SYLLABUS

MANAGING PORT & TERMINAL OPERATIONS AGENDA

Overview

- The national importance of port infrastructure
- The role of the Port Authority
- The difference between a 'port' and a 'terminal'
- Typical types of 'port traffic'
- Intermodal capability and the ship/shore interface
- The need for specialisation?

Security of infrastructure and supply

- Location considerations for a port
- Key factors from an infrastructure and personnel perspective
- Key security factors
- Local content – its role and influence
- Class exercise
- Primary and secondary infrastructure considerations
- Port specialisation

The Port Cycle

- Vessel arrivals
- Cargo handling
- Container operations
- Warehousing and storage
- Logistical activities -loading/unloading/trans-shipment
- Vessel departure

Managing the warehouse and inventory functions

- The Total Cost of Ownership (TCO) examined
- Storage management issues
- Special storage requirements: hazardous goods, climate
  controlled storage, and high security/value storage
- Class exercise

The supply chain function of a port

- The port as a supplier (cargo handling equipment; engines and (spare parts); bunkering; storage; warehousing and security)
- Digitalisation in the port supply chain
- The automation questions

Dealing with port congestion

- Impacting factors examined – operations/ infrastructure, FM events, fuel price, geopolitical events
- The problem with vessel delays and ETA's
- Resource constraints: labour, the problem of empty containers (space utilisation), equipment shortages (i.e.: container transporters), lack of infrastructure (i.e.: cranes), and lack of hinterland connectivity
- Berth management
- Demurrage and detention
- Some possible solutions: adjusting lead time, reconfiguring transportation, 24/7 operations, construction, enlargement, or dredging

Competitive advantage factors for a port/ terminal

- Identifying and examining the sources of competitive advantage – port operations assessment
- Assessing the key factors for creating a sustainable competitive advantage
- The 10 directly contributing key factors for a sustainable competitive advantage
- Understanding the importance of strategic integration
- Creating organisational resilience
- **Class exercise**

Commercial Performance Management

- Knowledge about vendor qualification, pre-qualification and post-qualification requirements and processes
- Understanding the ITT process
- Technological capability
- Track record: personnel, equipment, operational capability logistics
- Procurement processes
- Identification and inclusion of KPI's
- Evaluation against established KPI's
- Evaluate and control documentation
- HSE
- Environmental policies

Stakeholder engagement

- The problem with stakeholder agendas
- Stakeholder power and influence – a shifting dynamic over a project's lifecycle?
- Stakeholder identification and assessment or 'stakeholder mapping'
- **Class exercise** – stakeholder mapping
- Establishing/re-establishing constructive engagement with stakeholder groupings
- Dealing with local content and corporate social responsibilities (CSR)

Material Disposal and Waste Management

- Port State Control (PSC) or the International Maritime Organization (IMO)
- MARPOL
- Waste management/waste management options (i.e., reuse or recycle? Any acceptance criteria that must be met?)
- Any decontamination – early identification of potentially hazardous waste
- Managing waste inventory
- Case study: NORM (Naturally Occurring Radioactive Materials)
- Infrastructure for handling, transportation, and interim storage
- On-site capability?
- Assessment of supply chain requirements/ capabilities
- Strategies for minimising the potential for environmental damage
- Environmental Impact Assessments (EIA's)
- **Class exercise** – EIA's