NAVIGATIONAL DECISION SUPPORT SYSTEM FOR SEA-GOING SHIPS.

The NAVDEC System is an additional support system for the navigation of sea-going ships. It automatically collects the relevant data from AIS, GPS and radar/ARPA and analyses this data in relation to the international regulations for preventing collisions at sea (COLREGs).

System Advantages

- automatic acquisition, processing and presentation of navigational information
- graphical display of the navigational situation to the navigator
- analysis of the navigational situation based on the International Regulations for Preventing Collisions at Sea and the situation assessment criteria used by navigators
- signaling dangerous situations
- solving collision situations through
  - automatic determination of a manoeuvre (or manoeuvres) and trajectory that comply with the regulations in force
  - explanation of the proposed manoeuvres
- interaction with the navigator

Integration in any ECDIS / ECS systems

Developed by
Maritime University of Szczecin
Poland

Solutions protected by:
International patent application
PCT/PL2012/000112, 08.11.2010
“A method and system of navigational decision support in the process of safe vessel navigation”
NAVDEC integration into ECDIS / ECS systems:

NAVDEC module of decision support system can be integrated into any currently operational navigational system. Providers of such navigational systems with interest in an integration of NAVDEC into their products are invited to contact us for more details.

Some new functionalities:

- calculated trajectory for anticollision manoeuvre for user-defined input data
- trajectories plotted for a safe solution of navigational situation (different optimization methods and criteria)
- recommended new course or new speed as well as a sector of safe courses
- presentation of our Status according to the COLREGs
- solution computed for more than one vessel
- includes standard data from ARPA and AIS

**scapos AG**

In order to strengthen marketing and sales of their products, the Fraunhofer-Institute for Algorithms and Scientific Computing SCAI initiated the launch of scapos AG; the Fraunhofer Society is one of the scapos shareholders. The company also offers its services to other Fraunhofer institutes and research organizations.