

# INTERMOOR OVERCOMES OPERATIONAL CHALLENGES TO INSTALL PRE-LAY MOORING NEAR INDONESIAN SHORELINE

ACTEON



MOORINGS AND ANCHORS

**Project Name:** Nearshore mooring at BOMC

**Location:** Bintan Offshore Marine Centre (BOMC)

**Region:** Riau Islands, Indonesia

**Water depth:** Shore to 30m

**Date:** Q1 2021

## THE PROBLEM

The rigid reel lay vessel was to be moored at BOMC for reeling operations. An offshore mooring system needed to be pre-laid at the site to later hook up to it. The client needed:

- Project management, engineering and crew for transportation and installation of the mooring pre-lay system
- Charter of one Anchor Handling Tug Supply (AHTS) vessel for transportation and installation of the mooring system
- Managing manpower and logistics for the transportation and installation phase
- Engineering of the mooring design for catenary checks and buoyancy optimisation
- Procurement and preparation of mooring equipment

Using their experience in mobile and permanent mooring installation, InterMoor, the lead brand in Acteon's Moorings and Anchors segment, had to consider several challenges during the planning and operations stages, including:

### Availability and readiness of installation vessel

The candidate AHTS vessel qualified at the bid stage was confirmed unavailable due to the vessel owner's corporate decision to freeze all chartering operations.

### Operations near to the shoreline

Some of the mooring legs were to be installed near to shore in shallow water depths. The vessel's heading would be oriented towards the shore during pre-tensioning, posing a significant risk of vessel grounding or collision in case of anchor slippage.

### Crewing of personnel

Due to COVID-19 related restrictions imposed by MPA Singapore, only Singaporean and permanent residents crew would be able to sign off in region upon completion of the project. This

resulted in the challenge of sourcing locally based personnel for offshore operations.

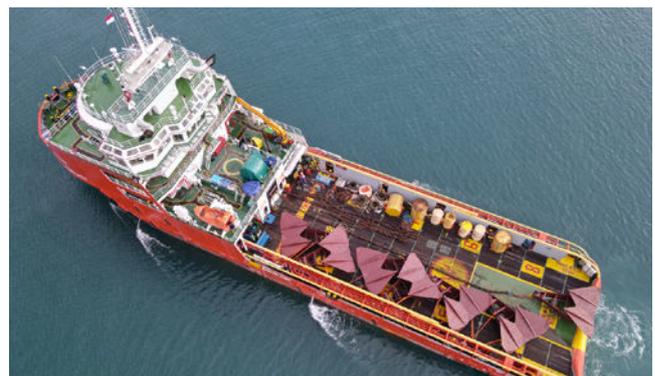
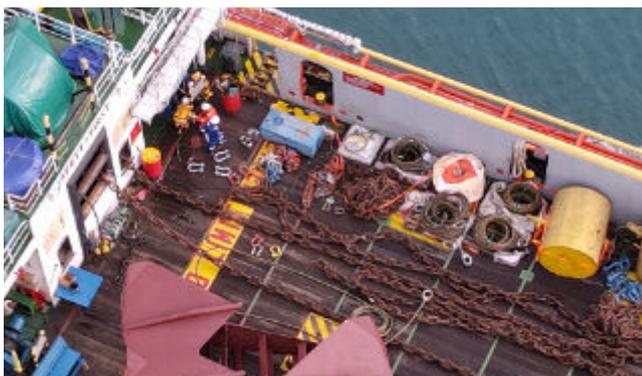
## THE SOLUTION

### Availability and readiness of installation vessel

An intense market search for suitable vessels was carried out by the project team, reaching out to several vessel owners and brokers. The available vessels were then shortlisted and technically/commercially evaluated before finally narrowing down the options to lock in the best candidate vessel for the operation. Constant and effective communication was required with the vessel owner to close out all inspection findings on time before the on-hire date for the charter. Detailed planning and continuous transparent communication with the client were implemented by the project team to confirm the best vessel for the project.

### Operations near to the shoreline

The operational challenges were handled through detailed discussions amongst all key stakeholders involved in the operation to carefully identify the risks and the best controls to mitigate them. Before mobilisation, a technical discussion was conducted with the vessel's master to review the installation drawings. Feedback was captured and incorporated into the procedure/task plans. It was decided that the nearshore mooring legs would be installed during daylight so that the vessel's bridge crew would get better visibility during pre-tensioning to monitor safe distance from the nearby assets. During offshore operations, the risk assessments were covered in pre-shift toolbox talks and incorporated into operations planning. A safety watch was assigned to the forward bridge to monitor the safe distance between the vessel and the nearshore assets while the vessel's echosounder was used to check the under-keel clearance. This crucial part of the operation was emphasized during the Hazard Identification and Risk Assessment (HIRA) review with the client and other subcontractors.



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## Crewing of personnel

InterMoor's Singapore team used their supply chain and local agencies to assemble a fully Singapore-based offshore project crew within the required time. This ensured that there were no unprecedented delays to the mobilisation and demobilisation of the vessel.

## THE RESULT

InterMoor completed the offshore campaigns safely within the revised schedule for one project and ahead of schedule for the other. Acteon companies InterMoor and MENCK worked together seamlessly to install the mooring system. InterMoor provided an engineering and project management single interface for the client and utilised LM Handling pile installation equipment. The seamless integrated approach simplified the tender process and ensured a single point of contact for the client, resulting in an overall faster, smoother, and successful delivery.



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