



PRESS RELEASE

A step forward for communications between European Armed Forces with the completion of ESSOR HDR waveform interoperability qualification tests

The milestone marks a major new achievement for the ESSOR project, with the new a4ESSOR technology proven to facilitate safe and effective joint operations between European land forces

Paris, 14 - 06 - 2022 – The European a4ESSOR consortium has successfully performed interoperability tests using the new ESSOR High Data Rate (ESSOR HDRWF) waveform. These tests are part of the ESSOR (European Secure Software defined Radio) project, launched at the end of 2017 by a4ESSOR and OCCAR (Organization Conjointe de Coopération en matière d'Armement) on behalf of Finland, France, Germany, Italy, Spain and Poland.

The testing took place in Poland, with Software Defined Radios (SDRs) from a4ESSOR's industry partners (Bittium, Indra, Leonardo, Radmor and Thales) equipped with the ESSOR HDRWF, all connected to an automated test environment. This made it possible to verify that the ESSOR HDRWF could handle a number of operational use scenarios, demonstrating full interoperability. The same environment was previously used to conduct testing and preliminary validation activities for participating nations' SDR platforms.

The tests demonstrated ESSOR HDRWF's excellent performance, including its networking (MANET - Mobile Adhoc Network), data transmission (IP), security, push-to-talk, radio silence mode and co-habitation (spectrum sharing) features.

"The successful completion of the HDRWF interoperability tests highlights the work done over the last four years. Four different SDRs from four different vendors of four different nations proved to be interoperable thanks to the ESSOR HDRWF and architecture. We are providing European nations with an excellent product that will enable land-based armed forces to operate jointly and in an increasingly integrated manner. This result underlines the importance of the European industrial collaboration implemented through a4ESSOR. It is our hope that NATO will adopt the ESSOR HDRWF as an interoperability standard, allowing for more integrated land communications across all Alliance members", said Lino Laganà, President and General Manager of a4ESSOR.

The ESSOR project's next milestone will be to test the ESSOR HDRWF on a radio from Germany's Rohde & Schwarz. Germany and Rohde & Schwarz joined the programme at the end of 2020.

About a4ESSOR SAS

a4ESSOR S.A.S. is a joint venture organized and existing under the laws of France, set up by six EU leading companies: Bittium Wireless Ltd, Indra, Leonardo S.p.a., Radmor S.A., Rohde & Schwarz GmbH & Co. KG and Thales Communications & Security S.A.S in order to manage the ESSOR (European Secure Software defined Radio) contract awarded by OCCAR-EA and to promote the ESSOR products in the SDR community.

ESSOR

The aim of the ESSOR programme, currently sponsored by the governments of Finland, France, Germany, Italy, Poland, and Spain, is to develop pan-European Software Defined Radio (SDR) technology in order to improve the ability of Armed Forces

to cooperate in joint operations and also to develop new ESSOR waveforms (E3DWF, ENBWF, ESATWF), in the frame of ESSOR ENC (ESSOR New capabilities) project.

The ESSOR programme will continue, with further activities including the porting of the ESSOR HDRWF to Rohde & Schwarz's SDR and a new interoperability verification test session. In addition to the European High Data Rate (HDR) waveform, the programme has produced and validated a European SDR architecture, now qualified on six different European platforms. The benefits of waveform interoperability are regularly demonstrated through network testing involving different ESSOR national platforms.