MODENA

MARITIME SURVEILLANCE INCORPORATING THE CONCEPT OF INTELLIGENT VISION

MODENA (Modélisation de l'Observation à Distance de l'ENvironnement mAritime) stands for modelling of remote monitoring of the marine environment. Numerous methods are used for ocean surveillance – airborne, satellite, ship, coastal, etc. – and various technologies are employed. These call on a range of active and passive sensors varying widely from optronic sensors to radar, sonar, etc. with the result that data collected then has to be compiled. It is anticipated that advances in this area will enable the various technologies and surveillance methods to 'speak to one another' within the context of a 'systems' system' thereby moving from an accumulation of heterogeneous information to a synthesized vision of situations under observation. Current advances also focus on problems involved in taking account of the specifics of particularly complex fields of observation, such as with moving objects and substances adrift on or in a moving environment.

MODENA is a marine environment modelling platform for simulating maritime surveillance systems and as such brings together experts in wave/matter interaction, information processing and geophysics.

MODENA is an R&D tool which will make it possible, at a very early stage of the product design process, to take account of the huge diversity of parameters in the monitored environment and the constraints imposed on inter-data dialogue, thereby facilitating development of new and more intelligent sensors and surveillance systems. MODENA will constitute a genuine scientific and technological breakthrough and Brittany has the companies and research centres with the skills to ensure its success. A great deal is at stake involving the successful acquisition of a share in rapidly expanding markets relating to the field of homeland safety and security – anti-pollution measures, fishing ground surveillance, combating illegal immigration and all types of trafficking, sea rescue operations, etc. – as well as relating to monitoring of coastal environment and sea conditions, weather/climate forecasting, flood zone surveillance, etc.

Partners

Companies

Artal Technologies, Labèges [Project Developer]
CLS, Brest
Marée, Lorient
Satimo, Brest
Thales DMS, Brest

Research centers

ENIB, Brest
ENSTA Bretagne, Brest
IETR (Institut d'Électronique et de Télécommunications de Rennes), Rennes
Ifremer, Brest
IMT Atlantique Bretagne-Pays de la Loire, Brest
IREENA, Nantes

Funders

- Fonds Unique Interministériel
- Région Bretagne
- Conseil départemental du Finistère
- Conseil départemental d'Ille-et-Vilaine
- Brest Métropole
- Lorient Agglomération
- Rennes Métropole

Labelisation

20/10/2006

Overall budget

3 005 K€