

Guideline: Approval process for Remote Operation of Maritime Sea Drones and Autonomous Vessels in Danish Waters

Introduction

The Danish Maritime Authority (DMA) is experiencing an increased interest from the industry to construct and operate maritime sea drones remotely or autonomously. According to applicable regulation, permits must be obtained from the Danish authorities beforehand. At present, approvals for commercial operations of maritime sea drones are granted on a **case-by-case basis**. This document aims to provide guidance for companies seeking permission to conduct remote operations of sea drones within Danish waters. The information below outlines the current administrative process, required documentation, and relevant authorities involved in obtaining operational approval.

In case you are looking to build a maritime sea drone to Danish Flag, please reach out to DMA's Regulatory Future Lab (<u>futurelab@dma.dk</u>), who will assist with the approval process using an alternative design approval approach.

Application Process for Operating Sea Drones in Danish Waters

Permission to conduct remote or autonomous maritime operations in Danish waters is issued by the **Safety of Navigation, National Waters** department within the **Danish Emergency Management Agency (DEMA)**. As part of DEMA's approval process, the DMA contributes with an assessment of the vessel's construction, equipment and operational aspects. Therefore, the DMA recommends companies to engage with the DMA as early as possible to initiate the safety assessment for a smooth approval process.

The following section outlines the current procedure for obtaining permission to operate maritime sea drones within Danish waters.

Step-by-Step Procedure

1. Contact DMA's Regulatory Future Lab (futurelab@dma.dk)

Future Lab invites the company for a first meeting to get an understanding of the project and to outline the approval process and align on the risk assessment etc.

2. Submission of Application

The operator must submit a formal, online application through the following link:

Navigation in connection with autonomous vessels or drones controlled without a fixed wired connection | dma.dk. Please find below a list of required information.

Please note: Applications must be submitted to DEMA no later than four (4) weeks before the planned operation.

3. Technical and Operational Assessment

As part of the safety of navigation assessment, the DMA provides DEMA with an assessment of the maritime sea drone's technical and operational aspects and lists operational criteria specific to the intended activity in Danish waters. In case the company has not engaged with the DMA prior to the submission of the application, the DMA may contact the applicant directly for additional information.



4. Final Approval

If the risk assessment demonstrates that the maritime sea drone, and the activities related to operating in Danish Waters, can be carried out safely and in accordance with the intentions of the international regulation, the DEMA issues a final permission.

Legal Framework

The legal basis for these requirements is set out in the Executive Order on Navigational Safety regarding Construction Work and Other Activities in Danish Waters. You can find further details here: Construction works at sea | Danish Maritime Authority (dma.dk). This page also provides direct access to the online application portal.

Required Documentation

For the assessment of the safety of navigation, the following documentation must accompany the application:

1. Risk Assessment

A detailed risk assessment must include:

- The overall safety of the intended voyage or operation.
- The potential impact on the freedom of navigation for other vessel traffic in the area.

2. Operational and Technical Information

Provide information regarding:

- 1. The nature and suitability of the operational area.
- 2. The expected vessel traffic in the area and its characteristics.
- 3. The need for advance notification or warnings to vessel traffic, including a communication plan if applicable.
- 4. The use and purpose of any support or auxiliary vessels.
- 5. The planned route or operational area, including safety parameters.
- 6. Compliance with the international Law of the Sea.
- 7. Measures to ensure that the drone or vessel remains in a safe and seaworthy condition throughout the operation.

If not already adequately included in the application or shared with the DMA prior to the submission, the DMA will require a technical description of the maritime sea drone and a concept of operation (CONOPS) for the specific operation.

Additional Permissions

If the planned operation includes **maritime survey activities**, a separate permit must be obtained from the **Danish Geodata Agency (Geodatastyrelsen)**. Applications can be submitted via the following link: Application for permission to conduct a maritime survey.

Summary

- The DMA recommends to **establish contact with DMA** (<u>futurelab@dma.dk</u>) as early as possible to align on the approval process and the risk assessment.
- Submit your application to DEMA at least 4 weeks prior to the operation.
- Ensure that a complete **risk assessment** and supporting documentation are included.
- Expect case-by-case evaluation by both DEMA and DMA.
- Additional approvals may be required depending on the operation type (e.g., surveys).