European Commission

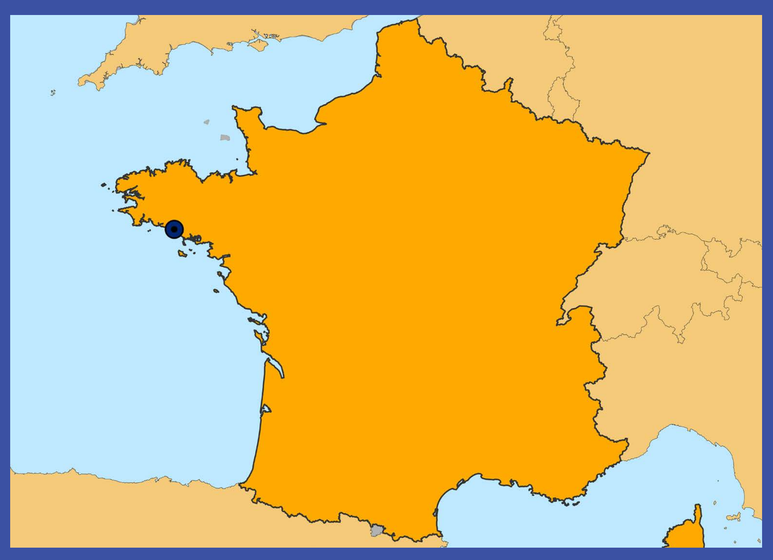
SUPPORTED BY THE **EFF (European Fisheries Fund)**

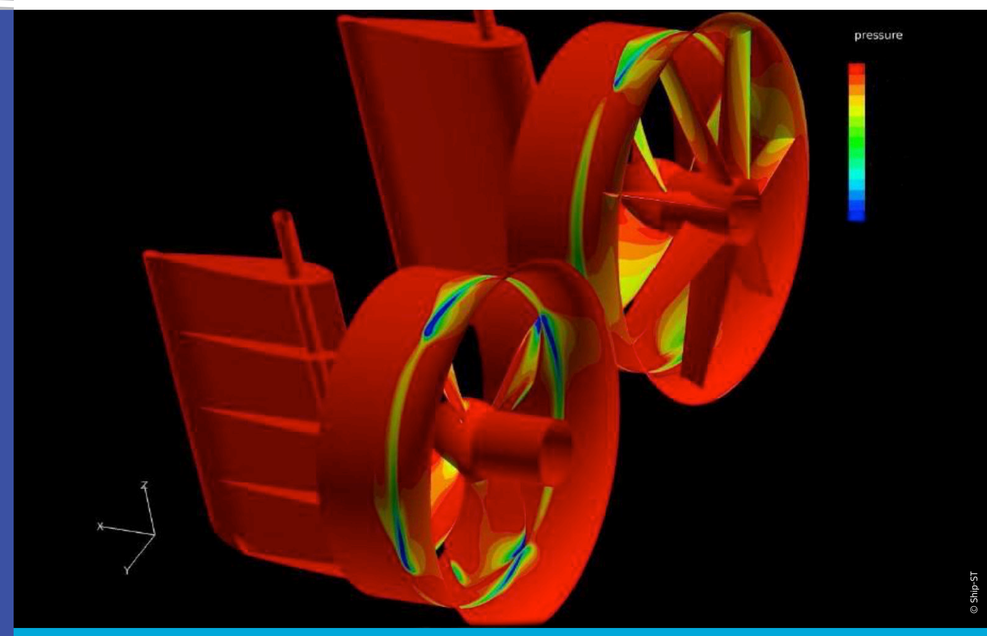
RESEARCH INTO PROPELLER EFFICIENCY ON FISHING VESSELS

High energy costs have a negative impact on the profitability of the fishing fleet and on the average wages paid to fishermen, and fuel use contributes to climate change. In seeking to provide solutions to these problems this research project (which seeks to optimize the characteristics of propellers used on fishing vessels) involved computer simulations, tank trials, and then sea trials of a military-derived pump-jet system (the Optipropulseur).

Tank tests confirmed the effectiveness of a pump-jet system, and at-sea trails were then conducted with the model design fitted on a 24 meter French trawler. Measurements of energy consumption during the sea trails confirmed the cost savings, both while the fishing vessel was steaming and while fishing.

More information here:
https://www.meretmarine.com/fr/content/lopti-propulseur-de-ship-st-reduire-la-consommation-la-peche





fisheries research environment

LORIENT, BRITTANY, FRANCE

RESULTS (2010 - 2015):
- 15 % reductions in the use of fuel both while fishing and while steaming, generating cost savings, higher wages, and increases in value added
- optimized propeller design transferable to 12-24 m fishing vessels using mobile gear
- These benefits convinced the owner of the vessel used to develop this innovative propulsion system to keep using it permanently

LESSONS LEARNED:
This applied and innovative research project, allowed the development of ways to reduce the operational costs of medium size fishing vessels using towed gear and to fight climate change by reducing the use of fossil fuels in fishing.

TOTAL OPERATION COST:
Total budget: 1 377 552 €
Union contribution: 228 208 €

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