our naval bartmer

OPV GOWIND® L'ADROIT A high-skilled Offshore Patrol Vessel



OPV GOWIND® L'Adroit: DCNS commitment to building the future

L'Adroit is an ocean-capable vessel made to perform the whole range of maritime security missions. Designed and built in a very short time, this Offshore Patrol Vessel brings about many shipboard innovations. It is designed for simplicity and for easy customising to the client navy's requirements including local in-country shipbuilding under technology transfer agreements.

A great industrial investment to address new challenges

The DCNS group decided in 2009 to self-fund the construction of a revolutionary vessel with the aim of demonstrating that innovative, economical solutions can secure the

oceans efficiently and durably. The French Navy will operate *L'Adroit* worldwide for three years, thus enabling DCNS to give a sea proven status to the design of its GOWIND® family of vessels.

to build DCNS OPV
in any shipyard
in the world with
tailor made local
industrial solutions.

Design standards

make it possible

Key innovations

The ship and its mission system have been designed as a whole.

Thanks to the panoramic bridge and an integrated mast, *EAdroit* crew and sensors collect reliable data over 360 degrees. The short superstructures of the ship leave a lot of space for aviation facilities and an ingenious rear ramps system. These features enable

rapid and safe deployment and recovery of a helicopter, drones and Rigid Hull Inflatable Boats (RHIB).

Sophisticated algorithms resulting from DCNS vast experience in Combat Management Systems provide the ship and its crew with accurate

information. The POLA-RIS® system gathers and processes data coming from the ship's sensors, from remote sensors (including those of the UAV/USV) and also from other OPVs connected through the extended surveillance network. As an option, the mission system may include

MATRICS®, a ship borne Maritime Surveillance System (MSS) designed by DCNS and featuring, for instance, the unique capability to automatically detect any suspicious behaviour on the part of other ships.

L'Adroit is the first ever vessel to be designed and built with full provisions for unmanned aerial and surface vehicles.



A shipbuilding success story

This OPV's design, construction and trials have been performed by a dedicated team of up to 100 people, all volunteers to develop and apply new methods and solutions not previously introduced at Lorient shipyard, which up to now had specialised in the construction of much bigger surface combatants. Less than 2 years after the initial idea was first mooted, DCNS succeeded in launching *L'Adroit*, geared up for maritime security duties, simple to operate and easy to maintain thanks to affordable innovations.

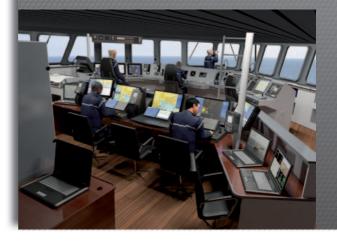


DCNS involved a great number of industrial partners in this bold venture, mostly French and European companies ready to take on the challenge of addressing maritime security needs.

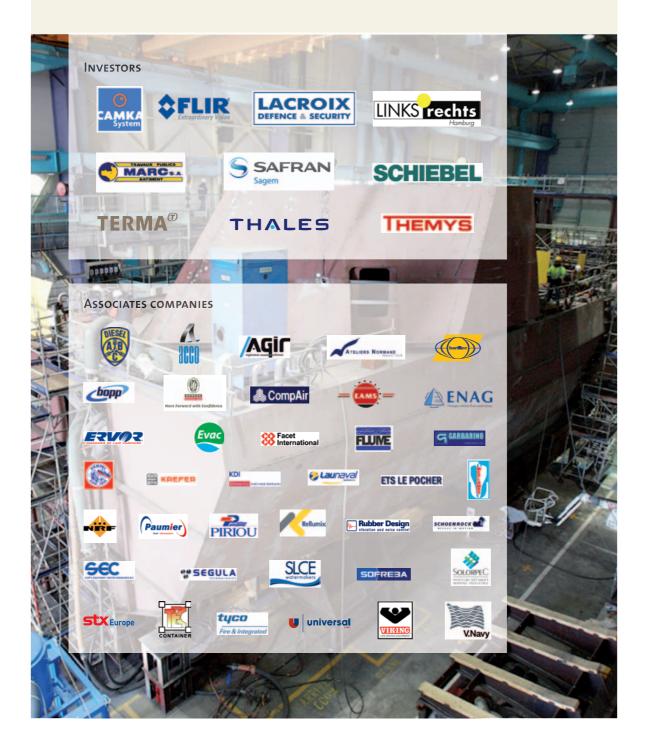
A success story reproducible everywhere

Design standards make it possible to build DCNS OPV in any shipyard in the world with tailor made local industrial solutions. Any nation may seize this opportunity for a transfer of technology (TOT) to get an affordable solution for maritime security.





All together on board...





L'Adroit Laure • Deplo • Laure • Mine

Programme start: September 15, 2009

First plate cutting: May 7, 2010

Launch: May 18, 2011

Builder sea trials: summer 2011

Worldwide demonstration tour in partnership

with the French Navy: early 2012

Building standards

- BV 2000
- Stability: IMO A.534 et A.749
- MSC 266.84, COLREG 1972.
- MARPOL Appendix I, IV, V & VI
- Military standards for aviation

Flexible propulsion systems

- 2 shaft lines with variable pitch propellers
- Electrical propulsion (low speed) as an option
- Bow thruster as an option
- 3 diesel generators

Aviation and drones

- Operation of a 10 t class helicopter
- Hangar for 5 t class helicopter
- 30 m³ of JP5
- Helicopter handling means
- Deployment and recovery of 1 t class UAV
- Launch and recovery of up to 9 m USV
- Mine warfare as an option

Habitability arrangements

- Yachting quality
- Crew: 30 people
- Passengers capability: 29 people
- 120 m² bridge grouping in one place ship control, operational command and aviation control
- Second bridge

Polaris® system

- Performance of all surface actions through integration of the ship sensors and effectors
- Management of the UAV, USV, RHIB, helicopter operations
- Compact and modular
- Interoperable thanks to Tactical Data Links such as Link 11
- Ready to receive plug-on modules such as MATRICS[®] Extended Surveillance or Command Support System

SYSMART Global®, secured wireless communication system

- Capability enhancer for on-board safety and operating assistance
- Indoor mobile telephony and wireless access to on-board network



STRENGTH at sea

DCNS is Europe's key global player providing high-value-added naval defence systems. The Group offers the world's navies a turnkey approach to warships, including all related equipment and services. As prime contractor, designer, builder, and integrator, the Group masters the overall value chain and life cycle of naval systems, from initial design to full operational maintenance.

An international player

DCNS capacity for innovation allows it to respond to the complex challenges of navies around the world by proposing cost-efficient integrated solutions, which are both interoperable (air/naval/land) and applicable to inter-allied operations.