Interspill 2025 - Remotely Operated Vehicles (ROV) service

Starting from January 2023, the European Maritime Safety Agency (EMSA) provides underwater surveys through Observation-Class Remotely Operated Vehicles (ROVs) supporting EU-EEA National authorities on-demand and free of charges.

The provision of ROVs service for accident investigation further strengthens the Accident Investigation Bodies (AIBs) capability to gather evidence from submerged/sunken ships with the potential to increase the quality of safety investigations and, ultimately, to enhance shipping safety. Although the service aims at the AIB needs, it is also offered to the national authorities in the context of Coast Guard functions, for instance for marine safety and counter-pollution.

Through this service, National authorities can gather footage and pictures of underwater targets, such as wrecks, assess hull damages and recover small debris.

The underwater survey services are delivered via observation-class ROVs operated by an external contractor. Two distinct types of service are foreseen: "ROV ONLY" and "FULL". "ROV ONLY" does not require the contractor to procure a support vessel. In contrast, the contractor shall charter a suitable support vessel for type "FULL".

Member States can request ROV services for "real operations", triggered by unforeseen events such as marine casualties, and "exercises", which are planned interventions scheduled in advance.

The EMSA ROV fleet is composed of three light (less than 20 kg), highly deployable underwater platforms that, although compact, can embed various payload, including sonar, HD camera, grabber, water sampler, underwater navigation system and laser measurement tools. The maximum operational depth of these machines is 150 mt.; however, the possibility of operating at greater depth can be considered with the contractor on an ad hoc basis.

ROVs operations are coordinated by requesting authorities and can be deployed within the waters of EU-EEA Member States and beyond.

EU-EEA authorities can request ROV interventions to EMSA through a streamlined procedure keeping in the loop the national point of contact for the service, i.e., the competent Accident Investigative Body.

Deliverables include videos, pictures, metadata, and other data gathered by ROV's sensors during the underwater survey. In certain interventions, confidentiality may be of a paramount importance, and specific data sharing procedures can be put in place.

Despite its novelty, the service has been deployed 16 times around Europe, supporting several stakeholders in gathering underwater awareness on several use cases, including ship safety, security and environmental monitoring.

ROVs can be beneficial for environmental and pollution response marine pollution, particularly for:

- Detection of the pollutant source (e.g., sunken vessel, broken pipeline etc.) and post-accident monitoring
- Collection of water samples for further analysis

- Safe evidence-gathering at high depth and in polluted water
- Support to pollution response and preparedness (e.g., historical wreck monitoring campaign)

In addition to these operational services, EMSA offers familiarisation sessions to provide national users with insight on underwater surveys and highlight operational and technical aspects of ROV interventions. Participants receive guidance on the effective use of ROV systems, the various types of ROVs, sensors and tools commonly used and typical tasks undertaken.

These sessions particularly emphasise on the constraints and parameters to be considered during the planning phase to efficiently conduct operations.

For more information on the service, do not hesitate to contact the Agency at rov.services@emsa.europa.eu





