



## JUMPER

### A TRAWLER OTTER BOARD WITH REDUCED ENVIRONMENTAL IMPACT

The project's objective was to optimise the Jumper prototype boards so that they could be easily immersed during the paying out of the trawl net and while descending to the seabed, in order to reduce vessel energy consumption and to develop a system for observing their physical impact on the seabed.

The project involved two modelling phases: the first was small-scale modelling carried out at the Lorient test tank. This identified and tested gear that was suitable for this type of board and facilitated the paying out and immersion process. The second phase comprised numerical modelling which helped guide the design choices made in developing the boards. Several trials at sea were carried out to test these boards on different types of trawler (16 - 25 m) and for different jobs within the industry.

#### Spin offs and future developments

The objectives have been attained: the Jumper boards fulfil their primary function of opening the fishing gear out horizontally and keeping it on the seabed. The impact of the Jumper boards is minimal: occasional contact with the seabed, limited surface area in contact with the seabed and slight hydrodynamic wake caused by the board's lower edge. These factors mean that the substrate is penetrated and stirred up to a much lesser extent than is the case with a traditional board.

The Jumper boards' vertical extension, centre of gravity and occasional contact with the seabed mean, however, that they are more responsive to being adjusted than any other high-performance board. During trials, small-scale boards demonstrated that their manufacture and use for small-scale trawling was economically worthwhile. But, as a result of their vertical slenderness and the positioning of their centre of gravity, their trim and list seemed to be more affected by acoustic monitoring buoys and the method of attaching the recorder. This led to interpretation problems when analysing their functioning.

These boards have minimal impact on crew safety, although in heavy seas, it is advisable to secure the Jumper boards on the boat's transom rather than on its sides.

Additional trials are scheduled as part of Benthis, an EU Benthic Ecosystem Fisheries Impact Study.

#### Partners

##### Companies

Comité National des Pêches Maritimes (CNPMM), Paris [\[Project Developer\]](#)  
Armements (dont SCAPECHE, Lorient), représentés par le CNPMM  
Morgère, Saint-Malo

##### Research center

Ifremer, Lorient

##### Other partner

Institut Maritime de Prévention, Lorient

#### Funder

France Filière Pêche

#### Labelisation

29/06/2012

#### Overall budget

536 K€