

SIMTISYS

Simulator for Moving Target Indicator System

SPACE SUPPORT TO MAJOR TOM

Space-borne radars mounted on single or formation-flying satellites play a pivotal role for enhancing the EU's service capabilities to undertake efficient maritime surveillance. SIMTISYS supports their development.

Above the open waters of the oceans and seas, radars mounted on satellites flying in Low Earth Orbit (LEO) may become invaluable means for enhanced policing of these challenging environments, and a source of critical information during rescue operations.



Dangerous world © Argus - Fotolia.com

SIMTISYS supports the development of next generation Radar satellite capabilities to improve the Service Quality level for citizen security and environmental monitoring.

The development of European capabilities for effective Moving Target Indication by Space Based Radar (MTI SBR) technologies is a priority, which could be exploited in a range of policy purposes, from border surveillance, to maritime traffic monitoring, environmental protection and fishery control. Actually, the FP7 space research project NEWA has initiated a review of the state of the art in EU competences for MTI SBR technologies.

The SIMTISYS project is based on NEWA's work, and it will develop and implement a simulator for an MTI system, which is an important precursor for the development of advanced operational services in the area of moving target identification.

SIMTISYS will provide a useful and powerful tool, which helps the users, such as civil protection and coast guard authorities, with the detection and tracking of small vessels in defined scenarios.

Indeed, the involvement of these user groups, through the interviews conducted in NEWA, allows SIMTISYS to explore technological solutions in response to concrete user demands, rendering the output of this Project very valuable in both technological and practical terms.



CLAUDIO CATALLO
IS PROJECT COORDINATOR

QUESTIONS & ANSWERS

What do you want to achieve with this project?

A global and integrated Maritime Surveillance System should, in particular, allow dual use. It should also support the recovery activities after a natural disaster.

Why is this project important for Europe?

The MTI technique can support the European Union in the monitoring of both cooperative and non cooperative vessels, natural and human disasters, etc. SIMTISYS is the first step in the configuration of an MTI system and can be expanded including all different space sensors. It can also integrate other platform data correctly dimensioned.

How does your work benefit European citizens?

Focussed on Maritime Surveillance, SIMTISYS will help the users and the service providers to improve the quality of the space data and support the integration of data coming from different platforms in a unique and clear way.

SIMTISYS

Simulator for Moving Target Indicator System



LIST OF PARTNERS

- Thales Alenia Space Italia, Italy
- Università di Roma "La Sapienza" dept. DIET, Italy
- Universitat Politecnica de Catalunya, Spain
- DEIMOS Space, Spain
- Sistemica SpA, Italy
- VEGA Space, United Kingdom
- D'Appolonia, Italy

COORDINATOR

Thales Alenia Space Italia, Italy

CONTACT

Ing. Claudio CATALLO

Tel: +39 06 4151 2551

E-mail: Claudio.catallo@thalesaleniaspace.com

PROJECT INFORMATION

Simulator for Moving Target Indicator SYstem
(SIMTISYS)

Contract no: 263268

Duration: 30 months

EU Contribution: € 1.643.701

Estimated total cost: € 2.489.926

