

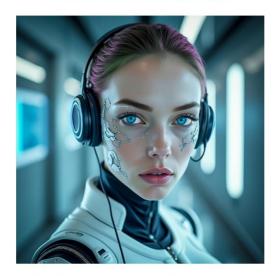


2026 Marine Terminal Management and Self-Assessment (MTMSA) Program



# What is new?

### Cassandra



'Only those systems that use optimal information can function.

Let me test yours'

TTT funded the development of an Artificial Intelligence named 'Cassandra'. Based on The General Law of Functionality, Cassandra can detect knowledge gaps and test and predict HSEQ Performance and Operational Excellence. She acts as an Early Warning System preventing risk. This is a unique service only offered by us.





This training, supervision and guidance program was created based on the 2012 OCIMF publication MTMSA.

It teaches Marine Storage Terminal Supervisors and Managers how to observe, run and improve managing operations and control their terminals in an organized manner. It can be used by terminal operators to verify that their management systems are comprehensive and promote safety and environmental excellence, with the intention of minimizing risk in the execution of their operations and providing the ability to measure and continuously improve their management systems.

Terminal Operators are encouraged to submit the results of their self-assessments online to OCIMF's central database for distribution to recipients approved by the terminal operator.

#### Who should attend?

We invite everyone involved in running and managing tank storage and marine terminals to attend this training course as it gives you the opportunity to review, improve and restructure your day to day operations where needed.

A systematic approach such as this OCIMF guideline is crucial to ascertain a high level of operational excellence and safety.





#### The following chapters are addressed during this training:

#### **The Quality System**

- a. Continuous Improvement
- b. Key Performance Indicators (KPI) Measurement Process
- c. Self-Assessment Process
- d. Verification Process
- e. Completion and submission of the MTMSA report

#### There are 15 elements of MTMSA as follows:

#### 1. Management, Leadership and Accountability

- Commitment to safety and environmental protection
- Understanding responsibilities and accountabilities of all involved
- Setting standards, HSE Standards
- HSE target are monitored against KPI's

#### 2. Management of Personnel

- Manning Levels
- Personnel Selection and Recruitment
- Induction, familiarization and training
- Performance management
- Contractor Selection

#### 3. Port and Harbour Operations

- Ship / Shore information exchange
- Define HSE criteria for berthing and departure
- Available up to date industry publications and guidelines
- Performance monitoring of pilotage, tugs, mooring craft

#### 4. Terminal Layout

- Mooring equipment
- Fendering Systems
- Safe access
- Electrical equipment status
- Sufficient lighting
- Fire fighting
- Transfer Equipment
- Surge risk





#### 5. Ship/Shore Interface

- Pre arrival information & Communication
- Safe Mooring
- Loading Unloading Plan and Agreement
- Cargo Quality and Quantity
- SSSCL Safety Checklist

#### 6. Transfer Operations

- Pre-Arrival inspections of berth and equipment
- Operating and environmental limits
- Transfers procedures
- ESD Emergency Shut Down
- MSDS exchange and information
- Cargo measurement and sampling

#### 7. Maintenance Management

- Routine Inspections
- Routine testing and calibration regimes
- Scheduled maintenance
- Identification of critical systems
- Spare part inventories
- Structural surveys at defined frequency

#### 8. Management of Change

- Temporary or permanent changes to equipment and procedures are subject to risk assessment
- Changes of staff, roles, responsibilities and organisational structures
- Documenting processes of change
- Identify consequences of change

#### 9. Incident Investigation and Analysis

- Prompt reporting of all near misses
- Define incidents and near misses that require investigations
- Requirements for timely investigations
- Reporting and initiating corrective actions
- Identify root causes and follow up
- Recording and analysis to improve management systems

#### 10. Management of Safety, Occupational Health and Security

- Risk assessment processes
- Work Permit Systems
- Site Safety Inspections
- Safety Meetings
- PPE- personal protective equipment
- Security threats, training and exercises (ISPS)





• Control of ignition sources

#### 11. Environmental Protection

- Create an environmental policy
- Identification and control of potential sources of pollution
- Waste management
- Disposal options for vessel and shore generated waste

# 12. Emergency Preparedness (in cooperation with local, regional or national authorities)

- Emergency response plan
- Spill response plan
- Emergency evacuation plan
- Emergency training

#### 13. Management Systems Review

- Audit plan to address management of all terminal activities
- Standard audit format and process
- Training and qualification requirements auditors
- Monitoring of audit finding to close-out
- Management review of findings

#### 14. Operations at Buoy Moorings

- Establish planning, operational practices and procedures to ensure safe mooring
- Compliance with established standards and accepted industry guidance
- Compatibility of area and size of vessels
- Suitability and capability of support crew and craft
- Monitoring vessel position in relation to the buoy

#### 15. Terminals Impacted by Ice or Severe Sub-Zero Temperatures

- Plans, procedures associated with the operating conditions
- Trained and prepared personnel
- Suitability of fire-fighting, life-saving and first aid equipment
- Selection of vessels for operating in anticipated conditions
- Ice forecasting and weather reports
- Emergency and spill response





## **Course Instructor**



#### Arend van Campen - Tank Terminal Training

Arend van Campen is a long-standing member of the Energy Institute with over 40 years of experience as CEO, Terminal Manager, Marine Cargo Expediter, and Loss Prevention Advisor across global operations. TTT is officially recognized as an Energy Institute Learning Affiliate.

Arend holds a PhD in Information Physics and promotes the principle that safe, sustainable, and profitable operations are only possible through ethical behaviour, continuous learning, and informed decision-making.

He is also the founder of <u>www.sustenance4all.com</u> which developed an Artificial Intelligence named Cassandra to test HSEQ functionality and operational performance.

We make people better!