

# INTERNSHIP AUTONOMOUS VESSEL



## INTRODUCTION:

Several concepts of autonomous vessels are now under final development and PRINCIPIA would like to propose a new concept of remoted and/or autonomous vessel, for multi-purposes uses with a special attention paid to launching and recovery of Autonomous Under water Vehicle (AUV) and Remotely Operated Vehicle.

## SCOPE OF WORK:

The scope of work includes the 3 following tasks:

- ✓ State of the art
- ✓ Comparative assessment manned – unmanned ships
- ✓ Naval architecture of the concept

### State of the art

Review of existing applications, projects under development and future trends for automated ships. Considering current project development, it may be of interest to analyze applicable rules and regulations.

### Comparative assessment manned – unmanned ships

Based on a reference vessel, the objective is to identify main changes in terms of naval architecture for the design of autonomous and remoted ships.

### Full loop design of one autonomous vessel concept

Ship design spiral will be realized, including the following:

- ✓ General arrangement
- ✓ Interface with ROV / AUV definition
- ✓ Hull structural design (midship section definition) and weight estimate
- ✓ Preliminary stability assessment
- ✓ CAPEX / OPEX preliminary assessment

## DELIVERABLES:

1 - Technical report including

- ✓ Documentation about the technological choices
- ✓ Main assumption and design parameters
- ✓ Calculation outputs

2 - 3D Model of the ship and associated 3D views (RHINO).

## GENERAL:

Based in PRINCIPIA offices at La Ciotat (13).

To apply : [job@principia.fr](mailto:job@principia.fr)