

European Project tests new SAR tools

Through sharing of data between vessels, new tools developed to enable more digital communication can make Search and Rescue operations both faster and better.

When navigating a ship through the less busy routes of the world, for example in Arctic waters, the ability to share data could take on increased significance in coming years. By using a new service developed with funding from the Nordic Council of Ministers and supported by the European Union project EfficienSea2*, seafarers will be able to automatically exchange and coordinate vessel positions and search patterns while conducting SAR operations.

The service, which is available for all ships sailing through Arctic waters, is free of charge and only requires a functional internet connection and a log-in to the map-based platform ArcticWeb**, has just been successfully tested at simulations in Gothenburg by Chalmers University of Technology and the Swedish Maritime Administration.

EfficienSea2 Work Package Leader Cajsa Jersler Fransson from the Swedish Maritime Administration explained: *‘We have done three days of full-bridge simulations with mariners to ensure the readiness of the service and to test how the digital data can best help the human beings who will be sailing the ships and leading the SAR operations. We feel confident that it will benefit everyone involved in conducting SAR operations.*

The most significant feature of the new Search and Rescue tools is how a coordinator can assign specific areas to different vessels and benefit from pooling many ships through a digital platform. Rather than doing everything over radio, all ships will be able to see updated search patterns directly on ArcticWeb. It will give much more situational awareness when conducting emergency operations.

Open Source Development

The digital SAR tools have been developed in open source, which makes the service open for all to adapt to their own specific platform and area. Cajsa Jersler Fransson is hopeful that other projects, companies or organisations will do that:

She said: *‘The mariners saw some obvious benefits with the new service, with the main one, naturally, being the reduction in time and energy spent on calculating different search areas for different ships. I think the need for the*

service is strong and now we've done the groundwork in EfficienSea2 for others to benefit from.'

It is understood that a large report taking human factors into account will be produced on the new tools.

Readers interested in the new tools can find more information on EfficienSea2's website to be found at: <http://efficiensea2.org/>

Picture caption

A screenshot taken during the simulation.

Photo: EfficienSea2 ©.

*EfficienSea2 runs from 1 May 2015 to 30 April 2018.

The budget amounts to €11.5 million of which € 9.8 million have been granted by the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 636339.

EfficienSea2 is focused on the Baltic Sea and Arctic waters, but is paving the way for a global roll-out of e-Navigation solutions and involves 32 EfficienSea2 partners.

EfficienSea2 is a Flagship Project in the EU Strategy for the Baltic Sea Region.

**For ArcticWeb see: <https://arcticweb.e-navigation.net/>