

PROJECT

NAVAIS

New, Advanced and Value-Added Innovative Ships

Funding: European (Horizon 2020)

Duration: Jun 2018 - May 2022

Status: Ongoing

Total project cost: €7,915,782

EU contribution: €6,589,361



[CORDIS RCN : 216018](#)

Objectives:

To maintain world leadership in complex, value-added and highly specialised vessels European shipbuilders must develop tailor-made innovative concepts that are efficient to design and build. Project NAVAIS proposed solution is a platform-based modular product family approach supported by the 3DEXPERIENCE integrated business platform. By sharing components and production across a platform of vessels, higher efficiency in vessel design and flexibility in production networks is achieved.

NAVAIS uses system engineering approaches to develop the principles, procedures and a re-use component library for modular design and production and will apply these to develop two platform-based product families: passenger/road ferries and multi-use workboats. For each product family a demonstrator will be developed to TRL9 "digital twin"-level, validated and assessed on low impact environmental performance e.g. discharges to air and water, underwater radiated noise and cost-benefit aspects. The demonstrators are a 400 passengers/120 cars E-ferry and a multi-use workboat equipped for aquaculture activities. A major aspect of the platform-based modular approach is the change in value chain management.

The current class approval procedure of engineered-to-order designs will be replaced by a procedure where pre-engineered product modules are approved by class, stored in a re-use library and applied in new vessel modular designs. This transfer from an engineered-to-order business model to an assemble-to-order business model will allow shorter process lead-times, constant quality, reduced design and production costs and better integration of the SME supply chain. Exploitation of results is expected at the end of the project duration. NAVAIS partnership contains 16 partners from 5 EU and 1 associated countries and includes technology providers, technology integrators and technology users. The project duration is 4 years and the required funding is € 6,6 MIO.

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Other programmes: MG-2.4-2017 Complex and value-added specialised vessels

Lead Organisation:

Stichting Netherlands Maritime Technology Foundation

Address:

Boompjes 40
3011 XB Rotterdam
Netherlands

EU Contribution: €444,073

Partner Organisations:

Scheepswerf Damen Gorinchem Bv

Address:

Avelingen West 20 Industrierrein
4202 MS Gorinchem
Netherlands

EU Contribution: €936,579

Vlaams Instituut Voor De Zee Vzw

Address:

WANDELAARKAAI 7
8400 OOSTENDE
Belgium

Organisation Website:

<http://www.vito.be>

EU Contribution: €626,983

Bureau Veritas Marine & Offshore Registre International De Classification De Navires Et De Plateformes Offshore

Address:

8 COURS DU TRIANGLE
92800 PUTEAUX
France

Organisation Website:

<http://www.bureauveritas.fr>

EU Contribution: €268,398

Santierul Naval Damen Galati Sa

Address:

STR AL MORUZZI STREET 132
800223 GALATI
Romania

EU Contribution: €100,690

Marin Dizajn Inginiring Mykolayiv

Address:

1 SPAS KA ST
MYKOLAYIV
54001
Ukraine

EU Contribution: €95,322

Shipyards And Maritime Equipment Association Of Europe

Address:

Rue Marie De Bourgogne 52 54 52
1000 Bruxelles
Belgium

Organisation Website:

<http://www.seaeurope.eu>

EU Contribution: €409,000

Dassault Systemes

Address:

Rue Du President Wilson 119
92300 Levallois Perret
France

EU Contribution: €401,135

Marine Engineering Srl

Address:

132 ALEXANDRU MORUZZI STR
800223 GALATI
Romania

EU Contribution: €98,579

Stichting Maritiem Research Instituut Nederland

Address:

Haagsteeg 2
6708 PM WAGENINGEN
Netherlands

Organisation Website:

<http://www.marin.nl>

EU Contribution: €641,125

Heliox Bv

Address:

DE WAAL 24
5684 PH BEST
Netherlands

EU Contribution: €157,535

Eekels Technology Bv

Address:

A. PLESMANLAAN 2
9615 TH KOLHAM
Netherlands

EU Contribution: €231,569

Schunk Bahn- Und Industrietechnik Gmbh

Address:

HAUPTSTRASSE 97
35435 WETTENBERG
Germany

EU Contribution: €211,750

Damen Schelde Naval Shipbuilding B.v.

Address:

Glacisstraat 165
4380AN Vlissingen
Netherlands

EU Contribution: €593,425

Technische Universiteit Delft**Address:**

2600 GA Delft
Netherlands

EU Contribution: €523,450

Center Of Maritime Technologies E. V.**Address:**

Bramfelder Strasse 164
22305 HAMBURG
Germany

Organisation Website:

<http://www.cmt-net.org>

EU Contribution: €849,750

Technologies:

Unclassified
Non-technology

Development phase: Implementation

STRIA Roadmaps: Other specified
Water transport (sea &

Transport mode: inland)

Transport sectors: Passenger transport, Freight transport

Transport policies: Deployment planning/Financing/Market roll-out

Geo-spatial type: Other