CORKEX2018
IRISH COAST GUARD

**Irish Navy Vessel
LÉ RÓISÍN**

Irish Coast Guard hosted one of the e-URready4OS exercises, in which new underwater vehicles were added and the fleet was tested in a harsh enviroment

Humanitarian Aid and Civil Protection

Salvamento Marítimo

GOBIERNO DE ESPAÑA · MINISTERIO DE FOMENTO

Irish Coast Guard

Universidad Politécnica de Cartagena

University of Zagreb

UIB · Universitat de les Illes Balears

SAMS

U.PORTO

University of Cyprus

TUT

NTNU

UdG

Workplace

Haulbowline Naval Base

The training exercise was held in Cork (Ireland) from 23 to 26 July 2018 on board the Irish Naval vessel "Lé Róisín" and coordinated by Irish Coast Guard.

The exercise involved 5 AUVs from different manufactures; two Sparus II from UIB and UdG, two LAUVs from UP and UZ, one Iver2 from UPCT and one USV (H2Omni-X) from UZ.
In addition, the team from University of Cyprus performed numerical predictions of the pollutant plume evolution, which aided in mission planning and adaptation.
All of them, working together in the Atlantic Ocean.

Irish Coast Guard

The Irish Coast Guard is the competent national authority with responsibility for oil pollution preparedness and response in the marine environment in Ireland. The IRCG investigate approximately 50 maritime pollution reports in one year. Thanks to its long expertise in disciplines related to oil pollution is a essential partner into the project.

The Irish Naval Service facilitated the naval patrol vessel "Lé Róisín". This was a major challeng to the project, since previous training exercises were performed on dedicated vessels for combating pollution, while Lé Róisín offered a different scenario for operations.

Both, the IRCG and the Irish Naval Servicie, brought all their knowledge during the exercise, resulting in an efficient and effective response to generate and monitor a simulated oil spill plume.

LÉ RÓISÍN
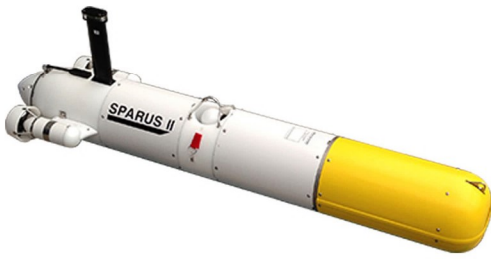
New AUVs

ONE OF THE CHALLENGES OF THE PROJECT WAS TO INCREASE THE FLEET WITH THE CAPABILITY TO DETECT CRUDE AND REFINED OIL

Two SPARUS II type AUVs, one from the University of Girona (Sparus) and the other from the University of the Balearic Islands (Turbot), joined the fleet.

The size of the vehicles was one of the issues to be taken into account for integrating these vehicles into the fleet, as they requiered a crane to launch and recovery.

A Cyclops C7 fluorometer was integrated in each Sparus vechicle for this exercise. The sensors were attached to the vehicle's structure on the payload area using a specially designed holder. The rhodamine sensor readings are periodically gathered, time-stamped and stored with all the corresponding navigation data, so they can be accessed by a base station during navegation or downloaded at the end of the mission. Vehicles, Sparus and Turbot, were equipped with an USBL transponder/modem and can be accessed from a base station while underwater.
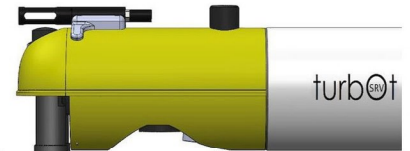
On board

The effort of all team members made possible to adapt the equipment to the available space into a military vessel. The planned missions were carried out in a near-real time scenario.
Another major challenge for the team involved was the waether, much more adverse than in previous exercises performed in the Mediterranean Sea.

This was a great opportunity to know the limitations of the system.

Technical track at the Interspill 2018

THE PROJECT WAS PRESENTED IN THE INTERSPILL 2018 WHICH TOOK PLACE AT ExCeL LONDON TOGETHER WITH OCEANOLOGY INTERNATIONAL ON 13-15 MARCH 2018.

The Interspill, that alongside the world renowned Oceanology International, stayed this year on London and has defined itself as the world leading ocean technology marine science exhibition and conference. Is supported by the European spill industry associations and attracts international experts and leaders from the spill industry to exhibit, discuss key topics and debate issues around Spill Preparedness and Response. This year it attracted over 1,200 delegates, visitors and exhibitors from over 70 countries who displayed cutting-edge equipment and services to prevent and respond to oil spills. More information is published on: www.interspill.org.

Javier Gilabert from Technical University of Cartagena in Spain and one of the project leaders, introduced the "e-URready4os" project to attendees in a session entitled "Situational Awareness for the Spill Prevention & Response Community".

Knowledge transfer

The Next Steps

The team members are working hard to improve the documentation of the project, with tutorials and multimedia resources.

These documents, intended to be user-oriented stand-alone, will describe the characteristics of the system from the viewpoint of any organizational entity that potentially would use it. This document will be a communication tool for informing end-users in the operational and support context for the system.

2018