

Overview

This standard covers the skills and knowledge required to use radar and tracking systems safely. The Vessel Traffic Services Operator is required to monitor the serviceability of radar and tracking equipment to determine if the equipment is operating correctly, identify any faults, and to deal with them. Of critical importance is the capability to use marine radar and automatic tracking systems at an operational level, to ensure safety.

There are two elements in this standard:

1. Monitor the serviceability of shore-based radar equipment
2. Use shore-based radar and tracking systems safely

Target Group

This standard applies to an authorised Vessel Traffic Services Operator who has a duty to ensure the safety of navigation and protection of the environment within their area.

Use shore-based radar and tracking systems safely

Performance criteria

You must be able to:

Monitor the serviceability of shore-based radar equipment

P1 check the alarms and indicators whilst using the equipment

P2 check and respond appropriately to documentation relating to equipment status

P3 monitor the operational and functional integrity of the equipment

P4 take prompt and appropriate reporting action with respect to observed defects and failures

P5 follow-up reports to ensure equipment is returned to service

You must be able to:

Use shore-based radar and tracking systems safely

P6 conduct a visual safety check of the scanner prior to powering on radar

P7 ensure no personnel are working in the vicinity of the radar system before powering on radar

P8 ensure that no permit to work is issued in the vicinity of the radar system before powering on radar

P9 switch radar components “on” and “off”

P10 set brilliance control for optimum performance by taking account of the ambient light conditions

P11 set gain control for optimum performance

P12 set tuning to peak performance for maximum traffic image

P13 set „anti sea clutter“ control to suit prevailing circumstances

P14 set „anti-rain clutter“ control to suit prevailing circumstances

P15 carry out radar performance monitoring in accordance with operational procedure

P16 account for the limitations and anomalies of the equipment when using radar

P17 select an appropriate radar range scale

P18 confirm error of variable range marker, take account of the error and obtain target range

P19 confirm error of the electronic bearing line, take account of the error and obtain target bearing

P20 confirm blind sectors and anomalies of radar set in use

P21 consider the effect of correlation/interference rejection systems on radar detection

P22 take account of the limitations of the automatic tracking system in use

P23 use a shore-based radar and tracking system to manually acquire a target

P24 enable automatic target acquisition by shore-based radar and tracking system

P25 interpret shore-based radar and tracking system information

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P26 interpret target vectors and target history P27 set up a guard zone

P28 take account of the operational limitations of the Vessel Traffic Services shore-based radar and tracking system

P29 set brilliance control for optimum performance by taking account of the ambient light conditions

P30 monitor equipment performance according to operational procedures

P31 tag all participating and relevant traffic in the Vessel Traffic Services area correctly

P32 acquire all new traffic within and entering the Vessel Traffic Services area promptly

P33 identify and correct target swaps promptly

P34 obtain target data and marker data and use it appropriately

P35 activate and correctly use the tracking system tools/aids including automatic detection and alerting systems

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Knowledge and understanding

You need to know and understand:

K1 the hazards and risks of the workplace that may affect people and the environment

K2 how to make and apply decisions based on the assessment of risk

K3 how to apply practices that maximise the health, safety and welfare of self and others in the workplace

K4 the national and international regulations, statutory authority, codes of practice and industry good practice in relation to Vessel Traffic Services and the role of Vessel Traffic Services Operator

K5 your organisation's policies, procedures and working practices relevant to Vessel Traffic Services operations

K6 the different roles within Vessel Traffic Service operations, their priorities and responsibilities

K7 lines and methods of communication /reporting in the workplace

K8 vessel movement and data recording equipment, their operating principles and how they are maintained

K9 how to communicate clearly and effectively with the range of people involved

K10 principles of effective communication

K11 how verbal and non-verbal communications work

K12 how to collect valid data K13 how to evaluate data

K14 own organisation's contingency plans

K15 operating theory and limitations of shore-based radar and tracking systems

K16 how to operate shore-based radar and tracking systems

K17 factors affecting radar detection and interpretation

K18 theory, limitations and use of manual plotting, manual tracking and Automatic Identification Systems (AIS) for tracking

External Links

The important contribution of Vessel Traffic Services towards maintaining the safety of life at sea, safety and efficiency of navigation and the protection of the marine environment is recognised nationally and internationally. International Association of Marine Aids to Navigation & Lighthouse Authorities (IALA) guidelines on recruitment, qualification and training for Vessel Traffic Services Operators have been adopted and are regulated in the UK through the Maritime and Coastguard Agency. These Vessel Traffic Services National Occupational Standards take cognisance of and complement the IALA guidelines and model courses.

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Suite	Vessel Traffic Services Operations
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