

Safe Manning

Considerations

- Operational functions
- Operational factors to consider
- Relevant instruments
- Task capability
- Attributes
- Workload assessment
- Hours of work and hours of rest requirements
- Watchkeeping patterns

Guidance & Tools

- IMO Principles of Minimum Safe Manning (Resolution A.1047(27))
[www.imo.org/KnowledgeCentre/IndexofIMOResolutions/Documents/A%20-%20Assembly/1047\(27\).pdf](http://www.imo.org/KnowledgeCentre/IndexofIMOResolutions/Documents/A%20-%20Assembly/1047(27).pdf)
- A rough guide to Minimum Safe Manning
www.he-alert.org/documents/published/HE01125.pdf
- Recommendations Relating to the Application of Requirements Governing Seafarers' Hours of Work and Rest
www.ocimf.org/media/55169/Recommendations-Relating-to-the-Application-of-Requirements-Governing-Seafarers-Hours-of-Work-and-Rest-Nov-2012.pdf

Future considerations

- Remote platform/system monitoring
- Traffic Organization Services
- Navigational Assistance Services
- Remote pilotage
- Autonomous vessel operations

Organization & Management

Performance Influencing Factors

- Top Level Management
- Personnel
- Operational
- Technical
- Safety Management

Guidance & tools

- Alert! Issue 2 Centrespread
www.he-alert.org/filemanager/root/site_assets/centrespreads/centrespread_2.pdf

Other considerations

- Need for additional crew (above minimum manning)
- Administration officer
- Information Management officer

Supernumeraries

- Company representatives
- Mooring crews
- Cargo crews
- Training officers
- Officers/ratings under training
- Riding gangs

Fatigue management

Causes, effects and mitigation

- Alert! Issue 13 Centrespread
www.he-alert.org/documents/centrespreads/centrespread_13.pdf
- Alert! Issue 13 Video
www.he-alert.org/user/vodcast13.asp

Responsibilities

Ship designer

- 'Design out' debilitating effects of noise, temperature, motion, vibrations, intensity of lighting etc

Shipowner/shipmanager

- Comply with Safe Manning requirements
- Develop a fatigue management plan
- Authorise master to anchor if crew are fatigued

Seafarers

- Identify the causes of fatigue
- Take appropriate and early measures to prevent fatigue
- Review watchkeeping patterns
- Comply with hours of work and hours of rest

Guidance & tools

- IMO guidelines on fatigue mitigation and management (MSC/Circ.1014)
www.imo.org/en/OurWork/HumanElement/VisionPrinciplesGoals/Documents/1014.pdf
- Crew Endurance Management System (USCG)
www.he-alert.org/documents/published/HE00520.pdf
- Crew Endurance Decision Support Software
www.uscg.mil/hq/cg5/cg5211/docs/DSS.zip
- ISF Watchkeeper
www.home.isfwatchkeeper.com
- MARTHA
www.warsashacademy.co.uk/about/resources/martha-software-and-documents.zip
- MLC 2006 Pocket Checklist
www.ukpandi.com/fileadmin/uploads/uk-pi/LP%20Documents/Checklists/ILO%20MLC%20pocket%20checklist_September%2012.pdf
- ILO MLC Smartphone App
www.ukpandi.com/loss-prevention/apps/
- Fatigue Advisor Resource (Maritime New Zealand)
www.he-alert.org/documents/published/he01130.pdf
- Wheelhouse Fatigue Checklist (Maritime New Zealand)
www.he-alert.org/documents/published/he01135.pdf
- Recommendations Relating to the Application of Requirements Governing Seafarers' Hours of Work and Rest
www.ocimf.org/media/55169/Recommendations-Relating-to-the-Application-of-Requirements-Governing-Seafarers-Hours-of-Work-and-Rest-Nov-2012.pdf
- The Nautical Institute Fatigue Forum
www.nautinst.org/en/forums/fatigue/index.cfm