

Information management - bringing it all together

Cargo operations

- Bills of Lading
- Cargo list
- Cargo Record Book
- Dangerous goods list
- Loading/unloading plan
- Passenger list or return
- Stevedore damage reports
- Ballast Water Data
- Tank/Pipeline/Hold diagrams
- Cargo pumping arrangements
- Checklists
- System/Equipment manuals
- Operating instructions
- Standing Orders/Instructions
- Tank Level monitoring
- Valve monitoring
- Ballast activity
- Emission reports
- Stability, loading and ballasting information
- Temperature or humidity requirements or restrictions

Health, Safety & Wellbeing

- Accident Log
- Medical/Sick-Bay Log
- Safety Posters
- Safety Information
- Safety Bulletins
- Minutes of safety meetings
- Fatigue Guidelines
- Port welfare information guides
- Family support information
- Medical advice
- Quality, Safety and Environmental Management Systems (QSEMS)
- Health and Safety Reports
- Results of exit interviews
- Staff suggestion schemes
- Confidential reporting scheme summaries
- National incident investigation body reports
- Topical health guidance (e.g. swine flu)
- System/Equipment manuals
- Operating instructions

Education & Training

- Records of Training
- Training Videos/DVDs
- 'Getting started' DVDs for new equipment
- CBT programmes
- Posters
- Magazines and bulletins

Regulation

- Official Log Book
- Garbage Record Book
- Radio Log Book
- Hours of rest records
- Ship security records
- Closing of Openings Record Book
- Controlled Drugs Register
- Muster lists
- Ship's certificates
- Certificates of competency
- Ballast water exchange log book
- ISO 9000 and 14000 records
- TMSA records
- Charterer requirements records
- Software/data version control



Ship's Administration

- Crew lists
- Stores Declaration
- Crew Agreement
- Bunker Declaration
- Standing Orders/Instructions
- Garbage Management Plan

Navigation & Communications

- Integrated Bridge System
 - Passage execution
 - Communications
 - Machinery control
 - Loading, discharging and cargo control
 - Safety and security
- Electronic Chart Display and Information Systems (ECDIS)
- Alarms
- Charts (ENC or paper)
- Magnetic compass
- Gyro compass
- Radars
- Automatic radar plotting aids
- Echo sounders
- Speed/distance indicators
- Rudder angle indicators
- Propeller direction/revolution indicators
- Rate-of-turn indicators
- Radio-direction finders
- GPS/GLONASS
- DGPS/DGLONASS
- Long Range Identification and Tracking (LRIT)
- Loran
- Voyage Data Recorder (VDR)
- Voyage Management System
- Route planning data
- Bridge movement book
- Compass deviation book
- Deck log book

- Records of navigational activities
- Voyage analysis reports
- Checklists
- System/Equipment manuals
- Operating instructions
- Standing Orders/Instructions

- Compass deviation curve
- Manoeuvring information
- Radar shadow sector diagram
- Ship Radio Licence
- R/T operating instruction cards

- Meteorological services and warnings
- Search and rescue services
- Ships' routing
- Ship reporting systems
- Vessel traffic services
- Aids to navigation
- Nautical charts & publications
- Life-saving signals
- Danger messages
- Distress messages
- Port Guides
- Notices to Mariners
- Flag State Notices and Regulations

Marine Engineering & Electro-technical

- Machinery control and surveillance systems
- Vibration monitoring
- Planned Maintenance
- Conditioned based maintenance
- Power Management Systems
- Survey and inspection reports
- Engine room log book
- Fresh Water Maintenance Log
- Bunker Declaration
- Oil Record Books
- Sounding book

- Bilge Sampling records
- Oily Water Separator (OWS) Performance Analysis
- Log of Fuel Oil/Lube Oil Purifier Settings
- Log of Oil to Sea Interfaces
- Checklists
- System/Equipment manuals
- Operating instructions
- Standing Orders/Instructions
- Tank Level monitoring
- Valve monitoring
- Ballast activity
- Emission reports
- Machinery and electrical space drawings

Emergency & Security

- Shipboard Emergency Plans
- Stability, loading and ballasting information
- Damage control plans
- Ship Security Plan
- Ship's drawings
- Position reports
- Port documents
- Cargo plans
- Loading/discharge plans
- ISPS documentation
- Anti-piracy guidance
- LSA manufacturer's instructions
- Confidential reporting scheme summaries
- Search and rescue capability during passage
- Offship communications during emergency (Owner, SAR, Technical support...)

Personal

- Crew phone/text/email
- Crew internet
- Entertainment (DVD/CD/Games)

Communication systems

- VHF DSC
- VHF radiotelephony
- MF DSC
- Imarsat
- EPIRB
- Maritime Safety Information
- NAVTEX/SafetyNET
- Email
- Telephone
- Facsimile
- Telex
- System/Equipment manuals
- Operating instructions

Communication modes

- Person to person
- Email
- Telephone
- Facsimile
- Telex
- Mail
- Paper
- AIS
- Computer print out

Databases

- Use of information technology
- Usability of information
- Data entry
- Checking
- Usability of information systems
- Number of reporting systems
- Maintenance and management of data
- Data analysis for operational and safety issues
- Assignment of responsibility for data and information management
- Asset value of information
- Audit
- Through life cost/opportunity cost etc.

For each job/task:

- **What** set of information needs to be communicated?
- **Why** is this information being communicated?
- **Where** is it going to / where will it be stored?
- **How** will it be communicated/ understood/stored?
- **When** is it needed / how long will it be needed?

For any information:

Should it be combined with other information to add value and increase efficiency?

Aim for the following in the presentation of information (whatever the format - even spoken!):

- **Clarity** - the information content is conveyed quickly and accurately
- **Discriminability** - the displayed information can be distinguished accurately
- **Conciseness** - users are not overloaded with extraneous information
- **Consistency** - unique design, conformity with user's expectation
- **Detectability** - user's attention is directed towards information required
- **Legibility** - information is easy to read
- **Comprehensibility** - meaning is clearly understandable, unambiguous, interpretable, and recognizable