

Vessel Traffic Management and Information Systems VTMIS Training Course

24 – 28 January 2027
Johannesburg

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Ref: 2155_257854 **Date:** 24 – 28 January 2027 **Location:** Johannesburg **Fees:** 4500 Euro

Overview

Vessel Traffic Management and Information Systems VTMIS Training Course is a one-week intermediate programme for vessel traffic service operators, harbour masters, maritime authority staff, port control personnel and marine operations supervisors. Participants build a VTMIS Operations and Assurance Pack that connects VTMIS course principles, vessel traffic management system training, VTS operations, maritime traffic monitoring, vessel traffic information system governance and service resilience. Agile Leaders Training Center presents VTMIS operations practice.

The course distinguishes the Vessel Traffic Service from the technology platform that supports it. Participants connect service purpose, authority, procedures, reporting, traffic-image creation, sensor and communication inputs, operator decision support, incident coordination, information quality, contingency and performance. It is not an accredited IALA VTS operator certificate course.

Who Should Attend

- Vessel traffic service personnel who monitor and support maritime traffic
- Harbour masters and port-control supervisors responsible for navigation safety
- Maritime authority staff who oversee VTS governance and performance
- Marine operations personnel who coordinate vessel arrivals and movements
- Technical support staff who maintain VTMIS information and interfaces

Participants should understand basic maritime operations and nautical terminology. The course does not authorise a participant to act as a certified VTS operator and does not replace IALA-accredited training, local on-the-job endorsement or competent-authority requirements.

Departments and Industries

- Maritime administrations and competent VTS authorities
- Port authorities, harbour master offices and marine control centres
- Coastal monitoring and waterways organisations
- Offshore, terminal and marine logistics operators
- VTMIS integrators, communications providers and technical support teams

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Learning Objectives

- Explain VTS purpose, service boundaries, authority and the supporting VTMIS architecture.
- Build and maintain a reliable traffic image from vessel reports and sensor inputs.
- Apply structured communication, information provision, advice and coordination procedures.
- Manage degraded sensors, data conflicts, recording, handover and contingency conditions.
- Assess cyber, technical and operational dependencies affecting service continuity.
- Complete a VTMIS Operations and Assurance Pack with procedures, controls and measures.

Course Agenda

Day 1: Define the VTS Service and Operating Context

- SOLAS V/12, IMO Guidance and IALA VTS Framework Map
- Service Purpose, Area, Users, Risk and Authority Profile
- Information Service, Traffic Organisation and Navigational Assistance Concepts
- Competent Authority, VTS Provider and Stakeholder Responsibility Matrix
- Operational Procedure, Record and Watch Handover Structure

Day 2: Build the Vessel Traffic Image

- Vessel Reporting, Identity, Voyage and Movement Information Flow
- Radar, AIS, CCTV, Weather, Radio and External Data Source Map
- Track Association, Correlation, Labelling and Information Confidence
- Chart, Route, Area, Alert and Traffic-Image Configuration
- Data Quality, Conflict, Latency and Missing-Information Review

Day 3: Communicate and Support Traffic Decisions

- VHF Watch, Message Structure and Standard Maritime Communication
- Information, Warning, Advice and Instruction Boundary Scenarios
- Traffic Plan, Movement Coordination and Waterway Constraint Board
- Operator Situation Assessment and Decision-Support Checklist
- Communication Log, Recording, Replay and Evidence Integrity

Day 4: Coordinate Incidents and Degraded Operations

- Collision Risk, Grounding, Equipment Failure and Hazard Scenario Matrix
- Alert Validation, Escalation and Multi-Agency Coordination
- Sensor Loss, Communications Failure and Conflicting-Track Procedure
- Business Continuity, Fallback, Recovery and Service Restoration Plan
- Cyber Dependency, Access, Interface and Incident-Control Review

Day 5: Assure and Improve VTMIS Operations

- Service Objective, Performance Measure and Threshold Dashboard
- Watch Audit, Recording Review and Procedure-Conformance Checklist
- Operator Workload, Human Factors and Team Coordination Review
- Technology Change, Configuration, Test and Acceptance Controls
- Capstone Exercise: Complete a VTMIS Operations and Assurance Pack

Practical Exercises

- Define a VTS service area, users, hazards and operating objectives.
- Reconcile vessel reports with radar, AIS and other sensor information.
- Draft an operator message for information, warning and coordination scenarios.
- Manage a degraded sensor and communications scenario through fallback and recovery.
- Prepare a watch assurance dashboard and improvement action plan.

FAQs

What is the difference between VTS and VTMIS?

VTS is the shore-side service and operating organisation that supports safe and efficient navigation. VTMIS is the integrated information and technology environment used to support that service and related maritime stakeholders.

Does this VTMIS course certify a VTS operator?

No. It is professional development, not an IALA-accredited operator course, competent-authority certificate or local on-the-job endorsement.

Which information sources support a traffic image?

Sources may include vessel reports, radar, AIS, cameras, meteorological and hydrographic feeds, radio communications, charts, port systems and other validated external data.

How should conflicting vessel information be handled?

Operators should preserve source identity, assess confidence and timeliness, seek clarification, avoid unsupported assumptions, record decisions and follow approved escalation procedures.

Why is cyber resilience included?

VTMIS depends on connected sensors, networks, software, accounts and external interfaces. Cyber disruption can affect information integrity, availability and operational decision support.

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Conclusion

Participants leave with a practical assurance framework and completed operating pack. They can connect service purpose, traffic information, communication, incidents, resilience, technology and performance through traceable procedures.