



## SOLID SAIL 2.0

### RIGID SAIL FOR NEW-GENERATION CRUISE LINERS

The SOLID SAIL 2.0 project aims to consolidate the concept of a rigid sail produced from articulated composite panels, which can be folded without any external action or buckling. As it is manufactured from composite panels, the rigid has a virtually indefinite lifecycle. The design was developed and patented by STX Shipyards and has been the subject of two demonstrators tested at sea in 2016 and 2017.

This second phase of the project involves moving on from the demonstrator stage to a product that is as effective as the classic, flexible sail but is noticeably similar in cost and five times more durable.

The first application targeted is the market for new-generation sailing cruise ships.

The first two demonstrators showed the validity of the design and highlighted the improvements required to compete fully with flexible sails.

The rigid sails could also be of interest to the fishing and leisure boating sectors.

**The SOLID SAIL 2.0 project is also recognised by the EMC2 cluster.**

#### Partners

##### Companies

Multiplast, Vannes [Project Developer]  
Awentech, Brech  
G-Sea Design, Lorient  
Incidence, Brest  
Mer Vent, Port-La-Forêt  
Ocean Data System, Lorient  
STX France, Saint Nazaire

##### Research center

ENSTA Bretagne, Brest

#### Funders

Région Bretagne  
FEDER

#### Labelisation

01/06/2018

#### Overall budget

994 K€