



## Flagship

### EUROPEAN FRAMEWORK FOR SAFE, EFFICIENT AND ENVIRONMENTALLY-FRIENDLY SHIP OPERATIONS

#### Objectives:

The rapid development of satellite communication and the Internet have provided the means by which data can be gathered instantaneously and in large amounts. However, data is not knowledge; it is only the pre-requisite for knowledge. Knowledge results from analysing the data and processing it intelligently so that it can be acted upon either in an automatic fashion or by humans which are either acting in isolation or in an integrated (though possibly geographically fragmented) group.

The vision of FLAGSHIP is to create the mechanism by which the expertise of all the required actors can be brought together in real time, independently of their location, and given to the right people, in the right format, at the right time and incorporating the highest level of knowledge, so that they can better manage all the questions which confront a ship operator: issues relating to the ship itself and its equipment (e.g. hull monitoring, equipment diagnostics, maintenance planning), its day-to-day operation (e.g. navigation, cargo, rule compliance) as well as emergencies and other exceptional situations (collision, fire, etc.)





## Expected Results:

- ✦ Monitoring systems for real-time assessment of hulls will extend the life of the existing fleet of Tankers and Bulk Carriers by up to 5 years.
- ✦ Monitoring tools for fuel efficiency indicators shall assist ship owners to improve energy efficiency by up to 10%.
- ✦ The decision support frame will reduce the time for a user's decision by a factor of 2 compared to present bridge installations.
- ✦ A factor 2 improvement will also show up in support systems for nautical operations, and in particular in increased awareness of the navigation scenario, increased safety of nautical decisions and in the increased speed of nautical decisions.
- ✦ Alarm filtering will reduce bridge alarms in a given scenario (breakdown in auxiliary systems) by 80% and in the general operational scenario by 20%.
- ✦ Support systems for rule compliance will improve the speed of text look up with at least a factor 2 while also improving the quality of the search.
- ✦ Scheduling and repositioning of empties will distribute the load more evenly along the day, cutting average waiting time by about 26% and therefore reducing queues and speeding up the containership's operations.
- ✦ A prognosis and assessment tool for emergency management will demonstrate 2 to 10 times improvements in prognosis generation speeds and result reliability in fire and smoke propagation, hull damage and flooding.

Project Co-ordinator: Mr Herman de Meester, Deputy Secretary General  
ECSA (European Community Shipowners' Associations)

Flagship website at [www.flagship.be](http://www.flagship.be)