ROBDOS

UNDERWATER ROBOTICS

R-ROSS Robdos Remotely Operated Survey System

December 2024

OARSOALDEA URDINA POLOA

Euskadi, auzolana, bien común

EUSKO JAURLARITZA GOBIERNO VASCO

AZTI

MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

ERRENTERIA UDALA

Lezoko Udalerriaren Udala

Oarsoaldea

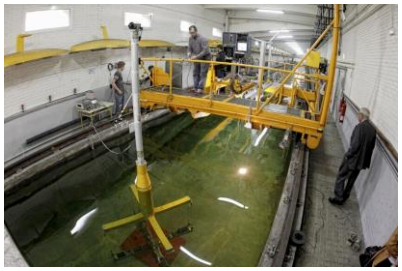
OIARTZUNGO UDALA

PASAIAKO UDALA

DE DONDE VENGO! - ETSIN UPM – CEHINAV

POLITÉCNICA

canal.etsin.upm.es



RobdoS Team

ROBDOS UNDERWATER ROBOTICS

POLITÉCNICA

gmv INNOVATING SOLUTIONS

CeGASA Portable Energy

Robdos Team promueve la robótica de campo en el ámbito académico de la UPM, agrupando a estudiantes de distintas ingenierías que desarrollan SW y HW para un robot submarino

EUROPEAN ROBOTICS LEAGUE

ROBDOS SRL – Inicios (2013)

Nuestra Start-Up se dedica a desarrollos de plataformas robóticas y sistemas de automatización y monitorización en el medio marino

FUNDADORES

HUGO RAMOS

Ingeniero Naval y Oceánico

Gestión de Proyectos tecnológicos

Diseño de sistemas embarcados

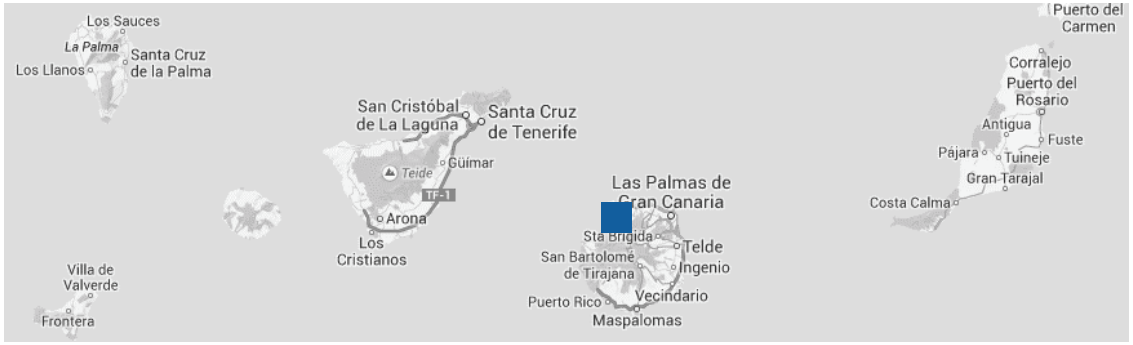
PIERRE SOULARD

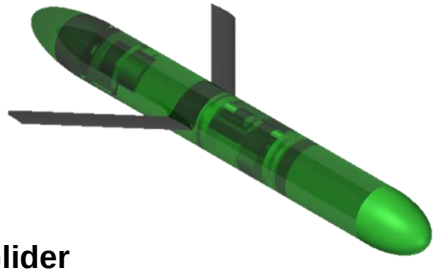
MBA

Consultant in the banking sector

Strong international experience

NUESTRA SEDE



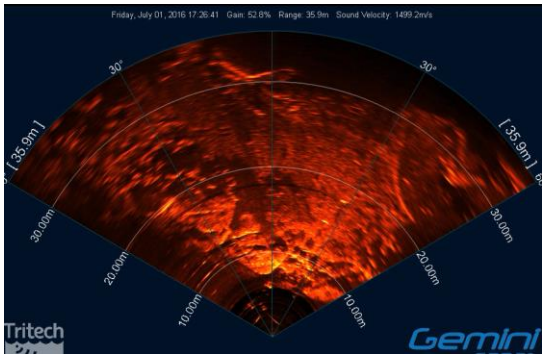


Glider
Submarine Robot
Glider

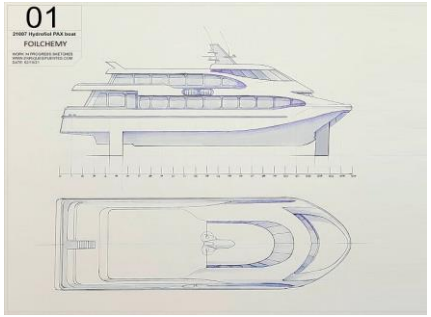
DE DONDE VENGO! – IXION smart automation

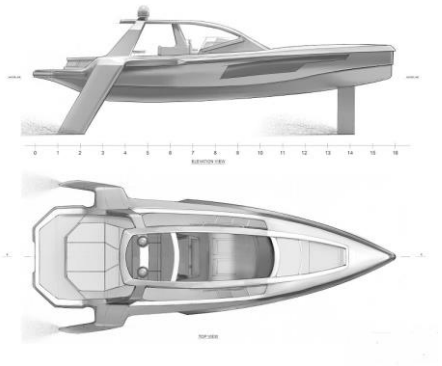
H-AUV Hybrid Autonomous Underwater Vehicle



FOILCHEMY





Naia – First of a kind!
Sailing dinghy on hydrofoil, electronically controlled by an on-board system

ACTUALIDAD- HRC ENGINEERING SL

OPERACIONES MARINAS

SERVICIOS DE CONSULTORÍA

PROYECTOS DE ARQUITECTURA NAVAL

ROBDOS OVERVIEW – QUE NOS GUSTARÍA HACER !

AUTONOMOUS PLATFORMS

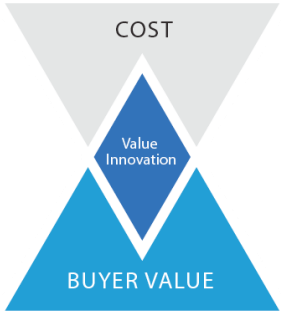
- Hybrid platforms
- Benthic landers and smart buoys
- Modular Payload

CLOUD BASED SW PLATFORM

- Ground stations
- Flexible and modular SW
- Data security & management

VALUE INNOVATION

Commercial exploitation model benefiting from transversal HW and SW developments and third-party systems integration



QUE SOMOS CAPACES DE HACER? Systems examples

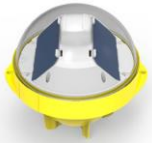
Resident on infrastructure systems

Submarino esperando a desconectar

Systems able to perform 24/7 inspections around a critical asset in the underwater infrastructure. Like the earlier develop by our tech staff and shown in the above pictures.

This system prototype is able inspect an underwater pipe from shore to mono buoy near the refinery and to be recharged at an underwater docking station/garage.

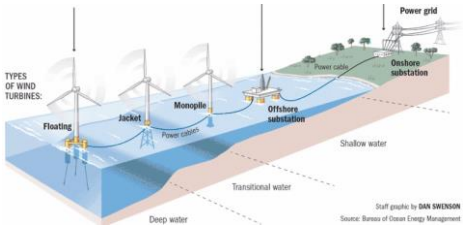
Benthic landers and smart buoys

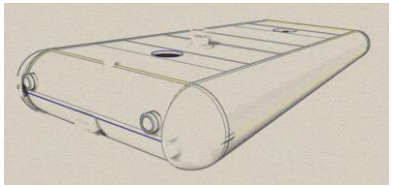


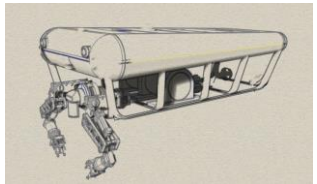
Smart connected buoys, equipped with an specific payload able to provide strategic data to the operator through our SW platform.

The same purpose will be covered on the seafloor by benthic landers (underwater system stations) at specific points of interest on the seabed.

Hybrid platforms, tailored developments







This advanced vehicle concept, coupled with our SW platforms is able to be adapted from the low energy consumption and efficient navigation scenarios of an AUV to the ROV operations where mechanical actuation tools and an umbilical cables are implemented on a lower structural frame in order to allow the system to perform this energy demanding tasks.

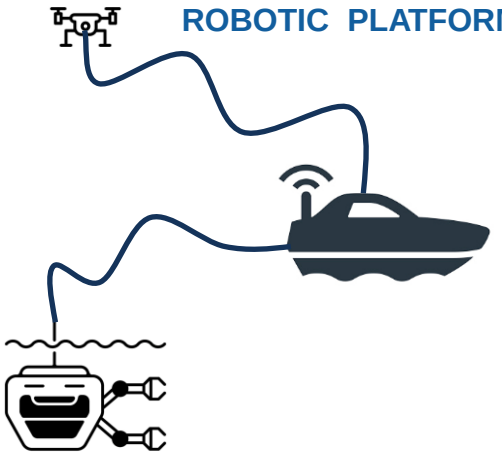
R-ROSS – POR DONDE HEMOS EMPEZADO!

R-ROSS Robdos Remotely Operated Surey System , a robotic marine survey system capable of operate in near shore scenarios with a great flexibility of different robots (surface, underwater and aerial), payload and the capacity of real time transmission of the survey information to the client central offices

CLIENT CENTRAL OFFICES

SHORE MONITORING & CONTROL STATION

REMOTELY OPERATED ROBOTIC PLATFORMS

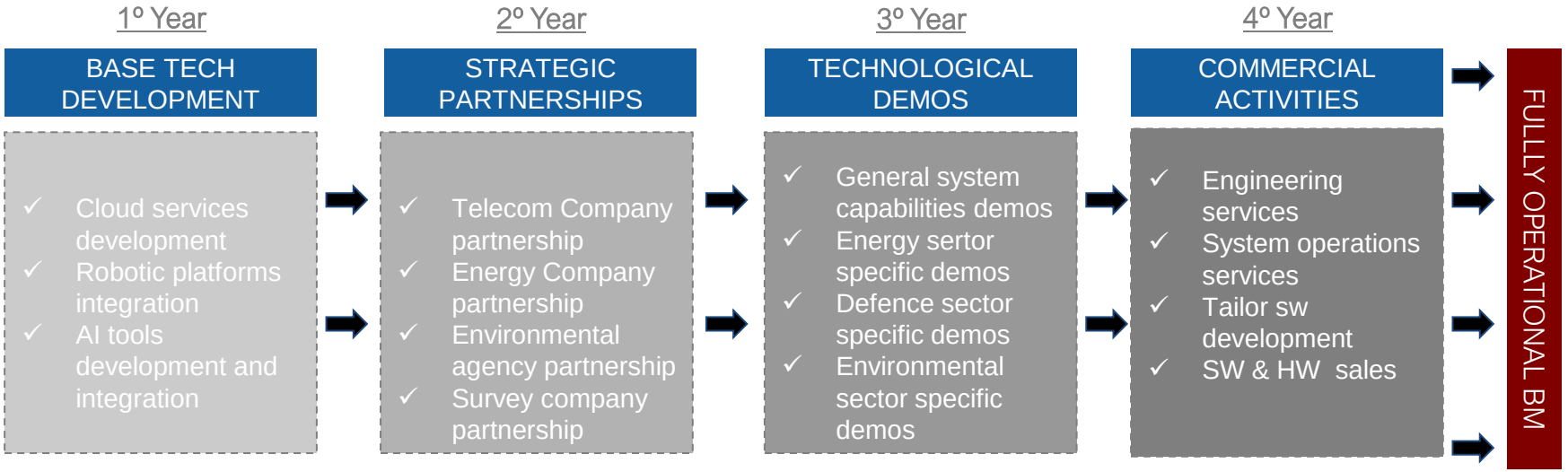


This innovative system, supported by Robdos Service Web Platform presents several advantages when compared with tradition survey methods:

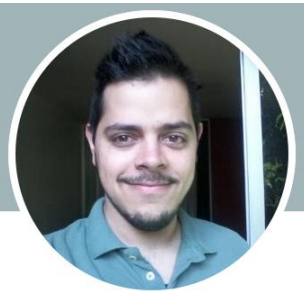
- Cheaper and more flexible operations
- Real time remote monitoring (direct connection to the client central offices)
- Reduction of the risk of the human life at sea
- Greater operational window
- Higher inspection speed while being able to go deeper that divers

COMO LO HAREMOS?

Following and open innovation and agile model of technological development where our clients and their operational need stand in the center of our business model



Equipo de Colaboradores



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