



Newsletter #1

SEPTEMBER 2016

Introducing the project RANGER

RAdars for lo**NG** distance maritime surveillance**E**
and Search and Rescue ope**R**ations

Foreword

'10 partners from 7 countries; a balanced blend of technology providers, domain experts, and end-users'

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For more Information

Please visit the **RANGER** website @ www.ranger-project.eu

You can also keep up with more of what is happening at **RANGER** project by following us on:

Twitter:
@ H2020Ranger

LinkedIn:
<https://www.linkedin.com/groups/12014068>

Dear readers,

Welcome to the first edition of the RANGER project newsletter.

This newsletter intends to keep public and stakeholders abreast of project activities and findings, and to provide an update on relevant developments.

What is the project about?

RANGER is a European project, co-funded by the European Union's Horizon 2020 research and innovation programme. RANGER combines innovative Radar technologies with novel technological solutions for early warning, in view of delivering a surveillance platform offering detection, recognition, identification and tracking of vessels, beyond current radar systems' capabilities, thus drastically improving the response and intervention capacity of European SaR services.

What is the concept?

Today, sea-border surveillance and the monitoring of maritime traffic within the Exclusive Economic Zone (EEZ) are of critical importance, especially for the Mediterranean Sea. Widespread irregular immigration, criminal trafficking, piracy and terrorism threats need to be addressed in order to ensure maritime security. However, while Europe needs to have the capability to act in response to the numerous crises occurring within its maritime environment, current maritime surveillance is no longer adequate to cope with these challenges.

RANGER -RADars for loNG distance maritime surveillancE and SaR operations-European project is designed to address these issues by providing novel technologies that enable more effective Search and Rescue operations and crime confrontation in maritime environment.

RANGER solution will contribute to the enhancement of maritime border security and crime prevention capabilities (irregular immigration, human trafficking, smuggling, illegal fishing and other illegal activities) through radar systems capable of detecting small vessels over the horizon in different Mediterranean sites supported by data fusion and machine learning mechanisms that provide more accurate early warning alerts to coast guards or other authorities responsible for maritime security.

This first newsletter is an introduction to the RANGER project and its main objectives. In the next editions we will provide more information about our activities, as well as highlights of our main findings and results. So, stay tuned!

Factsheet

Project name: RANGER RADars for loNG distance maritime surveillance and Search and Rescue operations

Start date: 1 May 2016

Duration: 42 months

Budget: € 7,992,312.5

Coordinator: EXUS Software LTD

Partners: 10 partners

Project objectives:

- ⇒ To provide an advanced solution for traffic surveillance and Search and Rescue operations offering vessel detection, recognition, and identification capacities far beyond existing radars in terms of both target size and range for traffic surveillance and Search and Rescue operations;
- ⇒ To lower the total cost of ownership (acquisition, installation, operation and maintenance) compared to existing radar solutions;
- ⇒ To ensure compatibility of the RANGER platform with CISE, already from the design phase in order to safeguard seamless interoperability in line with the CISE compliance framework through a scalable set of CISE-ready RANGER services;
- ⇒ To validate and demonstrate the effectiveness of the integrated RANGER platform in relevant environments by the actual public authorities/end-users in two terrain-diverse operational scenarios that will be implemented in two phases each, one in an open sea environment and the other in a maritime environment populated with numerous islands;
- ⇒ To define a multilevel compliance framework that RANGER solution will be aligned with.



Launch of RANGER project

Kick off meeting in Athens



The RANGER Kick off Meeting, organized by ICCS and held in Athens, Greece, on 25th and 26th of May 2016, brought together all of the members of the RANGER consortium. During the meeting the partners of the project introduced themselves and presented their aspirations in what concerns the project (role, main contribution, state of the art of their technology etc.).

In addition all aspects regarding administrative and financial issues were discussed and also the planned work for the work packages were thoroughly examined and finalized in order to start the project from a solid basis.

The RANGER Consortium

The project consortium, a balanced blend of technology providers, domain experts and end-users, comprises 10 partners from 7 countries.

	EXUS Software LTD (EXUS)	United Kingdom	http://www.exus.co.uk
	Diginext Sarl (DXT)	France	http://www.diginext.fr
	Institute Of Communication and Computer Systems (ICCS)	Greece	http://www.iccs.gr/
	Technische Universitaet Dresden (TUD)	Germany	https://tu-dresden.de/
	LAUREA-Ammattikorkeakoulu OY (LAU)	Finland	https://www.laurea.fi/
	Finmeccanica-Societa Azioni (FNM)	Italy	http://www.leonardocompany.com
	Telesto Technologies Pliroforikis kai Epikoinonion EPE (TEL)	Greece	http://www.telesto.gr/
	NATO Science and Technology Organisation (NATO)	Belgium	https://www.sto.nato.int
	Ministry of National Defence (HMOD)	Greece	http://www.mod.mil.gr
	Ministre de l' Ecologie du Developpement durable et de l' Energie (DMA)	France	http://www.developpement-durable.gouv.fr

Project News & Meetings

End-user Requirements Workshops (Greece & France)

In the framework of Work Package 2, Task 2.2: *Generic and Pilot-specific Mission and Operational Requirements Elicitation*, two special workshops were organized on 26 & 27 July 2016, in Athens—Greece and on 27 & 28 September 2016, in Toulon - France. The workshops were attended by EXUS, as project Coordinator; LAU, as Work Package 2: *Mission, Operational and System Requirements* leader; HMOD, as Task 2.2: *Generic and Pilot-specific Mission and Operational Requirements Elicitation* leader; The Hellenic Navy and DMA as end-users; and ICCS, as project Technical manager.

During both workshops, special sessions took place on different possible operation scenarios during maritime surveillance i.e. safety and security, border control, environment and customs. Examples were provided to the participants on how operations currently take place and on how the consortium would expect operations to be performed after the deployment of RANGER. Each participating organization (LAU, HMOD, DMA) presented its role in such operations, providing specific examples and clarifications with regard to the way that the requirements should be provided by end-users.

The objective was to identify the specific requirements of the RANGER platform from the end-users' perspective. To that end, experienced personnel in national and international command and control centres as well as sea authentication operations, set the generic operational framework for the platform by providing their expert opinions. In collaboration with the authorities responsible for the organization of the two project pilots for the validation and demonstration of RANGER, in France (open sea environment) and in Greece (archipelago), the requirements were further analyzed and specified.

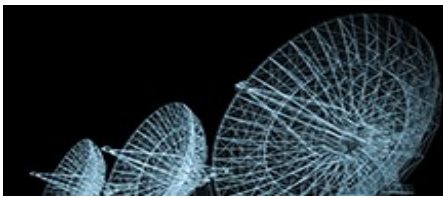


Related Conferences & Events



HomSec Int'l Fair for Security and Defense Technologies, 14-16 March 2017, Madrid, Spain

<http://www.homsec.es/>



European Conference on Antennas and Propagation (EuCAP) 2017, 19-24 March 2017, Paris, France

www.eucap2017.org



LIMA 2017 Langkawi International Maritime and Aerospace Exhibition, 21-25 March 2017, Kuala Lumpur, Malaysia

<http://www.limaexhibition.com/>



IEEE SoutheastCon 2017, 30 March - 2 April 2017, Charlotte, NC, United States

sites.ieee.org/southeastcon2017/



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For more Information

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www.ranger-project.eu



You can also keep up with more of what is happening at RANGER project by following us on:



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THE CONSORTIUM



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