

MarNIS PROJECT DEMONSTRATES VISIONARY EUROPEAN MARITIME NAVIGATION INFORMATION SERVICES CONCEPT

Almost four years after it started, the EC-funded MarNIS project is getting ready to demonstrate its visionary Maritime Navigation Information Services concept in **Genoa (Italy) from 23-25 September 2008 and Lisbon (Portugal) on 15-16 October**.

The MarNIS concept, which aims for implementation across EU Member States by 2012-2020, integrates vessel traffic management, search and rescue and environmental protection under one (virtual or physical) roof. In most Member States, these services are currently physically and administratively separate, but there are many advantages to integrating them, not least the potential for greatly improved efficiency through sharing of data and resources, leading to solid Maritime Information Management.

At the heart of the MarNIS concept is the use of existing, new and emerging technologies to provide a National Single Window for details of transiting vessels. These are then available for vessel traffic management and admission policy, as well as pollution control and search and rescue. Customs, immigration and security authorities could also have access to the information.

The traffic image uses data from onboard Automatic Identification System (AIS) transponders to give vessel position and past trajectory, as well as static and dynamic data such as ETA, next port of call and cargo. So-called 'web maps' (spatially referenced data available online) can be overlaid on the display to present real-time meteorological and hydrological data, like wind, tide, swell, and wave height. Web-mapped information may also be sent onboard to pilots equipped with a special portable unit to provide dynamic under-keel clearance data in real time.

MarNIS also introduces methodologies to address 'high risk ships', which are determined according to a list of risk criteria and can therefore be monitored more proactively. This enhanced traffic image will enable operators manning a suitably equipped centre to minimize risks. In the event of an incident, sophisticated drift models can be run to predict the movement of a ship that has lost command, an oil slick, or persons overboard, again using web mapping.

Earlier versions of the concept, mainly concentrated on Maritime Operational Services, were tested at the Maritime Coastguard Agency Training Facility in Highcliffe (UK) in February 2007 and again, in a realistic operational environment at the MCA Maritime Rescue Coordination Centre in Milford Haven (UK), in June 2007 and February 2008, with generally positive reactions from users.

The MarNIS concept could require changes to national and possibly international regulations. New job profiles and appropriate training for coastguards and vessel traffic services operators will also need to be addressed. It is therefore important that the public, decision-makers and potential end-users are given an opportunity to join in the debate on its implementation. The forthcoming demonstrations in Genoa and Lisbon are part of this process, and we hope that a wide range of stakeholders will attend one or both of the demonstrations, express their opinions and make constructive suggestions.

For further information and details on registration for these events see: <http://www.marnis.org>

