STRONGMAR: Robots at Sea

InfoDay Horizonte 2020 Spreading Excellence and Widening Participation Faculdade de Medicina da Universidade do Porto

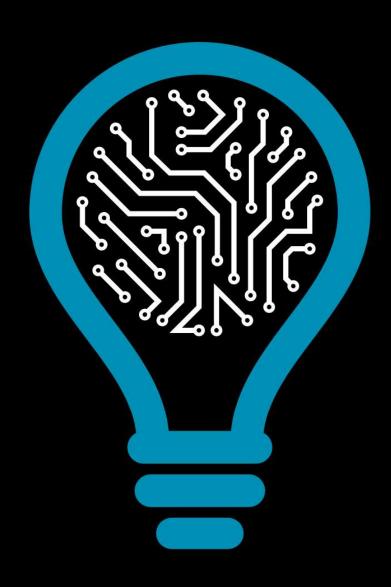
Marta Barbas

Funding Opportunities Officer at INESC TEC

6 September 2018



INSTITUTE FOR SYSTEMS AND COMPUTER ENGINEERING, TECHNOLOGY AND SCIENCE





STRONG MAR

• Call: H2020-TWINN-2015

Type of Action: CSA

Acronym: STRONGMAR

Duration: January2016-December2018

• **Website**: www.strongmar.eu

Consortium























Objective e motivation

To turn INESC TEC into a centre of excellence in maritime technology, in particular, on deep sea technology.

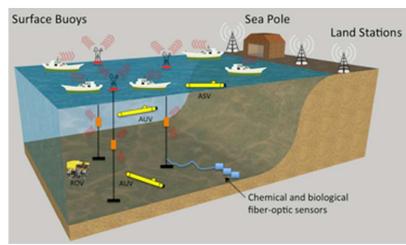


Expected strategic impacts

Make an important contribution for the **long-term sustainability** and **viability** of the research infrastructure TEC4SEA, of which INESC TEC and CINTAL are the founding institutions.

Consolidate it as a **recognized research asset**, capable of providing unique services to the whole of the European research community and, hence, a pole of attraction of European talent to the region.





Expected operational impacts

- Collect experience and best practice guidelines.
- Establish a solid network of cooperation with recognized institutions.
- Increase the research and innovation capacity of INESC TEC.
- Overcome the identified technological barriers still hampering the full implementation of the strategic national visions: Portuguese National Ocean Strategy and Portuguese Strategy for Smart Specialization.
- Reach broader audiences, motivate and attract new talent, and foster
 cooperation with the regional industrial fabric and stakeholders.

Progress

ERL EMERGENCY ROBOTS GRAND CHALLENGE - WINNERS!!!





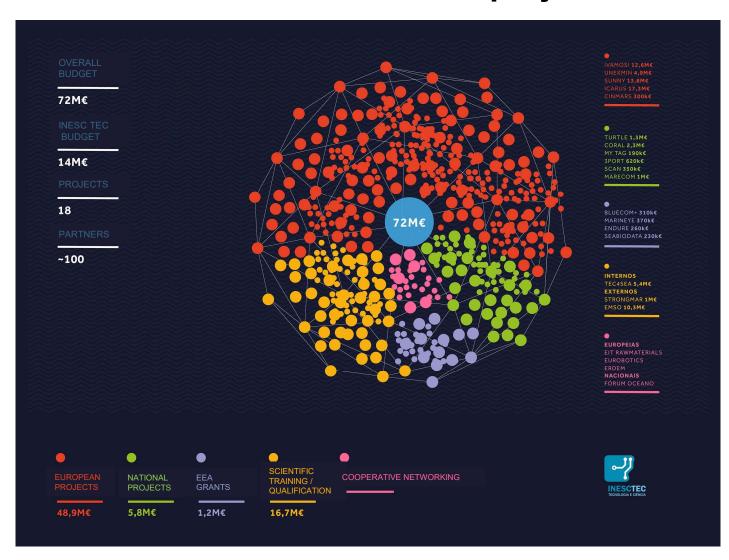
Progress

SHELL OCEAN DISCOVERY XPRIZE - FINALISTS!!!





Underwater/Sea related projects



Laboratories

Infrastructures

- o robotics with test tanks,
- o acoustic submarine signal processing and instrumentation development for submarine exploration,
- o optical/radio communications with access to an anechoic camera,
- o optical and image sensors, with access to infrastructure for fabrication of fibre optic based devices, microfabrication (cleanroom), and optoelectronics instrumentation.

Research infrastructures

Maritime wireless networks testbed with fixed stations and sea nodes deployed in fishing ships.

Support facilities at **Leixões Harbour** (Porto – Portugal)

Water tanks (LxWxD, in meters: 10x6x5 and 4.5x4.5x2)

Hyperbaric chambers (up to 400bar)



TEC4SEA

Research Domains and market sectors

Non-living Resources

- Deep- and ultra-deep water oil & gas
- Dredging
- Marine and seabed mining
- Ocean renewable energy
- Offshore oil & gas (shallow water)
- Offshore wind energy

Living Resources

- Aquaculture
- Fisheries
- Marine biotechnology
- Seafood processing
- Stock estimation and monitoring

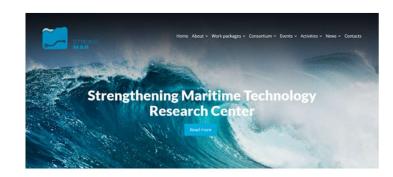
Services

- High-tech marine products and services
- Marine business services
- Marine manufacturing and construction
- Marine R&D and education
- Maritime and coastal tourism
- Maritime safety and surveillance
- Ports
- · Shipbuilding and repair
- Shipping



Strongmar Website & Newsletter

WWW.STRONGMAR.EU



STRONGMAR project

Funded by the European Commission under the H2020 EU Framework Programme for Research and Innovation (H2020-TWINN-2015, 692427)









WE WORK ON LAN

Kick-off meeting

The kick-off meeting was held on March 7 and 8, 2016 at Porto (Portugal) and joined together the six partners of the consortium: INESC TEC (Portugal), CINTAL (Portugal), Heriot-Watt University (United Kingdom), NATO Science & Technology Organization (Belgium), Universitat de Girona (Spain) and University of Aberdeen (United Kingdom).





Brand

The consortium is strong and dynamic, and our expertise ranges from surface to deep sea technologies. We embedded these concepts into the brand logos.



Website

The website is under construction and will be launched as soon as possible. Stay tuned!

www.strongmar.es

