



# MIRICLE

Mine Risk Clearance for Europe

## SELECTED PROJECTS EUROPEAN DEFENCE INDUSTRIAL DEVELOPMENT PROGRAMME (EDIDP) 2020

<b>CALL TITLE:</b>	<b>Underwater control contributing to resilience at sea</b>
<b>TOPIC TITLE:</b>	<b>Solutions to detect, identify, counter and protect against mine threats (including those operating at very high depths)</b>
<b>DURATION OF THE PROJECT:</b>	<b>24 months</b>
<b>TYPE(S) OF ACTIVITIES:</b>	<b>Study; Design; Prototyping; Testing</b>
<b>TOTAL COST:</b>	<b>€ 9,804,192.48</b>
<b>MAXIMUM EU CONTRIBUTION:</b>	<b>€ 8,999,611.80</b>

## MEMBERS OF THE CONSORTIUM AND COUNTRY OF ESTABLISHMENT:

NAME OF THE ENTITY	COUNTRY
NAVAL GROUP BELGIUM (COORDINATOR)	Belgium
AGENȚIA DE CERCETARE PENTRU TEHNICĂ ȘI TEHNOLOGII MILITARE	Romania
BELSS LTD	Latvia
CAFA TECH	Estonia
DOTOCEAN N.V.	Belgium
ECA GROUP BELGIUM	Belgium
ECA ROBOTICS	France
ELWAVE SAS	France
NAVAL GROUP SA	France
NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK	Netherlands
OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES	France
OŚRODEK BADAWCZO -ROZWOJOWY CENTRUM TECHNIKI MORSKIEJ S.A.	Poland
SISTRADE SOFTWARE CONSULTING SA	Portugal
SOCIEDAD ANÓNIMA DE ELECTRÓNICA SUBMARINA S.M.E	Spain
SPACE APPLICATIONS SERVICES NV	Belgium
TERRA SPATIUM SA	Greece
THALES DMS	France
VLAAMS INSTITUUT VOOR DE ZEE	Belgium

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## **SHORT DESCRIPTION OF THE PROJECT:**

**MIRICLE will develop an innovative counter naval mine warfare solution.**

The project "Mine Risk Clearance for Europe" (MIRICLE) addresses the main components of a stand-off mine warfare solution such as a mission system, communication network, Mine Countermeasures (MCM) vessel and robots, using artificial intelligence for supporting decision making. It will enable significant improvements to carry out all MCM missions. European navies, which have developed unique mine action capabilities including physical means, organizations, and a high level of operational excellence due to massive use of sea mines in the 20th century, will thus reinforce those MCM capabilities to keep pace with an ever evolving, complex and pervasive mine threat.

**Related PESCO project: Maritime (semi-) Autonomous Systems for Mine Countermeasures (MAS MCM)**

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