Maritime safety and security

GEODESIC / MEDUSA

HIGH-TECH MARITIME SURVEILLANCE THAT FACTORS IN HUMAN BEHAVIOUR

At a time when we are witnessing an explosion in publicly available information technology, the development of human-centred rather than machine-centred applications is becoming a priority. Such applications must take account of user habits and provide genuine task-related support, as well as establish the user's role in contexts and environments that may vary widely.
In the professional world, IT systems' capabilities are continually expanding as a result of component miniaturisation, enhanced computing power and advances in signal and image processing. The wide variety of tasks and the complex functions involved in the field of aerial maritime surveillance mean that 100% automation is not possible without performance being impaired. A degree of human involvement remains essential. The workload of those operating surveillance aircraft is considerably increased by the range of on-board sensors – radar, optical and infrared cameras, radar detectors, ultraviolet scanners to detect deliberate pollution, AIS for ship identification and new means of communication for getting rapidly in touch with decision-makers and relevant public authorities.
The aim of the GEODESIC/MEDUSA project is to introduce behavioural aspects of user-system interaction upstream in the design of new systems for dealing with maritime emergencies. An iterative methodology will be used to reconcile the need to make a system user-friendly, easy-to-learn and efficient with its complexity and the multiplicity of interactions involved. When a user has to deal with a crisis situation, the elements needed for controlled management of that crisis will come from having factored human behaviour in relation to the system into its design from the initial stages.
Intended for use by the French government maritime initiative, Action de l'Etat en Mer, and for managing maritime shipping, GEODESIC/MEDUSA will enhance operators' responsiveness in stressful situations and will facilitate decision-making. The project falls within the themes defined by the recent French government marine environmental audit – the Grenelle de la mer – and will contribute to improving the management of maritime emergencies that have the potential to impact significantly on the marine environment.

Partners

Companies

Thales DMS, Brest [Project Developer]
Sodius, Nantes et Paris

Research centers

Enac, Toulouse
ENSTA Bretagne, Brest
IMT Atlantique Bretagne-Pays de la Loire, Brest

Funders

- Fonds Unique Interministériel
- Région Bretagne
- Conseil départemental du Finistère
- Région Pays de la Loire

Labelisation

16/10/2009

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1 875 K€