



Radars for loNG distance maritime surveillance and Search and Rescue operations



Date

The RANGER EU project realised its first Pilot in real environment and validated successfully its integrated platform.

RANGER is an EU funded project that aims to provide open and safe seas and oceans and protect against a wide array of maritime threats by advancing the current state-of-the-art in maritime surveillance technology with a platform consisting of two radar and supporting technologies. The RANGER system is offering detection, recognition, identification and tracking capabilities of suspicious vessels using a novel Over-The-Horizon (OTH) Radar combined with a photonic enhanced Multiple Input Multiple Output (PE-MIMO) Radar and an Early Warning System exploiting data fusion and machine learning techniques able to automatically detect anomalies. Interoperability with CISE and existing legacy systems constitute the interoperability features of the RANGER platform.

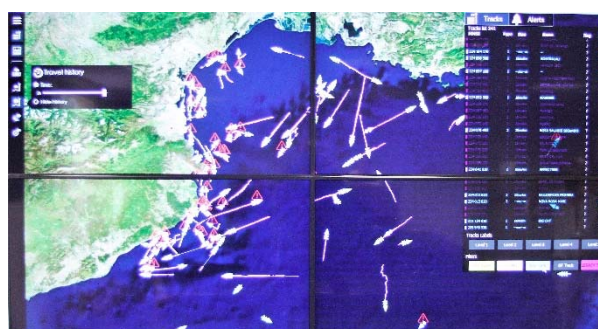


This project has received funding from the European Union's H2020 research and innovation programme, under grant agreement no 700478.

RANGER project has been funded by the European Union's H2020 research and innovation programme, it runs from May 2016 for 42 months and it is implemented by 10 partners from 7 EU members.

The 1st RANGER Pilot, during which the RANGER platform capabilities and performance were assessed, was held on the 16th of October 2018 in the marine area between Cape Bear and Toulon in France.

The objective of the first sea trial was to validate the system in the open sea, with the collaboration of the technical partners and the French end-user partner, the French Ministry for an Ecological and Solidary Transition (DMA). The integrated RANGER platform and its main features were tested and validated following a specific scenario, which lasted from early in the morning until late in the evening. In this scenario four different kinds of vessels participated, following specific routes, in order to test different capabilities of the system like detection and continuous tracking, data fusion, violation of specific rules and early warning alerts, visualization of the tracks and compatibility with CISE.



The consortium collected valuable feedback, reached to important conclusions and learnt major lessons concerning RANGER's platform capabilities, which will lead to further required improvements and refinements. After the very successful first Pilot, a second validation Pilot will follow in the next months, this time in a completely different maritime environment, which the Aegean Sea with the numerous islands in Greece offers.



For further information regarding the project, please contact:

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Or visit the project's official website: ranger-project.eu

Project's Information

Start Date: 1st May 2016

Duration: 42 months

Budget: 7,992,312.5



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- Technische Universitaet Dresden, **TUD, Germany**
- LAUREA- Ammattikorkeakoulu, **LAU, Finland**
- LEONARDO S.p.A _ **LEONARDO, Italy**
- Telesto Technologies Pliroforikis kai Epikoinonion EPE, **TEL, Greece**
- NATO Science and Technology Organisation, **NATO, Belgium**
- Ministry of National Defence, **HMOD, Greece**
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