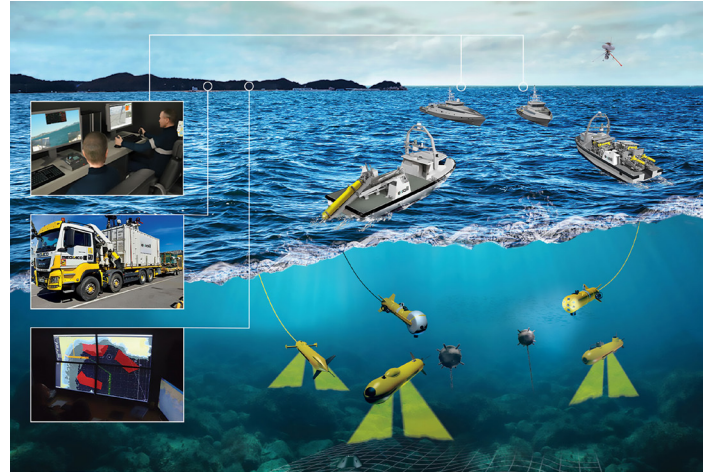


UMIS

The third generation solution for maritime mine countermeasures

- Reduces human exposure
- Modular, adaptable & scalable configurations
- Faster and safer operations
- Sea proven solutions
- Optimized solution
- Efficient use of human resources
- Deployable from designed and designated vessels, coop or shore



UMIS - MMCM

Relying on its 60 years expertise in providing the most high-performance unmanned systems for missions at sea and in the air, Exail offers comprehensive, safe, time and cost-effective drone-based systems to perform mine clearance missions.

UMIS is an open robotic system developed by Exail for surveying or securing large or complex zones at sea as well as coastal areas and harbours.

This modular solution comprises a wide range of unmanned vehicles such as Unmanned Surface Vehicles (USV), Autonomous Underwater Vehicles (AUV), Remotely Operated Vehicles (ROV), Mine Identification and Detection System (MIDS), Towed systems (sonars, sweeps) and Unmanned Aerial Vehicles (UAV).

UMIS integrates UMISOFT, a comprehensive software suite for intuitive open architecture and user-friendly management of the entire mission and data.

This includes tasks preparation, planning, and supervision as well as data acquisition, processing, analysis and storage. UMIS is specially suited to navies and homeland protection operators engaged in the naval warfare, in survey or intervention missions at sea.

Faster and safer operations

Deployed from the shore or a ship (dedicated or not), UMIS enables navies to perform several tasks simultaneously, reducing the operation time and providing more efficient use of human resources.

Keeping the ship in a stand-off position, UMIS conducts operations more safely than traditional MCMVs.

An optimized solution

- UMIS has been designed using common modules (software and hardware);
- Reducing procurement costs as a result of commonality
- Reducing through life costs thanks to maintenance and spare parts standardisation, common training for several systems/equipment
- Simplifying integration: common equipment (consoles, tracking, comms...) providing space and weight savings.

OPEN ARCHITECTURE

Open architecture of UMIS allows third party drones and equipment to be integrated into the UMIS system and at the same time to interface UMIS with external systems such as warship Combat Management Systems (CMS), Platform Management Systems and Message Handling Systems.

MODULAR AND SCALABLE

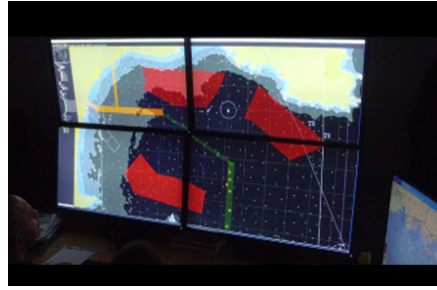
UMIS is based on a toolbox approach providing a tailored configuration to fulfill operators' requirements and constraints for Mine Countermeasures missions.

Modular

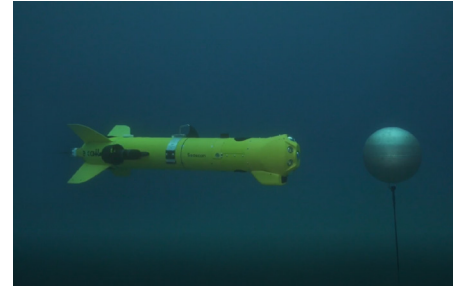
UMIS is modular, allowing the user to configure its system for a specific mission and select the assets for optimized performance.



Inspector 90



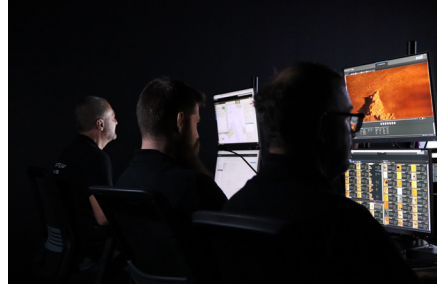
UMISOFT software suite



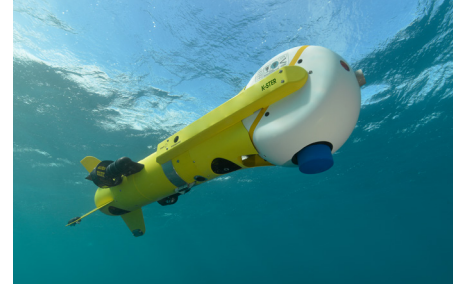
Seascan



Inspector 125



Command control



K-Ster

Scalable

UMIS design enables customers to start with a basic configuration (e.g. limited number of vehicles) and to expand it according to its evolving operational needs and available budget.

From a basic system composed available portable vehicles (UMIS Compact) up to an extensive configuration deployed from a large vessel or the shore.

UMIS COMPONENTS

Tools

UMIS toolboxes are based on the following Exail of third-party unmanned vehicles and subsystems:

- Autonomous Underwater Vehicles (A9-M, A18-M, ...)
- Unmanned Surface Vehicles (Inspector 90, Inspector 125) • Towed sonars (T18-M, TOWSCA, ...)
- Identification ROV (Seascan,...)
- Mine Disposal vehicle (K-Ster C...)
- Unmanned Aerial Vehicle (IT180, ...) • Launch & Recovery Systems
- ISO containers (C2 and others).

See dedicated datasheet.

UMISOFT

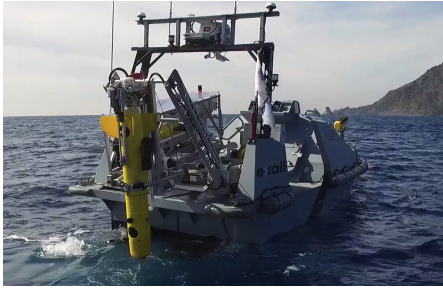
UMIS integrates UMISOFT software suite that allows crews to:

- Interface with a higher level system (e.g. naval ship Combat Management System, task force...)
- Prepare and plan the missions
- Program and control the drones
- Supervise the missions, reallocate tasks etc...
- Process, manage and store the data collected during the missions
- Evaluate the missions.

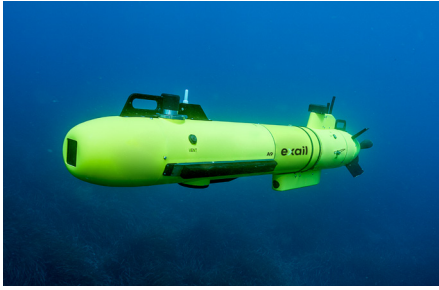
Training simulator

UMIS Training Simulator using representative drone models and environment for:

- Training individuals or groups of operators to learn to use the UMIS Toolbox
- Developing skills and expertise in MCM.



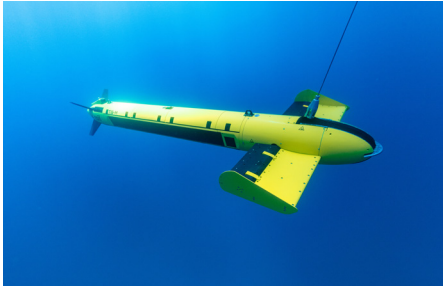
Deployment of a MIDS from the LARS



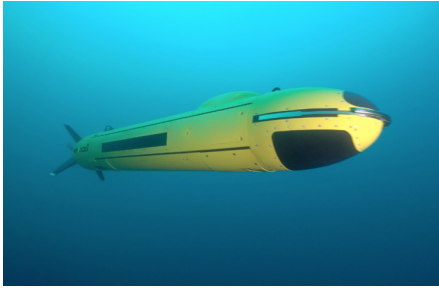
A9-M



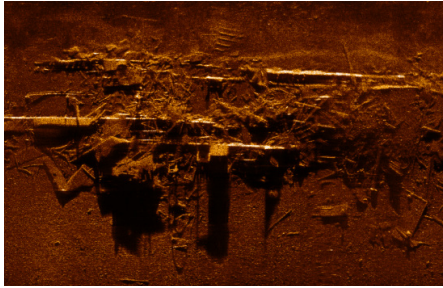
IT180



T18-M



A18-M



UMISAS

