PROMPT Factsheet Information

Definition of Terms

EU Project category: Union Civil Protection Mechanism (UCPM) (UCPM-2022-PP)

PROMPT; Preparedness for Operational Monitoring and Prediction of contaminant Transport in the Sea.

Source of Funding: EU Co-Funded 85%

Project Duration: 01/02/2023 to 30/01/2025

Target Group: Ports in the EU and Neighborhood

Intervention areas: Genoa Port (Italy), Tripoli Port (Lebanon), and Aqaba Port (Jordan)

Parner's Info:

Coordinator

Organization's Name: UNIVERSITà DEGLI STUDI DI GENOVA

Contact Person: Associate Professor Giovanni Besio

Contact Person's Email: giovanni.besio@unige.it

Website: www.dicca.unige.it

CO-Partners

Organization's Name: FUNDACION INSTITUTO DE HIDRAULICA AMBIENTAL DE CANTABRIA

Contact Person: Dr. Anna Abascal

Contact Person's Email: anajulia.abascal@unican.es

Website: www.ihcantabria.com

Organization's Name: PM_TEN

Contact Person: Dr. Paolo Brotto

Contact Person's Email: paolo.brotto@pm10-ambiente.it

Website: www.pm10-ambiente.it

Organization's Name: WASDI SARL

Contact Person: Mr. Paolo Campanella

Contact Person's Email: p.campanella@fadeout.it

Website: https://www.wasdi.cloud/

Organization's Name: OFFICE D'EXPLOITATION DU PORT DE TRIPOLI

Contact Person: Dr. AbdulRahman Hajar

Contact Person's Email: abdelrahman_hajar@yahoo.com

Website**:** www.oept.gov.lb

Organization's Name: EUROPEAN RESEARCH INSTITUTE ONLUS

Contact Person: Dr. Iskender Forioso

Contact Person's Email: f.iskender@eri.net.in

Website: www.europeanresearchinstitute.eu

Organization's Name: UNIVERSITY OF JORDAN

Contact Person: Prof. Mohammad Rasheed

Contact Person's Email: m.rasheed@ju.edu.jo

Website: http://eacademic.ju.edu.jo/r.manasrah/default.aspx

Synopsis of PROMPT's Description

The project aims to extend the capabilities of the ICT tool developed in the framework of the DG ECHO project Be-Ready, in order to (1) model the harbour and coastal circulation in the proximity of the Genoa harbour, one of the biggest ports of the Mediterranean Sea, which lay close to highly sensitive environmental areas; (2) model the dispersion of volatile substances related to oil and hazardous-noxious-substances spills in the harbour of Tripoli and Aqaba; (3) develop an algorithm for automatically detect oil spills from satellite images in order to provide to the decision support system a localisation of the area interested by the spills; (4) develop an innovative algorithm able to track lost container in the sea; (5) and to train and transfer the knowledge that resides in the development of decision support system tool to the local operators of partners belonging to the European Neighbourhood Policy countries (Lebanon and Jordan).

PROMPT's General Objective is to;
- Model the harbour and coastal circulation in the proximity of the Genoa harbour
- Model the dispersion of volatile substances related to oil and HNS spills in the harbour of Tripoli and Aqaba.

- Develop an algorithm for automatically detecting oil spills from satellite images
- Develop an innovative algorithm able to track lost containers in the sea.
- Train and transfer the knowledge that resides in the development of the (Decision Support System) DSS tool to the local operators of partners belonging to the European Neighbourhood Policy countries (Lebanon and Jordan).

PROMPT's Main Activities are;

- creation of a dispersion model for harbor waters
- creation of a dispersion model of the volatile part of HNS and oil spills
- apply risk assessment Model for water and air pollution
- perform detection of oil spills through satellite images
- perform detection of floating containers through satellite image
- perform Real scale monitoring of floating containers
- upgrade the BE-READY's DSS with PROMPT new features
- perform training and evaluation

Milestones (MS) Activities are;

- apply numerical models for the water and air contaminant dispersion
- apply algorithms for the detection and tracking of spills and floating objects
- apply storyline of real-scale floating container test case
- conduct training course

PROMPT's immediate results (outputs) from activities shall be:

- Dispersion of chemical pollutants in harbour and coastal waters
- High-resolution description of atmosphere dynamics and volatile contaminants dispersion
- availability of a tool for the detection of oil spills in coastal waters
- availability of a Tool for tracking floating containers
- an Integration of modeling and technological tools in the Decision Support System
- training and refresher courses

PROMPT's short-term impact (outcome) shall be;

- optimised prevention and preparedness for oil, hazardous and noxious substances (HNS) marine pollution
- improvement of the effectiveness of surveillance, detection, drift modeling, and recovery operations, including floating objects

PROMPT's Long-term impact (goal) shall be;

- reduction of marine pollution in the EU and the neighborhood marine ecosystem to safeguard the environment thus contributing to climate change mitigation.