

## ■ Scope

This course provides training in the basic theory and use of Electronic Chart Display and Information Systems (ECDIS) for those who will be in charge of a navigational watch on vessels equipped with ECDIS. The training comprises all safety-relevant aspects and for this reason -aims beyond the use of operational controls. Because ECDIS systems and MM Is are in an ongoing process of evolution, a functional approach, not a product-oriented approach, is aimed at. As ECDIS is part of a complex system (including sensors, track control, etc.), complex training based on a variety of functionalities and potential problems is promoted.

The theoretical aspects like all major characteristics of ECDIS data such as data contents and all major characteristics of the display of ECDIS data will be covered in sufficient depth.

For practical capabilities and skills, exercises are performed which will provide practice in setting up and maintaining an ECDIS display, in planning and monitoring a route, in using basic navigational functions and equipment in a real-time navigational environment, in activating updates and in performing proper actions which are necessary for a safe navigational watch.

## Objective

A trainee successfully completing this course will be able to use ECDIS for his navigational watch. He will be able to operate ECDIS equipment, use the navigational functions of ECDIS, select and assess all relevant information and take proper action.

The trainee will acquire and develop a knowledge and understanding of the basic principles governing the safe operation of ECDIS, including ECDIS data and their presentation, as well as the system-related limitations and potential dangers.

He will be able to generate and maintain displays, to operate all basic navigational functions and all specific functions for route planning as well as route monitoring, to use and select proper navigational data and to display the data in the appropriate manner. He will also be able to perform updating.

He will be able to analyse nautical alarms during route planning and route monitoring as well as sensor alarms. He will be able to assess the impact of the performance limits of sensors on the safe use of ECDIS and to appreciate that the back-up system is only of limited performance. He will be able to assess errors, inaccuracies and ambiguities caused by improper data management. Thus, he will be aware of errors in displayed data, errors of interpretation and the risk of over-reliance on ECDIS and be able to take proper action.

In addition, he will have knowledge of the principal types of electronic chart and the essential legal aspects of the use of ECDIS.