



Press Release December 8, 2017

CNIM and VPLP join forces to build the marine propulsion system of the future

Oceanwings[®], the smart wingsail for ship propulsion conceived by VPLP, will be jointly developed and manufactured at CNIM's industrial plant at Seyne-sur-Mer, France



CNIM – a French equipment manufacturer and industrial contractor with an international presence – and French naval architecture firm VPLP design have announced the signing of a **technological partnership agreement** for the design and manufacture of the **Oceanwings® propulsion system**. The aim of this partnership is to create an innovative product on the basis of a concept imagined and tested by VPLP design.

Targeting the super-yachting, maritime transport and nautical sports markets, Oceanwings[®] consists of a **two-element wingsail which is entirely automated, furlable and reefable¹.** Usable in **hybrid mode** together with a propeller propulsion system, Oceanwings[®] offers **considerable fuel savings** and reduces greenhouse gas emissions.

VPLP has already built and tested a full-scale prototype (8 meters wide) which has been fitted on a 7-meter trimaran. The two partners will now develop industrial solutions to make this patented technology available to maritime professions and vessel owners.

¹ "Furlable" means that the area of the sail can be totally reduced. "Reefable" means that it can be partly reduced.





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"We have been working on the rigid wingsail concept since 2010 in partnership with teams taking part in international races such as the America's Cup," points out Marc van Peteghem, joint-founder of VPLP. "With Oceanwings®, we wanted to overcome the restrictions imposed by rigidity and, so, offer the possibility of reducing the area of this type of rigging, as is the case with conventional rigging. Backed by France's environment and energy efficiency agency, ADEME, we developed a complete functional prototype. Our technical partnership with CNIM will now enable us to move on to the industrialized construction of these wingsails on the basis of

a design-to-cost approach to make them an attractive proposition for all types of craft."

CNIM's skills and industrial capabilities will be key to the success of the Oceanwings[®] project. With its highlevel engineering expertise in business lines such as space, big science and defense, it has extensive experience in the design and manufacture of extremely large items. CNIM also has complete mastery in composites technologies, including filament winding, automated spraying and autoclaving, that will be used to manufacture Oceanwings[®] wingsails on an industrial scale. Furthermore, CNIM's history as a former shipbuilder along with its current business in designing innovative systems for the navy and marine-related industries provides the Group with a wealth of expertise in the maritime sector.

"The CNIM Group has a lot of industrial expertise and a wellproven capacity for innovation, particularly in developing innovative craft for the maintenance of the offshore wind



farms, not to mention high added-value equipment to cut the flue gas emission of the work boats as well as the passenger ships. Companies like Petrofac, Brittany Ferries and STX are CNIM regular customers," says Philippe Lazare, Chief Executive of CNIM Industrial Systems.



Scrubbers supplied by LAB, a subsidiary of CNIM

"We are also increasingly focusing on renewable energies and energy efficiency. The Oceanwings[®] smart wingsail, which can be used in hybrid mode to achieve fuel savings up to 30%, is therefore totally in line with our skills and objectives. We believe it offers a real propulsion solution for the future."

According to a study² conducted for DG CLIMA (the European Commission's Directorate-General for Climate Action), the world market potential for wind propulsion technologies could amount to between 3,700 and 10,700 systems installed on vessels such as bulkers, container ships and tankers **by the year 2030**. This use of wind propulsion systems could significantly **reduce carbon emissions**.

https://publications.europa.eu/en/publication-detail/-/publication/7d4405d7-c81f-11e6-a6db-01aa75ed71a1/language-en , November 2016





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About CNIM

Founded in 1856, CNIM is a French equipment manufacturer and industrial contractor operating on a worldwide basis. The Group provides its products and services to major public and private sector organizations, local authorities and national governments in Environment, Energy, Defense, and high technology markets. Technological innovation is at the core of equipment and services designed and manufactured by the Group. They contribute to produce cleaner and more competitive energy, to limit environmental impacts of industrial activities, to secure sensitive facilities and infrastructures and to protect individuals and nation states. CNIM is listed on the Euronext exchange in Paris. It relies on a stable family-based majority shareholding structure committed to its development. The Group employs 2,500 staff and had revenues of €539.9 million in 2016, 54.6% of which was from exports. www.cnim.com/ - Twitter: @CNIM_Group

About VPLP design

VPLP is an internationally renowned team of naval architects, based in Vannes and Paris, France, that designs race, cruise and work craft.

Well-known for its racing boats and large cruise catamarans, VPLP also has had a firm foothold in the field of production craft since 1986 with the Lagoon catamaran range.

As well as offering expertise in naval architecture, VPLP is at the cutting edge of design and innovation. Backed by its experience in the America's Cup, and the IMOCAs and Ultimes events, it uses and develops latest-generation numerical simulation tools in the field of hydro and aerodynamics (CFD, code AVL, VPP and routing, etc.).

https://vplp.fr/ - Twitter: VPLPYachtDesign - Facebook: VPLPdesign

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