Maritime safety and security

SEANET

HIGH-SPEED OFFSHORE SHIP-TO-SHIP COMMUNICATION WITHIN THE SAME FLEET

All sections of the maritime community have voiced the need for ship-to-ship communication, particularly at a distance offshore. Officially recognised in 2009, SEANET's objective was to develop exchanges between ships operating in the same area and equipped with the same communication device over distances of 20 to 30 nautical miles, whether close inshore or further out to sea. The intention was that the communications network should be able to cope with changes in vessel cricumstances by exploiting reconfigurable intelligent connectivity systems.

The project's work focused particularly on a feasibility study of whether propagation was adequate using the chosen frequencies, of the tolerance of multi sector antenna given the rolling and pitching of the ships, of implementing vertical diversity at sea, of dynamic antenna management and also of the ships' ad-hoc networking incorporating reconfiguration of the topology in response to their changing situation.
This concept was validated and the SEANET partners must now bundle LTE (ship-to-shore) and ship-to-ship technology.

Three posts were creating during the project and 1 patent is in the process of being registered. SEANET was the subject of 5 scientific publications and was presented at 3 conferences. In terms of commercial prospects, the aim of the partners is to economically develop the separate basic modules - antena, transponder, etc. A review is also underway of those applications and clients likely to use the system at this stage.
The ultimate aim is to offer maritime communities a reconfigurable system capable of high-speed communication over long distances and at a low cost.SEANET will offer highly significant technological advances in the field of communication networks for maritime applications.

SEANET project is recognised jointly by Pôle System@tic and Pôle Mer Bretagne.

Partners

Companies

Thales Communications & Security, Colombes [Project Developer]
Déti, Brest
Estar, La Richardais
Satimo, Brest et Courtabœuf

Research centers

ENIB, Brest
IMT Atlantique Bretagne-Pays de la Loire, Brest

Other partner

Technopôle Brest-Iroise, Brest

Funders

- Fonds Unique Interministériel
- Région Bretagne
- Conseil départemental du Finistère
- Brest métropole

Labelisation

20/11/2009

Overall budget

3 748 K€