

EULER

European Software Defined Radio for wireless in joint security operations

Outline

EULER collaborative research project gathers main European actors to demonstrate how the benefits of Software Defined Radio can be leveraged in order to enhance interoperability and fast deployment in case of national and international joint emergency service operations. The consortium carrying out the EULER project is made of a strong group of end-users, academic research institutes and major industrial partners.

Approach

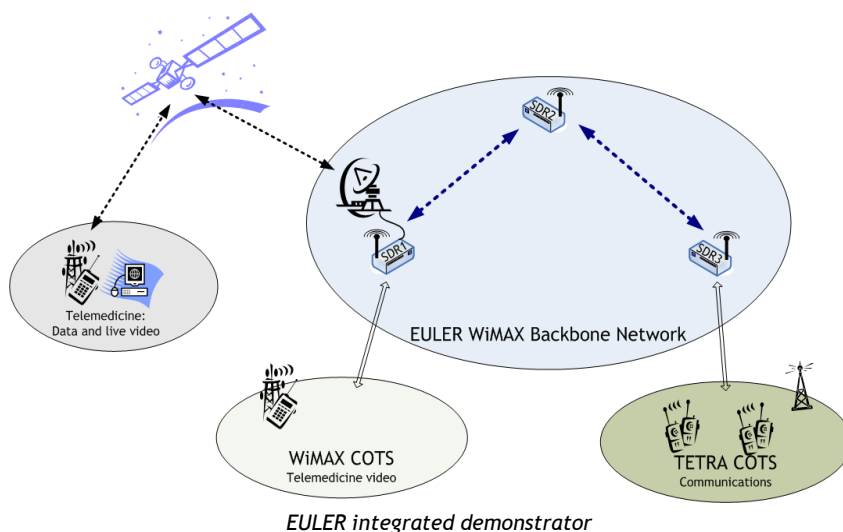
In cooperation with a strong group of end-users in Europe, EULER will contribute in proposing and demonstrating a more agile, interoperable, robust communication system supporting a new range of services to its users.

Motivation

Communication systems used on field by security organisations constitute major elements enabling restoring security and safety after crisis in an efficient manner. Large scale events necessitate the cooperation between security organisations of different nature and different nations.

Fully programmable radios (Software Defined Radios) with standardised software interface allow to design the system architecture and reference wireless communication waveform in a software portable fashion, hence guaranteeing reusability of these elements across platforms from different organisations and suppliers.

Highspeed communication backbone allows emerging types of services such as on-field video, telemedicine, but also usual PMR ones. New reference high-speed radio waveform is needed to fulfil the functional, technical, security and operational requirements in multitude of unpredictable conditions.



Vision

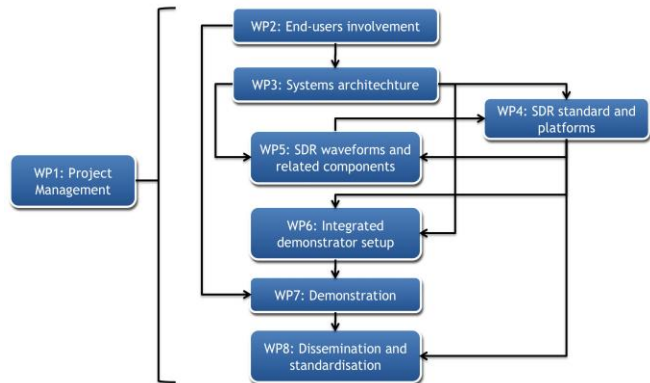
The EULER -project will shape and clarify the European vision for interoperability in joint emergency and security services in close cooperation with E.U. stakeholders in the field of security forces management.



EULER-project and consortium

The EULER-project will

- propose a new high-data-rate waveform for emergency and security operations,
- strengthen and mature ongoing efforts in Europe in the field of SDR standardization,
- provide proof-of-concept waveform implementation and portability on several Software Defined Radio (SDR) platforms and
- realize an integrated demonstrator targeted towards end-users.



EULER project structure

The Consortium

Thales Communications S.A.	France
EADS Secure Networks	France
Astrium Limited	United Kingdom
Budapest University of Technology and Economics	Hungary
Elsag Datamat s.p.a.	Italy
Selex Communications s.p.a.	Italy
Telespazio s.p.a.	Italy
Universita di Pisa	Italy
Saab Communications	Sweden
TNO	The Netherlands
Indra Sistemas S.A.	Spain
Rohde & Schwarz gmbh.	Germany
Centre for Wireless Communications, University of Oulu	Finland
Prismtech Limited	United Kingdom
IMEC	Belgium
JRC - Joint Research Centre	Belgium
Ecole Supérieure d'Electricité	France
Elektrobit Wireless Communications	Finland

EULER is FP7 Security research collaborative project:

- Duration: 36 months
- Start date: 1st March, 2009
- Total cost: € 15,468,483
- EU Contribution: € 8,720,692

Coordinator:

Thales Communications France

Contact:

Bruno Calvet

Tel: +33 (0)1 41 302 084

bruno.calvet@fr.thalesgroup.com

