## 24th of February 2016
## TRITON final workshop at the Joint Research Centre of the EC

**JRC premises in Ispra**
Via Enrico Fermi, 2749 - Ispra (VA)

***Agenda***

Participants arrival and reception

**10.00:** Introduction to the workshop and presentation of the agenda

**10:25:** PANEL: The need of robust and secure systems in marine applications

*A discussion with key experts in maritime domain moderated by Prof. Fabio Dovis*

**13:00:** Quick visit to JRC labs and lunch break

**14:30:** A flavour of TRITON…live demonstration of the developed prototypes

**15:00:** TRITON Consortium presentation

**16:30:** Conclusions and workshop wrap up

**17:00:** End of workshop

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7i GROUP
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TRITON
ROBUST ON-BOARD SHIP EQUIPMENT

# TRITON

(TRusted vessel Information from Trusted On-board iNstrumentation)

# contributes to increase the trustworthiness of ship reporting systems and, in turn, the security of the maritime domain

This project if funded by the EU Seventh Framework Programme (FP7 2007-2013) under the Grant Agreement n. 312687

*A new consciousness has arisen in the scenario of the civilian and commercial maritime control: surveillance and safety systems may be under the attack of unintentional or malevolent players, whose aim (or effect) is to bypass or mystify the control system to obtain economic or personal gain.*

*The Consortium organised a final workshop to disseminate the project results and discuss on them with key experts in maritime domain.*
*See the agenda in the last page*

## What TRITON has worked on...

Acknowledging the primary role of Global Navigation Satellite Systems (GNSSs) – i.e. GPS, Galileo – to support Ship Reporting Systems (SRS), TRITON analysed practical solutions for GNSS jamming monitoring and spoofing detection. The most promising solutions have been implemented in a robust GNSS module, part of a new on-board system prototype.

TRITON proposed to enforce AIS reliability and safety, by adding a new communication channel in the UHF band. The project analysed lightweight solutions and evaluated methods for adding signatures on top of the messages. The white space communication system overcomes most of current limitations, adding a secure, broadband layer.

## What TRITON has done...

Design and development of a “trusted” GNSS based positioning module, built in software radio technology.

Design and development of a robust communication module, interfacing with a commercial AIS.

Specific in lab tests to integrate the developed prototypes.

## What TRITON has addressed in the last months..

A test campaign at the Joint Research Centre (JRC) of the European Commission took place in Ispra in October 2015, with the primary objective of stressing the prototypes with intentional interfering signals and assess the real improvements they offer. Major results have been disseminated to stakeholders and to the scientific community.