

Joint Action

Munition in the sea

Action Description

Lead country: Italy

About

The JPI Oceans action on munition in the sea was first proposed by the Strategic Advisory Board in April 2014, and approved by the JPI Oceans Management Board in November 2015. The aim of the action is to assess risks, define priorities and suggest intervention options with regards to munition in the marine environment. The outcomes of the action will be used to support identification, monitoring and elimination of threats through a more systematic approach.

Objectives

As a result of discussions between the most relevant stakeholders, it has been decided that JPI Oceans will conduct activities along three lines:

Science Support- By combining different scientific disciplines, JPI Oceans intends to support the development of a service to forecast changes in the sea state in relation to munitions. Simulation of the impact of removal, dispersion and detonation on human health, on the environment, and on economic activities will also be investigated.

Technology Transfer- JPI Oceans will analyse different technologies and procedures for intervention to support decisions by operators and policy makers. The development and demonstration of technologies and procedures can be used to increase safety, improve the efficacy and reduce the environmental impacts of interventions. JPI Oceans will provide support to exchange findings between different disciplines, projects and initiatives.

Exchange of Knowledge- Panels of experts will support transfer of knowledge and experiences of dealing with munitions in the sea.

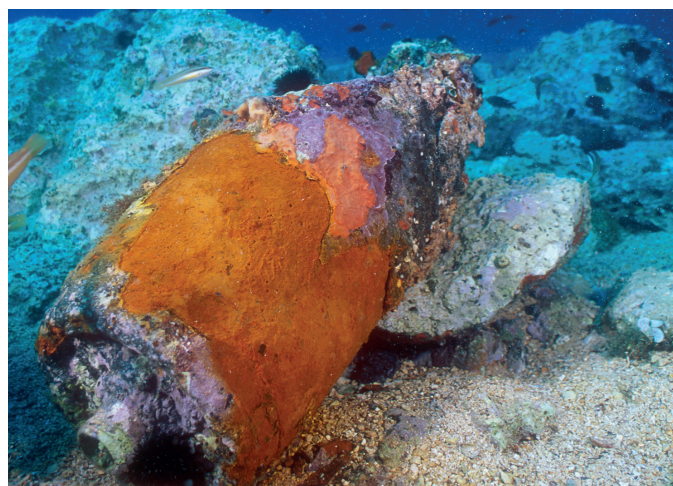


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Expected impact

A. Science Support: provision of services to support operators and provide risk-assessment, through: use of 3D numerical models to provide meaningful data for the risks effect of shallow/deep water explosions, chemical leakage, diver visibility, sediment transport; impacts of blast waves and underwater sounds generated from controlled and spontaneous detonations; estimate of corrosion phenomena and consequences; recognition and identification of munitions, increasing the accuracy and efficiency in the post-processing of sonar and visual data.

B. Technology Transfer: technology transfer and development of new technologies for: high resolution sea bed mapping, acoustic, magnetic and visual, measure sea conditions and marine ecosystems; mitigate effects of blast waves and underwater sounds from controlled detonations on marine life and infrastructure; autonomous and robotic systems, chemical sensors for aquatic systems and assessment of health of marine ecosystems; safety conditions for operations on the sea floor along with confirmed procedures to monitor the release of toxic compounds; protect current infrastructure and improve safety for new infrastructure; avoid the introduction of potentially harmful chemicals into the human food web via aquaculture facilities; defence and national security.

C. Exchange of Practices and Knowledge

Science-to-policy transfer, with knowledge support to select best options; improvement of existing knowledge base, method unification and intercalibration; exchange of practices, unification of guidelines; improvement of personal skills of experts.

Progress

- JPI Oceans presented the action at the NATO Research Workshop " Sea Dumped Munitions and Environmental Risk" AVT-269 -RWS-027, in Varna, Bulgaria, October 2016.
- A reference to munitions has been introduced into the MarTERA ERA-NET Cofund.
- JPI Oceans has been invited to join a large scale exercise at sea in 2016 and 2017, in cooperation with the Portuguese Navy.
- A list of end-users priorities has been completed in 2016 to guide the activities in the near future.
- A list of national offers (IT+DE+NO+BE+PT) has been completed in 2017, for joint activities with and without additional funding/contributions.
- Joint activities without external additional contributions and allowing the participation of all participating countries will start in 2018.

Participating countries

Belgium, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Sweden and the United Kingdom