

The Dry Bulk Management Standard

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Purpose and scope

The Dry Bulk Management Standard (DryBMS) helps assure ship managers of bulk carriers that they are meeting the right standards to achieve a good level of management.

It can be used to identify areas for change to make sure resources are used to support high-quality ship management.

The tool consists of a draft self-assessment questionnaire for review by the industry to gather feedback and opportunities for improvement. The vision is to launch a revised standard early in 2021, and a to incorporate a dashboard.

The questionnaire covers 30 subject areas of ship management, within four sections – Performance, People, Plant and Process.

The dashboard will show how a company's self-assessment compares to other companies on a range of statistics that have been identified as indicators of good management.

Section one

The Dry Bulk Management Standard

Introduction

The Dry Bulk Management Standard is a set of resources for ship managers to use to self-assess and improve (or maintain) their performance. It contains guidance on how to conduct self-assessments and specific subject areas in which each focus on an area of ship management.

All the materials are available on our website <https://drybulkmanagementstandard.org>

The documents guide you through a process to capture current activity and practice, assess how well your company is performing against a set of standards, and improve practices, procedures and administrative arrangements.

The subject area self-assessment criteria set out what good practice looks like and how to evaluate performance by assessing each expectation of your company's practice against these good practice criteria

Finally, as an organisation, you decide what actions you want to take to either maintain good current practice or improve practice.

Expectations

Within each subject area, the Dry Bulk Management Standard provides expectations and associated targets at four levels: - Basic, Intermediate, Advanced and Excellence. Each level describes the comprehensiveness of a company’s management system in relation to the subject area. A general description of the levels of compliance is shown in the table below: -

Basic	Mandatory compliance with IMO and flag state requirements. The company sets clear HSSE requirements and makes reference to industry guidelines and non-mandatory recommendations but does not adopt them as mandatory and does not set clear parameters.
Intermediate	The company meets all the expectations of the basic level. The company incorporates continuous improvement process and has set clear parameters in the SMS for non-mandatory recommendations and industry guidance and in order to manage HSSE risks.
Advanced	The company meets all the expectations of the intermediate level. The company demonstrates a continuous improvement process, has adopted upcoming legislation and industry lessons learnt into its SMS and adopts specialised tools to manage key indicators and emerging risks associated with HSSE.
Excellence	The company meets all the expectations of the advanced level. The company demonstrates a pro-active continuous improvement process, to collect and analyse leading indicators and emerging risks. It is able to demonstrate a systematic process for follow up and conclusion of definite actions for managing all HSSE risks.

The expectations and associated targets can be used by a company to self-assess their systems and processes.

Self-assessment process

It is important that the process is led and managed by a senior figure in the organisation, but self-assessment works best when it is an integral part of your company's activity, not something that is done by just a few people on behalf of all the rest. Everyone should have the opportunity to assess and evaluate their role against subject area expectations and targets, and against those parts of the Dry Bulk Management Standard which apply to them.

The staff involved in self-assessing each subject area should identify and gather sources and kinds of evidence in relation to the expectation and target for each stage in the subject area. Suggested evidence is included in the subject area document, however, this is only guidance, as each company may comply with the expectation and target in a different way. Once you have identified the possible evidence under each expectation and target, you can begin the process of working out what the evidence is telling you - What are your strengths? What are your weaknesses? How do you know?

Evidence of your company's performance may be made by matching the evidence of your company's performance against other indicators. Here are some examples. You may wish to add others.

Your last self-assessment report

External audits of the company

Internal audits

Feedback from customers/stakeholders

Performance against your own targets

Findings from inspections

Performance trends

Benchmarking information

Once you have collected your evidence and made judgements on the effectiveness of your management, you should record your findings. You are now able to score your self-assessment.

Scoring methodology

Within each subject area, and based on your self-assessment, you should score each level based on the following criteria:

This level is not met	0%
This level has substantial opportunities for improvement	25%
This level is partially met	50%
This level is substantially met	75%
This level is fully met	100%

The percentages for each stage are totalled and divided by 100 to give a score out of four.

Within the dashboard, there are plans for certain rules, for scoring levels above basic and intermediate: -

Unless the score for the basic level is 100%, scores for the intermediate, advanced and excellence levels will be scored at 5% of the self-assessed score.

Unless the scores for both the basic and intermediate levels are 100%, scores for the advanced and excellence levels will be scored at 5% of the self assessed score.

Continual improvement

The PDCA cycle is a way of implementing continual improvement to your company's activities. Each step to improvement can be defined by four sub steps, Plan, Do, Check and Act:

1. **Plan:** Establish a timetable for internal audits and management reviews. Establish the objectives and processes necessary to deliver results in accordance with your company's requirements and policies.
2. **Do:** Implement changes designed to solve the problems on a small scale first to see the effect. This minimizes disruption to routine activity while testing whether the changes will work or not.
3. **Check:** Monitor and measure processes and product against policies, objectives and requirements and report the results. Also check on key activities to ensure that the quality of the output is conforming and not influenced by the changes.

4. **Act:** Take actions to continually improve process performance. Implement the changes on a larger scale, if the experimental changes have proven to be successful. This means making the changes a routine part of the activity.

Priority subject areas

Within the Dry Bulk Management Standard, seventeen priority areas have been identified as subject areas which have a potentially higher impact for injury to people, damage to the environment and achieving effective performance in the organisation.

Although, these priority subject areas make no difference to the overall score of a company, a company may wish to focus on improvements to these subject areas, ahead of improvements to other subject areas.

Performance	People	Plant	Process
1. Commitment to HSSE	7. HR management and recruitment (office)	14. Maintenance	19. Mooring & anchoring
6. Master's reviews & company evaluation	9. Crew management & recruitment	16. Critical equipment	20. Cargo & ballast
	10. Crew technical & HSSE training (vessels)	17. Engine room operations & bunkering	21. Bridge procedures & standards
	12. Contractor management		22. Risk assessment & management
			23. Permit to work
			26. Management of change including vessel acquisition
			29. Emergency planning including crisis management
			30. Incident reporting, investigation & training

Submitting Reports

It is voluntary for ship managers to complete and submit the self-assessment questionnaire.

You will need to submit your self-assessment questionnaire using our online form. *We will update this guidance when the form is available.*

It is suggested that the questionnaire is included in the company management review, reviewed and updated annually. Companies may find it useful to complete the questionnaire at other times, for example after a major change to the organisation or the safety management system (SMS).

Abbreviations

AIS	Automatic Identification System	CO2	Carbon dioxides
ARPA	Automatic Radar Plotting Aid	CSO	Company Security Officer
BLU	The Code of Practice for the Safe Loading and Unloading of Bulk Carriers	CSR	Corporate Social Responsibility
BNWAS	Bridge Navigation Watch Alarm System	D&A	Drugs and Alcohol
BRM	Bridge Resource Management	DMS	Document Management System
BWM	Ballast Water Management	DryBMS	Dry Bulk Management Standard
CatZoc	Category Zone of Confidence	DPA	Designated Person Ashore
CBM	Condition-based Maintenance	ECDIS	Electronic Chart Display and Information System
CBT	Computer Based Training	ENC	Electronic Navigation Chart
CCTV	Closed Circuit Television	ERP	Emergency Response Plan
CEO	Chief Executive	FMEA	Failure Mode and Effects Analysis
		GMDSS	Global Maritime Distress and Safety System
		H&M	Hull and Machinery
		HAZID	Hazard Identification

HR	Human Resources	SME	Subject Matter Expert
HSSE	Health, Safety, Security and Environment	SMS	Safety Management System
IBWM	International Ballast Water Management	SOLAS	International Convention for the Safety of Life at Sea
IMSBC	International Maritime Solid Bulk Cargoes	Sox	Sulphur Oxides
ISM	International Management Code for the Safe Operation of Ships and for Pollution Prevention	SSO	Shipboard Security Officer
ISO	International Organisation for Standardisation	STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
ISPS	International Ship and Port Facility Security code	SWA	Stop Work Authority
IT	Information Technology	T&P	Temporary or Preliminary
KPI	Key Performance Indicator	TBT	Tool Box Talk
LOTO	Lock out – Tag out	TSS	Traffic Separation Scheme
MARPOL	International Convention for the Prevention of Pollution from Ships	UKC	Under Keel Clearance
MLC	Maritime Labour Convention	UMS	Unmanned Machinery Space
MOC	Management of Change	USB	Universal Serial Bus
NOx	Nitrogen Oxides	VDR	Voyage Data Recorder
OT	Operational Technology	ZOC	Zone of confidence
P&I	Protection and Indemnity		
PMS	Planned Maintenance System		
PPE	Personal Protective Equipment		
PTW	Permit to Work		
RA	Risk Assessments		

Glossary

Appraisal	A formal assessment, typically in an interview, of the performance of an employee over a period.
Assurance programme	A system of inspections, audits and assessments to ensure the system is working to the required standard.
Benchmarking	A comparison of the company's processes and performance metrics to other companies. It is also used to compare performance within a fleet of vessels.
Behavioural change	A modification of people's habits and attitudes to safety.
Causal factors	A mistake, error, or failure that directly leads to an incident or fails to mitigate the consequences of the original error.
Company	The owner or any other organization, such as the manager or bareboat charterer, who has assumed responsibility for operating the ship. Normally, the holder of the Document of Compliance.
Contractor	A third-party company paid to provide goods, services or activities aboard a vessel.
Document controller	The person(s) responsible for the timely, accurate and efficient preparation and management of documents associated with the SMS.
Energy efficiency	The process to reduce the amount of energy required to carry out the operations of a vessel.
Executive team	A team of individuals at the highest level of management of the company who have the day-to-day tasks of managing that company.
Feedback	Information or statements of opinion about something, such as a process, that can tell you if it is successful.
High Potential	An unplanned HSSE incident or near-miss that has the potential severity to cause permanent disability or death

Human factors	The application of psychological and physiological principles to the engineering and design of products, processes, and systems.
Job description	A document that contains details of duties and responsibilities of a role, as well as, essential qualifications, key competencies and relevant experience.
Management level	The level of responsibility associated with ensuring that all functions within the designated area of responsibility are properly performed; normally serving as master, chief mate, chief engineer officer or second engineer officer
Management review	An evaluation of a company's performance and SMS.
Near miss	An incident where no property was damaged and no personal injury was sustained, but where given a slight shift in time or position damage and/or injury easily could have occurred.
Operational level	The level of responsibility associated with maintaining direct control over the performance of all functions within the designated area of responsibility in accordance with proper procedures and under the direction of an individual serving in the management level for that area of responsibility; normally serving as officer in charge of a navigational or engineering watch or as designated duty engineer for periodically unmanned machinery spaces.
Retention rate	The percentage of staff that have been employed by the company throughout the period under review.
Root cause	The absence of a best practice, or the failure to apply knowledge that would have prevented the incident.
Safety culture	The product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of, a company's HSSE management.
Safety Officer	The person onboard who acts as the vessel's safety adviser. The safety officer shall be appropriately trained for this role.

Senior manager	A member of the company's shore-based leadership team.
Subject matter expert	Someone with a deep understanding of, and wealth of experience in, a role, process or technology.
Support level	The level of responsibility associated with performing assigned tasks, duties and responsibilities under direction.
Tool-box talk	An informal safety meeting, generally carried out at the site of work prior to the commencement of a job.
Vertical clearance	The distance above the top of a vessel and an overhead obstruction, such as a bridge. Also the distance above the top of a hatch cover and a gantry.

Section 2

Performance

The company promotes a strong, proactive HSSE culture throughout the organisation. HSSE objectives are set and communicated to the workforce. Measurement is used to understand, sustain and improve performance.

Commitment to HSSE

The company promotes a strong, proactive HSSE culture in senior management and at all levels throughout the company.

Vessel visits & communications

The company ensures managers, through their actions and behaviours, create an environment in which the workforce are informed, involved and enabled to carry out their roles.

SMS governing documents

The company documents, maintains and follows policies, practices and procedures for the safety of their employees and the safe, compliant and reliable operation of their ships.

HSSE objectives & KPIs

The company provides a system to report leading and lagging indicators that provide a clear understanding of HSSE performance.

Audit planning, review & close out

The company performs audits of operating and management processes to assure compliance with legal and company requirements, and drive risk reduction and performance improvement. Findings from audits are followed up for close out.

Master's review and company evaluation

The company periodically reviews the adequacy and appropriateness of the SMS and drive systematic improvement in efficiency.

People

The company's organisation is fit for purpose staffed with competent people and teams.

HR management & recruitment (office)

The company establishes an organisation that allows it to deliver its objectives effectively through the deployment of competent people and adequate resources ashore.

Technical & HSSE training (office)

The company maintains competent shore staff with appropriate qualifications, skills and knowledge for roles that support the fleet, and to meet current and future business needs.

Crew management & recruitment

The company deploys competent people and adequate resources aboard vessels in its fleet.

Crew technical & HSSE training

The company maintains competent vessel staff with appropriate qualifications, skills and knowledge for roles onboard, and to meet current and future needs.

Crew familiarisation

The company has a programme to ensure crew members are familiar with the arrangements of the ship, as well as the location and operation of any on-board procedures, systems or equipment that they may be called upon to use.

Contractor management

The company develops and implements a process for the management of contractors and sub-contractors with emphasis on the master's and other officers' and crew members' related health and safety responsibilities.

Crew welfare

The company has a programme to ensure the wellbeing of vessel personnel.

Plant

The ships and equipment onboard are fit for purpose throughout the lifecycle of operation.

Maintenance

The company has a programme to inspect and maintain plant and assets to prevent injury to people, damage to the environment and achieve effective performance.

Dry dock & surveys

The company has a programme to manage dry docks, repair periods and maintaining class status.

Critical equipment

The company maintains an inspection programme to determine the condition of critical equipment & systems to verify and document they are fit for service.

Engine room operations & bunkering

The company operates engine room and plant facilities effectively to prevent injury to people and damage to the environment.

Inspection planning review & close out

The company ensures that shore-based personnel carry out inspections to monitor the condition of the vessel and it's equipment

Process

The company documents and rigorously follows procedures for safe compliant operations.

Mooring & anchoring

The company develops and implements planning and operational processes for mooring, anchoring and access, to ensure these are carried out effectively without injury to people and damage to the environment.

Cargo & ballast

The company develops and implements planning and operational processes for cargo and ballast, to ensure these are carried out effectively without injury to people and damage to the environment.

Bridge procedures & standards

The company develops and implements planning and operational processes for navigation, including bridge team management, to ensure this is carried out effectively without injury to people and damage to the environment.

Risk assessment & management

The company has a programme to assess, prioritise and manage operating risks to prevent harm to people, damage to the environment and to achieve operational effectiveness.

Permit to work

The company has a formal control of work process to provide a work environment that will allow tasks to be completed safely with adequate control measures in place.

Safety culture improvement

The company has a programme to develop and maintain a culture to enable safe, compliant and efficient operations.

Environmental management

The company manages the impact of its operations on the environment and integrates environmental requirements into the safety management system.

Management of change including vessel acquisition

The company has a formal process to document, evaluate, approve and communicate temporary and permanent changes that could impact safe, compliant and efficient operations.

Security management

The company has processes in place to maintain the security of the workforce, vessels and premises.

Cyber security

The company has a programme to design and operate IT and digital process control systems to manage risk to system and information integrity, availability and confidentiality.

Emergency planning including crisis management

The company prepares for and responds promptly to emergency events threatening harm to its staff, vessels and other incidents.

Incident reporting, investigation & training

The company has a programme to report and investigate incidents; determine immediate and root causes and implement appropriate corrective actions.
