio platforms is the first of its kind and we are proud to demonstrate this capability at Eurosatory, together with Bittium", comments Lorenzo Mariani, Managing Director of Leonardo-Finmeccanica Land & Naval Defence Electronics Division.

"We are happy to be collaborating with Leonardo on this ESSOR interoperability demonstration, and proud to be part of the whole ESSOR community. The programme has been successful in reaching its objectives and Eurosatory is the perfect place to showcase the results for the whole defense community. Our TAC WIN system operating together with Leonardo's Swave SDR perfectly demonstrates the ESSOR High Data Rate Waveform's portability to different SDR platforms", states Harri Romppainen, Vice President of Defense at Bittium.

Both Bittium and Leonardo have been part of the ESSOR programme since it started in 2009. The aim of the programme is to develop European Software Defined Radio technology in order to improve the capabilities for cooperation in coalition operations. The programme was established under the umbrella of the European Defense Agency (EDA), sponsored by the governments of Finland, France, Italy, Poland, Spain and Sweden and awarded by the Organisation Conjointe de Coopération en matière d'Armement (OCCAR) to the dedicated joint venture Alliance for ESSOR (a4ESSOR S.A.S.) to be in charge of managing the industrial consortium. Besides Bittium and Leonardo, the other companies involved in the first phase of the ESSOR - which was successfully completed in 2015 - were Indra from Spain, Radmor from Poland, Saab from Sweden and Thales from France. In addition



to the European High Data Rate Waveform, the first phase of the programme produced the definition for the European Software Defined Radio Architecture. The parties are currently negotiating the second phase of the programme, which will largely focus on achieving operational performance for the ESSOR system.

Further information:

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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, organized into business divisions (Helicopters; Aircraft; Aero-structures; Airborne & Space Systems; Land & Naval Defence Electronics; Defence Systems; Security & Information Systems), Leonardo 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.

www.leonardocompany.com

About Leonardo Swave SDR radio solutions

Leonardo was one of the first companies in the world to invest in SDR (Software Defined Radio) technology, developing the systems since early 2000. This has led to a complete range of products under the Swave family name, which includes handheld, man pack and vehicular tactical radio systems. These products host a wide range of waveform applications and cover all of a potential customer's operational needs.

Bittium specializes in the development of reliable, secure communications and connectivity solutions, leveraging its 30 year legacy of expertise in advanced radio communication technologies. Bittium provides innovative products and customized solutions based on its product platforms and R&D services. Complementing its communications and connectivity solutions, Bittium offers proven information security solutions for mobile devices and portable computers. In 2015, Bittium's net sales of continuing operations, was EUR 56.8 million and operating profit was EUR 2.3 million. Bittium is listed on Nasdaq Helsinki Exchange. www.bittium.com

About Bittium Tactical Wireless IP Network

Bittium Tactical Wireless IP Network (TAC WIN) is a Software Defined Radio based wireless broadband network system intended for military and public safety use. With the system MANET (mobile ad hoc network), link, and connection networks can be formed into one logical IP network quickly, no matter what the location is. Bittium TAC WIN is compatible with existing fixed and wireless network infrastructures. The core of the system is a tactical router that enables users to freely form both wired and wireless broadband data transfer IP connections. Tactical router enables also connections to different types of terminals and other communication systems connecting them into a one communication network. In addition to the router the system comprises three types of radio heads, and each radio head covers its own frequency band area and can be used for flexible formation of optimized network topologies for different communication needs. All the products of the system are designed for harsh conditions, and thanks to the system's automated functions the implementation of the system can be done quickly. Due to the software-based functionality of the Bittium TAC WIN system, it can be easily updated with additional performance cost-efficiently during the whole lifespan of the system.