

# Tailor-made bridge team management and emergency response course

**To achieve maximum effect of training, intelligent facilitation of course content and simulator hardware and software are key factors to success. Based on this knowledge, DMI recently developed a training and simulation course adapted to the individual customer's needs.**

## The course adaptation

The aim of the training is to challenge the officers' practices on the bridge and improve their performance, both individually and as a team.

In order to meet this objective we needed detailed knowledge of the daily routines and work on the bridge. We also needed to know when and how potentially risky situations occurred in the daily operation, handling and navigation of the vessel.

## Introduction

The first step towards obtaining this information was to present the idea and project plan to the company's senior officers and management. This first step was very important in order to gain the confidence of the company's employees, as the development of the course and the final response to the course would depend heavily on a constructive dialogue between the course developers and the crewmembers.

## Observations

The second task was for the course instructors to make observations onboard the vessel. Only by onboard monitoring, it was possible for the instructors to understand how the daily work was done and to identify the potential risks.

## Near miss

Moreover, information on incidents and near miss situations needed to be collected. This was done by sending a reporting sheet personally to all senior officers, inviting them to report and describe a number of known risky and near miss situations.

Based on the collected data, it was possible to tailor-make the content of the course and to create simulator exercises suitable to the purpose of the course i.e. to improve safety and efficiency in the daily work on the vessel.

## The simulator

To create a realistic and convincing environment in the simulator, a number of adjustments to the simulator was needed.

First an accurate model of the vessel and the environment in which the vessel normally operates had to be created. Based on detailed information on the vessel, electronic charts and pictures of the landscape and the port, a computer generated "world" was created to mirror the real world.

Secondly, the same controller devices were fitted on the simulation bridge as those on the bridge of the vessel.

The last and very important step was to have experienced officers from the real vessel test and evaluate the simulation setup.

## Outcome

In order to see if the course has had an effect on the daily practices on the bridge, observations are necessary. But based on the officers' reflections on their own attitudes and behaviour in the debriefings after each simulation exercise, it is realistic to believe that it has.

The attendees supplied valuable and positive feedback and were able to pinpoint where daily work practices needed to be changed. But the course can only be regarded as successful if the knowledge gained is transformed into an actual change in behaviour, and not least maintain this change over time.

More observations in the near future will show if this has been the case.



*The real world*



*Simulation adapted to the individual customer's needs*