Annex A

Extract of SCTW Table A-II/1 – Specification of minimum standard of competence for officers in charge of a navigational watch on ships of 500 gross tonnage or more

Extract of STCW Table A-II/1 Specification of minimum standard of competence for officers in charge of a navigational watch on ships of 500 gross tonnage or more

Function: Navigation at the operational level

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Use of ECDIS to maintain the safety of navigation Note: Training and assessment in the use of ECDIS is not required for those who serve exclusively on ships not fitted with ECDIS These limitations shall be reflected in the endorsements issued to the seafarer concerned.	Navigation using ECDIS Knowledge of the capability and limitations of ECDIS operations, including: .1 a thorough understanding of Electronic Navigational Chart (ENC) data, data accuracy, presentation rules, display options and other chart data formats .2 the dangers of over-reliance .3 familiarity with the functions of ECDIS required by performance standards in force Proficiency in operation, interpretation, and analysis of information obtained from ECDIS, including: .1 use of functions that are integrated with other navigation systems in various installations, including proper functioning and adjustment to desired settings .2 safe monitoring and adjustment of information, including own position, sea area display, mode and orientation, chart data displayed, route monitoring, user-created information layers, contacts (when	Examination and assessment of evidence obtained from one or more of the following: .1 approved training ship experience .2 approved ECDIS simulator training	Monitors information on ECDIS in a manner that contributes to safe navigation Information obtained from ECDIS (including radar overlay and/or radar tracking functions, when fitted) is correctly interpreted and analysed, taking into account the limitations of the equipment, all connected sensors (including radar and AIS where interfaced), and prevailing circumstances and conditions. Safety of navigation is maintained through adjustments made to the ship's course and speed through ECDIS-controlled track-keeping functions (when fitted) Communication is clear, concise and acknowledged at all times in a seamanlike manner

Use of ECDIS to maintain the safety of navigation (continued)	interfaced with AIS and/or radar tracking) and radar overlay functions (when interfaced) .3 confirmation of vessel position by alternative means .4 efficient use of settings to ensure conformance to operational procedures, including alarm parameters for anti-grounding, proximity to contacts and special areas, completeness of chart data and chart update status, and backup arrangements .5 adjustment of settings and values to suit the present conditions .6 situational awareness while using ECDIS including safe water and proximity of hazards, set and drift, chart data and scale selection, suitability of route, contact detection and management, and integrity of sensors		

Annex B

ECDIS – International carriage requirements

ECDIS CARRIAGE REQUIREMENTS

SOLAS Chapter V Regulation 19/2.1.4 states:

"*All ships, irrespective of size, shall have nautical charts and nautical publications to plan and display the ship's route for the intended voyage and to plot and monitor positions throughout the voyage. An electronic chart display and information system (ECDIS) is also accepted as meeting the chart carriage requirements of this subparagraph. Ships to which paragraph 2.10 applies shall comply with the carriage requirements for ECDIS detailed therein.*"

Timetable

Paragraph 2.10 sets out a timetable for vessels engaged on international voyages to be fitted with an ECDIS using Electronic Navigation Charts (ENCs):

- Passenger ships of 500 GT and upwards constructed on or after 1 July 2012
- Tankers of 3,000 GT and upwards constructed on or after 1 July 2012
- Cargo ships, other than tankers, of 10,000 GT and upwards constructed on or after 1 July 2013
- Cargo ships, other than tankers, of 3,000 GT and upwards but less than 10,000 GT constructed on or after 1 July 2014
- Passenger ships of 500 GT and upwards constructed before 1 July 2012, not later than the first survey on or after 1 July 2014
- Tankers of 3,000 GT and upwards constructed before 1 July 2012, not later than the first survey on or after 1 July 2015
- Cargo ships, other than tankers, of 50,000 GT and upwards constructed before 1 July 2013, not later than the first survey on or after 1 July 2016
- Cargo ships, other than tankers, of 20,000 gross tonnage and upwards but less than 50,000 GT constructed before 1 July 2013, not later than the first survey on or after 1 July 2017
- Cargo ships, other than tankers, of 10,000 GT and upwards but less than 20,000 GT constructed before 1 July 2013, not later than the first survey on or after 1 July 2018