Maritime safety and security



# PORTABLE SONAR TO IMPROVE UNDERWATER IMAGING AND NAVIGATION FOR DIVERS

The SINAPS project involves developing an autonomous portable sonar system for divers, which is capable of detecting objects using acoustic and video cameras. This innovative concept will incorporate crucial detection, navigation and communication functions within the one device using a data-fusion process.

The object is to perfect an autonomous device integrating the most advanced functionalities:

- Near-seabed detection by video and also acoustic imaging using a high-frequency acoustic camera capable of identifying a partially buried object or obstacle in even the most limited visibility.

- Navigation capability for continuous positioning of the submerged system using navigation sensors, GPS receiver to fix an initial point on the surface and DVL to measure speed in relation to seabed.

- Acoustic communication to facilitate the exchange of information between divers and between divers and surface.

The SINAPS project is recognised jointly by the Pôle Mer Bretagne Atlantique and the Pôle SYSTEM@TIC.



## Partners

### Companies

RTSys, Caudan [Project Developer] SBG Systems, Rueil-Malmaison Seaways, La Trinité sur Mer

#### **Research center**

ISEN, Brest

#### Funder

Financé sans aides publiques

Labelisation

14/03/2014

**Overall budget** 

1 866 K€