MSA Unit 115	QCF Ref: K/506/4620
Title:	Operate non-ECDIS marine Electronic Chart Systems
Level:	3
Credit value:	2

Learning outcomes - The learner will:	Assessment criteria - The learner can:
1. Be able to interpret information presented by Electronic Chart Systems	1.1 Analyse information presented by Electronic Chart Systems 1.2 Demonstrate how to use the information to monitor and adjust Electronic Chart Systems with regard to the following: • Own position • Sea area display • Mode of display • Orientation • Chart data information display • Basic navigation functions • Special functions for route planning and monitoring • User created information layers • Target data • Radar overlay functions • Updating and correcting charts • Status indications • Alarms • Automatic voyage recording • Reconstruction of past track 1.3 Demonstrate how to respond in the event of a malfunction to Electronic Chart Systems.

2. Be able to use Electronic Chart Systems	2.1 Use electronic charts for vessel navigation including: • Vector charts • Raster charts
	2.2 Use settings to ensure compliance with operational procedures including: • Alarm parameters for anti-grounding • Proximity to hazards • Proximity to special areas • Availability of chart data • Chart update status • Back up arrangements • Integrity monitoring • Verification of proper function
	2.3 Adjust settings to suit present conditions
	2.4 Demonstrate situational awareness while using Electronic Chart Systems including: • Safe water and proximity of hazards • Set and drift • Chart data and scale selection • Suitability of route • Target detection and management • Integrity of sensors • Man overboard facilities • Event triggering
	2.5 Use functions integrated with other navigation systems including: • Radar superimposition • Automatic Radar Plotting Aid superimposition • Automatic track keeping • Automatic Identification System transponders
	2.6 Confirm position by alternative means such as Line Of Position fixing
3. Understand the capability of Electronic Chart Systems	3.1 Explain the principal types of electronic charts
	3.2 Explain the difference between Electronic Chart Systems and Electronic Chart Display and Information Systems
	3.3 Explain Electronic Chart Systems/Raster Chart Display Systems data accuracy and datums
	3.4 Describe Electronic Chart Systems data presentation

4. Understand the dangers of over reliance on Electronic Chart Systems	4.1 Explain the limitations of Electronic Chart Systems
	4.2 Explain errors in display data in Electronic Chart Systems
	4.3 Explain errors in interpretation of data
5. Understand rules regarding use of Electronic Chart Systems	5.1 Explain the acceptance of Electronic Chart Systems by United Kingdom for secondary navigation
	5.2 Explain the legal requirements to carry charts

Additional information about the unit	
Unit aim(s)	Covers competence of person in charge of a navigational watch on code vessels operating in any area
Unit review date	31 December 2017
Details of the relationship between the unit and relevant national occupational standards (if appropriate)	MNTB NOS (2012) – B02 Maintain a navigational watch, B03 Plan a navigational voyage B11 Initiate the response to navigational emergencies"
Details of the relationship between the unit and other standards or curricula (if appropriate)	Seafarer's Training, Certification and Watchkeeping Code (Table A-ll/1)
Assessment requirements specified by a sector or regulatory body (if appropriate)	Maritime Skills Alliance's Assessment Strategy and Maritime and Coastguard Agency requirements
Endorsement of the unit by a sector or other appropriate body (if required)	Maritime Skills Alliance
Location of the unit within the subject/sector classification system	Transportation
Name of the organisation submitting the unit	Skills for Logistics, for the Maritime Skills Alliance
Availability for use	
Availability for delivery	
Guided Learning Hours	20