



Directorate General of Maritime Administration

Engineering Wing Training Manual



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Table of Contents

From the Chief Surveyor's Desk.....	4
Introduction.....	5
Vision & Mission	5
About the Engineering Wing	5
Engineering Wing Branches.....	6
Engineering wing transforming to Maritime Environment & Statutory Services Wing.....	9
Mandatory Functions	11
Recruitment of Surveyor.....	12
Surveyor Familiarization Programme	13
Surveyors' Training Programmes	13
1. Training To Be Authorized As Flag State Inspector	13
1.1 Competence Requirements	14
1.2 Training Requirements.....	14
1.3 Maintenance Of Authorization	15
2. Training to be Authorized for Statutory Survey and Certification of The Vessels.....	16
2.1 Competence Requirements	16
2.2 Training Requirements.....	16
2.3 Maintenance Of Authorization	17
3. Training To Be Authorized As Port State Control Officer.....	18
3.1 Competence Requirements	18
3.2 Training Requirements.....	19
3.3 Maintenance Of Authorization	19
4. Training to be Authorized as Auditor	20
4.1 Competence Requirements	20
4.2 Training Requirements.....	20
4.3 Progression To Lead Auditor	21
4.4 Maintenance Of Authorization	22
5. Petroleum License Inspection for Carriage of Petroleum in Bulk by Water	23
5.1 Competence Requirements	23
5.2 Training Requirements.....	23
6. Carving And Marking Inspection	24
6.1 Competence Requirements	24
6.2 Training Requirements.....	25
7. Inspections for Towing Permission as per MS Notice 08 of 2013	26
7.1 Competence Requirements	26
7.2 Training Requirements.....	26

8. Record.....	27
9. Continuous Updation of Knowledge and Training	28
10. Website and Portal Familiarization	29
11. Role and Responsibilities of the Engineering Wing Staff	30

The Engineering Wing of the Directorate General of Maritime Administration plays a critical role in ensuring the technical safety, statutory compliance and environmental performance of ships under the Indian maritime administration. Its responsibilities extend across statutory surveys and certification, Flag State and Port State inspections, implementation of the International Safety Management Code, STCW examinations and certification [Engineering], oversight of Recognised Organisations, ship recycling, marine pollution prevention and emerging areas of green shipping and maritime decarbonisation.

With the transition of the Directorate General of Shipping to the Directorate General of Maritime Administration under the Merchant Shipping Act, 2025, the Engineering Wing is also evolving to address an expanded range of statutory, environmental and technical responsibilities. This transition reflects the growing importance of sustainable shipping, alternative fuels, energy efficiency, pollution prevention, emerging maritime technologies and strengthened regulatory oversight.

The effective discharge of these responsibilities requires sound technical knowledge, a clear understanding of the applicable statutory and regulatory framework, professional judgement and continuous capacity building. Officers and staff must remain familiar with the Merchant Shipping Act, applicable Rules, international maritime Conventions and Codes and the Orders, Circulars, Notices and Standard Operating Procedures issued by the Directorate from time to time.

This Training Manual has been prepared to provide officers, surveyors and supporting staff with a structured understanding of the organisation, functions, procedures, competency requirements and authorisation framework of the Engineering Wing. It is intended to support induction, familiarisation, on-the-job training and continuous professional development and to promote consistency in the discharge of statutory and regulatory functions across the Directorate and its field offices.

The dedication, technical competence and collective contribution of all officers and staff are essential for maintaining high standards of maritime safety, environmental protection and regulatory compliance and for strengthening India's position as a responsible and future-ready maritime nation.

Shri Killi Mohana Rao
Chief Surveyor and Chief Examiner
Directorate General of Maritime Administration

Introduction

The Engineering Wing of the Directorate General of Maritime Administrative is headed by the Chief Surveyor-cum-Additional Director General (Technical) and comprises three Principal Officers (Engineering), eight Deputy Chief Surveyors, and twenty-nine Engineer and Ship Surveyors.

Vision & Mission

Our mission is to promote a safe, compliant, and environmentally sustainable maritime ecosystem by aligning national practices with global standards and fostering technical excellence in marine engineering and ship safety.

About the Engineering Wing

DGS Order 16 of 2013 broadly enumerates the statutory responsibilities that the Engineering wing is the responsible Liaison branch. Each officer within the DGMA Engineering Wing is assigned specific tasks, ensuring smooth and effective management across maritime domain.

Level	Designation	Primary Role
1	Director General (Level 15)	Administrative head – Head of DGMA
2	Chief Surveyor-cum- Addl DG (Level 15)	Head of the Engineering Wing, DGMA
3	Principal Officers-cum- Joint DG (Tech) Engineering (level 14)	Head of MMD (posted at MMD)
4	Dy. Chief Surveyor- cum- Sr. DDG (Tech) (level 13)	Direct responsibilities for various divisions and branches operating within the Engineering Wing.
5	Engineer & Ship Surveyor-cum- DDG (Tech) (Level 12)	In-charge of allocated work / duties in respective Engineering branches
6	Administrative Officer / Assistants / UDC / MTS	Provides administrative support, responsible for record management and maintenance of files.

Engineering Wing Branches

The Engineering Wing is organised into the following functional branches, each responsible for specific technical, regulatory, certification and oversight functions:

S. No.	Branch	Key Functions
1	Survey and Certification Branch	All matters related to survey and certification of ships including Passenger and HSC vessels, exemptions/dispensations related to SOLAS, MARPOL, BWM, AFS Conventions etc. SOLAS Chapter II-1 - Construction - Structure, subdivision and stability, machinery and electrical installations Chapter II-2 - Construction - Fire protection, fire detection and fire extinction Chapter III - Life-saving appliances and arrangements (Engg.) Chapter IX - Management for the safe operation of ships Chapter X - Safety measures for high-speed craft MARPOL Annex I - Prevention of Pollution by Oil Annex II - Control of Pollution by Noxious Liquid Substances in Bulk Annex III - Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form Annex IV - Prevention of Pollution by Sewage Annex V - Prevention of Pollution by Garbage

		Annex VI - Prevention of Air Pollution • All matters related to monitoring of Recognised Organisations (RO). • Approval of plans and drawings pertaining to the engineering wing • Manning Dispensations for Indian Flag vessels
2	ISM Branch	• Scrutiny of Interim/ Annual / Renewal DOC applications. • Nomination of Auditors for carrying out the DOC audits & SMC audits of Passenger Ships. Issuance of authorization for carrying out the SMC audits. Casualty , Accident/ Investigation analysis on the part of ISM Cell. Issuance of extensions for the DOC/SMC. • Matters related to ISM implementation and identifying persistent substandard performance by companies/DPA ashore. • Preparation & Issuance of Certificates for Interim /Full term DOC for companies and SMC for vessels.
3	Port State Control and Flag State Inspection Branch	• As National authority- approval of inspection reports sent by the Field authorities • Monitoring the implementation of MSN 04 of 2017 and MSN • Approval of surveyors for PSC and FSI inspections. • Preparation of Annual reports, Data analysis, Sagarmanthan updation etc.
4	Sustainability and Green Shipping Branch	• IMO MEPC Coordination • Indo-Danish Centre of Excellence

		• IMO GloNoise Project • Shore Power Supply Standards • Correspondence Group (CG) for further work on alternate fuels for developing interim guidelines for hydrogen and low flash point fuel oils. Road map for alternative fuels and bunkering guidelines. • IOCE- Smart
5	Examination Assessment and Certification Branch	• Preparation of Question Papers • Verification, approval and issuance of Certificate of Competency • Verification, approval and Publication of Results • Resolution of Helpdesk and direct emails by candidates. • Verification and approval of Certificates of Proficiency (COPs) • Issuance of I/10 endorsement of Foreign COC's • Conduct of Orals • Conduct of Enquiries on Incompetence/ Misconduct etc.
6	Ship Recycling Branch	• Development of Ship Recycling Portal • Attending Ferrous scrap committee meetings chaired by the Ministry. (Quarterly) • Scrutiny of the proposals submitted by GMB/SRIA as received from the Ministry & providing recommendations.
7	Shipping Services Branch	• Approval of Fire Fighting Appliances Service Stations • Approval of Life boat, Rescue Boat and Life raft launching devices service stations. • Approval Bunker Supply Registration.

- All Matters related to Port Reception Facilities

Engineering wing transforming to Maritime Environment & Statutory Services Wing

With the transition of the Directorate General of Shipping (DGS) to the Directorate General of Maritime Administration (DGMA) under the provisions of the Merchant Shipping Act, 2025, the Engineering Wing is correspondingly being transformed into the **Maritime Environment & Statutory Services Wing**, reflecting its expanded mandate and enhanced regulatory responsibilities in the areas of maritime safety, environmental protection, statutory certification, and implementation of international maritime conventions.

- (a) **Division I:** Statutory Services Division to ensure robust implementation of statutory inspection, certification, and safety management protocols for Indian and foreign vessels operating under Indian jurisdiction.

Branch wise functions for Statutory Services Division

Branch	Functions
Statutory Survey, Certification & RO Monitoring	Conducts surveys and certifications under SOLAS, Load Line, and MLC; oversight of Recognized Organizations.
Monitoring & Control (PSC/FSI)	Implements PSC inspections as per IOMOU and FSI; maintains national port inspection readiness.
Safety Management (ISM)	Oversees compliance with ISM Code, audits and issuance of DOC and SMC certificates.
Safety Services (LSA/FFA/Bunker Licensing)	Monitors life-saving appliances, fire-fighting systems, and bunker licensing protocols.

- (b) **Division II: Maritime Sustainability Division** To mainstream environmental sustainability and regulatory compliance across the Indian maritime sector through enforcement, innovation, and incentivization.

Branch wise functions for Maritime Sustainability Division

Branch	Functions
Environmental Compliance (MARPOL/BWM/AFS)	Implements MARPOL and related conventions including Ballast Water Management and Anti-Fouling Systems.
Green Shipping	Facilitates uptake of low-/zero-emission fuels, supports compliance with IMO GHG measures like EEXI and CII and the National Maritime Decarbonisation Policy Framework.
Ship Recycling	Enforces Ship Recycling Act, IHM audits, and Hong Kong Convention compliance.
Sustainability Services	Develops emission indices, leads maritime clean-up drives and climate-data-based interventions.

- (c) **Division III: Technical Cooperation & Capacity Building Division** To enhance India's maritime capabilities through international collaboration, regional partnerships, and promotion of maritime innovation.

Branch wise functions for Technical Cooperation & Capacity Building

Branch	Functions
International Cooperation (IMO Meetings)	Coordinates India's participation in IMO technical bodies and international negotiations.
IMO Projects & Technical Assistance	Implements global technical cooperation initiatives (e.g., GloLitter, GHG Smart, GloNoise).
Regional Capacity Building (IOCE/ BIMSMaRT)	Builds regional partnerships under IOCE, BIMSTEC, and SACE-SMaRT for technical training and knowledge exchange.
Maritime Innovation & Research	Fosters R&D in decarbonization, smart ship compliance, and emerging technologies.

This structured approach enhances maritime safety, environmental stewardship, and India's leadership in international maritime governance. The Wing serves as the technical backbone of India's maritime regulatory regime, reinforcing DGMA's mission to ensure safe, sustainable, and globally compliant shipping operations. Proposed Organizational Structure of the Maritime Environment and Statutory Services Wing under DGMA.

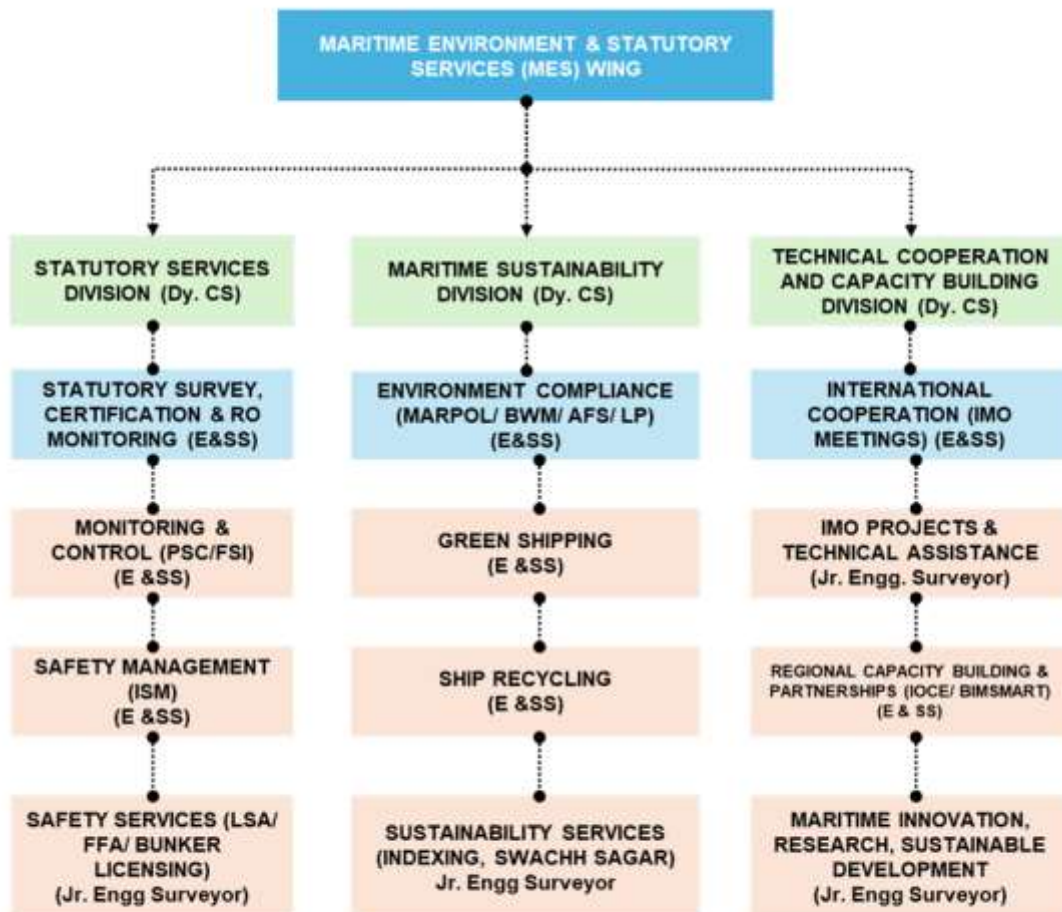


Figure 1: Proposed Organizational Structure of the Maritime Environment & Statutory Services Wing under DGMA

Mandatory Functions

The Engineering Wing discharges its mandated functions under the provisions of various statutes, inter alia, the Merchant Shipping Act, 2025, as amended, and the Rules framed thereunder, in conformity with the applicable international maritime Conventions and Codes.

1. ISM code, with advice from the Nautical and Naval Architecture branches as required.
2. STCW Examinations and Certification of Engineering Stream
3. Fire Fighting Equipment.
4. Maritime Training related to Engineering stream as per STCW.
5. Minimum Safe Manning requirements for ships (Engineering)
6. All matters related to shipboard machinery including boilers and electrical installations
7. Approval of Service stations/organizations.
8. Prevention, detection and suppression/extinction of fire on board ships including associated plans.

9. Standing committee on Shipbuilding Financial Assistance and Ship Recycling Credit Note.
10. All matters pertaining to Indian Standard Institutions and various technical committees in various Recognized Organizations
11. Port State Control and Flag State Implementation inspections with advice from the Nautical and Naval Architecture wings as required.
12. Annexes of MARPOL Convention (i.e. Oil, Sewage, Chemicals, Garbage, Air) including Reception Facilities.
13. All matters related to Energy Efficiency of Ships including control of emissions from Ships.
14. All matters pertaining to Statutory Survey and Certification of Ships.
15. All matters related with Recognized Organizations (Classification Societies)
16. Ship Recycling and allied Matters
17. All matters related to casualties arising out of fire, explosion and/or breakdown or malfunctioning of machinery and/or equipment.
18. Registration of Bunker Suppliers
19. Casualty investigations related to fire, explosions, machinery failures, violation of MARPOL or officers involving engineering departments on board ships.
20. Ballast Water Management Convention.
21. Anti-Fouling Convention

Recruitment of Surveyor

MINISTRY OF PORTS, SHIPPING AND WATERWAYS DIRECTORATE GENERAL OF SHIPPING, MUMBAI NOTIFICATION New Delhi, the 9th December, 2025, G.S.R. 887(E).— In exercise of the powers conferred by the proviso to article 309 of the Constitution and in supersession of the Ministry of Shipping, Directorate General of Maritime Administration and Mercantile Marine Department, Group 'A' (Engineering) Posts Recruitment Rules, 2010, Engineer and Ship Surveyor cum-Deputy Director General (Technical)- General Central Service, Group 'A', Gazetted, Non- Ministerial, selection and recruitment by the Union Public Service Commission.

(a) Essential Qualifications: (i) Educational qualifications: Certificate of competency of marine engineer officer first class (Steam or Motor or Combined Steam and Motor) as specified in section 78 of the Merchant Shipping Act, 1958 (44 of 1958) or equivalent as specified in section 86 of the said Act; and (ii) Experience: Five-year service at sea of which one year service as Chief Engineer or Second Engineer

(b) Desirable Qualifications: (i) Educational qualifications: Certificate of competency of extra first class engineer as specified in section 78 of the Merchant Shipping Act, 1958 (44 of 1958) or equivalent as specified in section 86 of the said Act; and (ii) Experience: Two years of experience in carrying out statutory survey or inspection or audit or certification of foreign going merchant ships and equipment on board such ships, as a surveyor, with Government of India or with a classification society recognized by Government of India.

As per above requirement, surveyors may be broadly categorized in **three categories**

- a) Surveyors having Sailing experience but no shore experience
- b) Surveyor having Shore Experience but no RO experience
- c) Surveyor having RO experience

Surveyor Familiarization Programme

Every Surveyor, upon appointment, shall undergo a structured familiarization programme within **two (02) months** from the date of joining.

The familiarization programme shall comprise the following components:

1. DGMA Familiarization (One Week)

The Surveyor shall undergo training at the Directorate General of Maritime Administration (DGMA) to gain an understanding of organizational structure, regulatory framework, policies, procedures, and administrative functions.

2. MMD Familiarization (One Week)

The Surveyor shall be deputed for familiarization at any Mercantile Marine Department (MMD) office under the jurisdiction of a Principal Officer (PO). This shall include exposure to survey procedures, inspections, certification processes, and field-level regulatory implementation.

The above programme shall be planned and coordinated by the competent authority to ensure effective familiarization of the Surveyor with own department.

Surveyors' Training Programmes

The Surveyors Training Manual' developed by the Directorate General of Maritime Administration describes the requirements for the qualification, selection, training, and authorization for following five Modules have been developed to address the five basic functional areas of survey, certification and audits carried out by the administration surveyors:

- Flag state inspections
- Statutory Surveys & Certification of ships.
- Port State Control inspections.
- ISM, ISPS & MLC Audits.

These procedures will help the Maritime Administration of India (DGMA) to achieve its overall objective to achieve qualification and training requirements for Flag state personnel engaged in the inspection, survey, audits and certification of various merchant ships to verify the compliance of various international conventions, codes and national regulations.

1. Training to be Authorized as Flag State Inspector

The Indian Maritime Administration (DGMA) is treaty bound to fulfil its obligations as a Flag State. To ensure that its obligations as a flag state are complied with it is necessary that all ships plying

under the Indian Flag meet the requirements of the Conventions. While survey and certification of cargo ships are delegated to RO's, the final responsibility lies with the DGMA. To ensure that vessels are complying with the requirements and the RO's are applying the requirements of International and National regulations effectively on the ships, enforcement and oversight mechanisms have been put in place by the Directorate. To ensure the effective implementation of these mechanisms Flag State Inspections of the vessels are carried out by surveyors of the administration in line with the provisions of the Merchant Shipping Rules framed under the act and Merchant Shipping Notices of the DGMA.

The objective of this section of the Training Manual is to make the surveyors competent to conduct Flag State Inspections in accordance with the relevant provisions of the various International Conventions and the Merchant Shipping Act. He/she is required to be fully familiar with the procedures and standards set out in the Manual for Surveyors.

1.1 Competence Requirements

Those responsible for authorized to carry out Flag State Inspections must be able to demonstrate knowledge and understanding of :

- a) All relevant IMO instruments and latest amendments applicable to the vessel. b) Conduct the inspection in accordance with relevant legislation and policy;
- b) Action to be taken when deficiencies are noted;
- c) Procedures for detention and release of the vessel;
- d) Raise the appropriate fee (where applicable);
- e) Complete the FSI report (for statistical purposes); and
- f) Understanding of FSIDGS portal for reporting.
- g) Knowledge of Legal authority and requirements
- h) Procedures for initial, detailed and follow up inspections. Procedures for Detention & rectification of deficiencies.
- i) Right of appeal.
- j) Code of conduct of the Government of India officials.

1.2 Training Requirements

In order to be authorized as a Flag State Inspector, the candidate must have, as a minimum: Qualification & experience prescribed for the Flag State Surveyor by the Administration.

- a) The officer conducting FSI must be a certified Chief Engineer, Master mariner or a naval Architect employed with the Government of India on a regular basis. Radio officer/Inspector can only assist qualified Flag State Officer for radio related inspections.
- b) The officer should have conducted at least ten (10) FSI Inspections satisfactorily under a qualified Flag State officer before being authorized him as an independent flag state officer by the Principal Officer of the district.

- c) The qualification record along with a copy of authorization by the Principal Officer of the district concerned to be forwarded to the Chief Surveyor for record.

1.3 Maintenance of Authorization

Re-Qualification of the authorized flag state officer is required if the officer has not carried out at least two FSI in a calendar year. Such officer is to get re-qualified by conducting at least two FSI under an authorized FSI officer and on satisfactory completion of the same the authorization to be renewed by the concerned Jurisdictional Principal officer.

2. Training to be Authorized for Statutory Survey and Certification of The Vessels

The Indian Maritime Administration (DGMA) is treaty bound to fulfil its obligations as a Flag State. To ensure that its obligations as a flag state are complied with it is necessary that all ships plying under the Indian Flag meet the requirements of the Conventions. While survey and certification of cargo ships are delegated to RO's, the final responsibility lies with the DGMA. DGS Order 6 of 2013 requires some surveys to be carried out by Surveyors of the Administration eg. SEQ Intermediate Surveys, Participation in SAFCON, IOPP, and SRT Renewal surveys etc. Further, companies have to option to get the statutory survey and certification of the vessels surveyed directly by the MMD's. To ensure that vessels are complying with the requirements and the RO's are applying the requirements of International and National regulations effectively on the ships, enforcement and oversight mechanisms have been put in place by the Directorate where knowledge of surveyors in statutory survey and certification of the vessels is required.

The objective of this section of the Training Manual is to make the surveyors competent to conduct statutory survey and certification of the vessels in accordance with the relevant provisions of the various International Conventions and the Merchant Shipping Act. He/she is required to be fully familiar with the procedures and standards set out in this Training Manual for Surveyors.

2.1 Competence Requirements

The surveyor may be authorized to carry out Statutory Surveys and Certification and able to demonstrate knowledge and understanding of :

- a) All relevant IMO instruments and latest amendments applicable to the vessel.
- b) Conduct the inspection in accordance with relevant legislation and policy;
- c) Action to be taken when deficiencies are noted;
- d) Raise the appropriate fee (where applicable);
- e) Knowledge of Legal authority and requirements
- f) Code of conduct of the Government of India officials.

2.2 Training Requirements

In order to be authorized for the Statutory Survey and Certification of the vessels, the candidate must have, as a minimum: Qualification & experience prescribed for the Flag State Surveyor by the Administration.

- a) The officer conducting Statutory Survey and Certification of the vessels must be a certified Chief Engineer, Master mariner or a naval Architect employed with the Government of India on a regular basis.
- b) Radio Surveyors/Inspectors are authorized for all radio related surveys/inspections and can assist in other Statutory Survey and Certifications.

- c) The officer should have conducted at-least two (2) Annual/Periodic/Intermediate survey of the specific Statutory survey satisfactorily under a qualified Surveyor before being authorized as an independent Surveyor by the Principal Officer of the district.
- d) The Principal Officer at his discretion may authorize a surveyor for carrying out conducting Statutory Survey and Certification of vessels taking into account the past experience of the surveyor as a surveyor of any RO in the relevant area.

2.3 Maintenance of Authorization

Re-Qualification of the authorized surveyor is required if the officer has not carried out at least one of the following: -

- a) At Least two FSI's in the last calendar year, or
- b) Carried out at least 2SMC/DOC audits in the last calendar year or
- c) Carried out at least 2 SEQ Intermediate/Participation in 2 renewal surveys in last calendar year or
- d) Carried out any refresher training in Survey and certification of ships in the past 2 years.
- e) If the authorization has lapsed such officer is to get re-qualified as per the provisions of Para 2.2 (c) above.

3. Training to be Authorized as Port State Control Officer

The Fundamental aim of Port State Control is to eliminate Sub-standard ships from entering any port in order to ensure safer ships and cleaner oceans. The main philosophy to the port state control is to identify sub-standard ships at any port and corrective action taken before they are allowed to proceed to sail.

Various provisions in IMO Instruments provide for control procedures to be followed by the contracting Governments with regard to foreign flag vessels visiting their ports. The effective use of the provisions enables the State Authorities in identifying Sub-Standard Ships and ensuring that remedial measures are taken for the deficiencies identified by them. Ships of the countries which are not party to the various International Conventions has to demonstrate compliance under the provisions of “no more favourable treatment” to non parties to the conventions. The International Maritime Organization (IMO) has promulgated various Resolutions from time to time giving guidelines on such inspections. The guidelines also provide that all possible efforts should be made to avoid a ship being unduly detained or delayed. However, wherever necessary Sub-Standard Ships are detained and corrective action taken before allowing them to sail out to sea.

The objective of this section of the Training Manual is to make the surveyors competent to conduct Port State Control Inspections in accordance with the relevant provisions of the various International Conventions and the Merchant Shipping Act. He/she is required to be fully familiar with the procedures and standards set out in the Manual for Surveyors of the Parties to the Indian Ocean Memorandum of Understanding on Port State Control.

3.1 Competence Requirements

Those responsible for authorized to carry out Port State Control Inspections must be able to demonstrate knowledge and understanding of;

- a) the procedure for selecting a ship for inspection;
- b) conduct the inspection in accordance with relevant legislation and policy;
- c) action to be taken when deficiencies are noted;
- d) Targeting of substandard ships
- e) procedures for detention and release of sub-standard ship;
- f) raise the appropriate fee (where applicable);
- g) complete the PSC report (for statistical purposes); and
- h) keep proper records of entire PSC process.
- i) Knowledge of Legal authority and requirements
- j) Procedures for initial, detailed and follow up inspections. Procedures for Detention & rectification of deficiencies.
- k) Update and maintenance of records of inspection in IOMOU website.
- l) Detention Review Panel and Right of appeal.
- m) Code of ethics and good practice of PSC officers.

3.2 Training Requirements

In order to be authorized as a PSC officer, the candidate must have, as a minimum: Qualification & experience prescribed for the Flag State Surveyor by the Administration.

- a) The PSC officer to be a certified Chief Engineer, Master Mariner or a Naval Architect employed with Government of India on a regular basis. Radio officer can only assist qualified PSC officers for radio inspections.
- b) The officer should have been a qualified Flag State Inspector for a period of at-least six months and has a minimum of one year experience as flag state surveyor.
- c) The officer should have completed at least ten (10) Flag State inspections as an authorized Flag State Inspector and satisfactorily carried out at least ten (10) PSC inspections under a qualified Port State Control officer (PSCO).
- d) After completion of the above, a suitable recommendation from the jurisdictional Principal Officer along with the officer's training records to be forwarded to the Chief Surveyor for approval.

3.3 Maintenance of Authorization

Re-Qualification of the authorized PSC officer is required if the officer has not carried out at least two PSC in a calendar year. Such officer is to get re-qualified by conducting at least two PSC under an authorized PSC officer and on satisfactory completion of the same; a suitable recommendation is to be forwarded to the Chief Surveyor by the jurisdictional Principal Officer for approval.

4. Training to be Authorized as Auditor

The IMO has promulgated the International Safety Management Code for the safe operation of ships and for pollution prevention (ISM Code), The International Ship and Port Facility Security (ISPS) Code as an amendment to the Safety of Life at Sea (SOLAS) Convention (1974/1988) on minimum security arrangements for ships, ports and government agencies and the ILO has promulgated The Maritime Labour Convention (MLC) 2006 for the protection of the rights of seafarers and their employment and working conditions.

To ensure compliance with the requirements periodic audits as prescribed by the ISM Code, ISPS Code and MLC 2006 are carried out by the Administration or RO's on its behalf.

The Indian Maritime administration surveyors carry out DOC audits of the shipping companies and SMC audits of ships under these companies under the ISM code. They also carry out ISPS audits for the ships and ports under its jurisdiction and MLC audits for the vessels including issuing DMLC Part 1 & 2. Though most of these vessel audits are delegated to ROs, however, flag state surveyors carry out Intermediate audits of SMC, ISPS and MLC as a part of oversight mechanism.

The objective of this section of the Training Manual describes the requirements for the selection, training, qualification and authorization of Flag State auditors responsible for verifying compliance with the ISM Codes, ISPS Codes and Maritime Labour Convention. These requirements have been developed in accordance with the requirements of applicable IMO Instruments as amended from time to time and applicable National provisions in force.

4.1 Competence Requirements

Those responsible for verifying compliance with the requirements of the ISM, ISPS Codes and MLC must be able to demonstrate knowledge and understanding of

- a) The requirements of the ISM, ISPS Codes and MLC and their interpretation and application.
- b) Mandatory rules and regulations and applicable codes, guidelines and standards recommended by the IMO, Administrations, classification societies and maritime industry organizations.
- c) Basic shipboard operations including emergency preparedness and response.
- d) In addition, they must demonstrate that they have the ability to apply such knowledge and understanding and that they are capable of carrying out effective verification audits of the shore-based and shipboard aspects against the ISM, ISPS Codes and MLC as applicable.

4.2 Training Requirements

- a. **ISM Audits**
 - Candidate who has successfully completed ISO 9001:2015 lead auditor course.
 - A candidate who has passed the written examination required by paragraph above and who has successfully completed the practical training and received.

b. **ISPS Audits**

- Candidate who has been authorized for ISM audit or
- Candidate who has successfully completed ISPS auditors course or
- Carried out at least two ISPS audits under authorized Lead Auditor

c. **MLC Audits**

- Candidate who has been authorized for ISM audit or
- Candidate who has successfully completed MLC lead auditors course

The Chief Surveyor may, at his discretion, authorize a surveyor to carry out ISM, DOC, ISPS, and MLC audits, taking into account the surveyor's previous experience as an auditor with a Recognized Organization in India.

4.3 Progression to Lead Auditor

a) **ISM Audits**

The auditor to be authorized as Lead Auditor must have undergone minimum 15 audits including at least five initial / renewal audits under the supervision of a certified lead auditor of which two must have been of a ship and two of a company.

b) **ISPS Audits**

- A qualified ISM Lead Auditor or
- Must have undergone minimum 5 audits as auditor which must include at least 2 ISPS Audits of Ports and 2 Audits of Ships. or
- The Principal Officer at his discretion may designate a surveyor as lead auditor for ISPS audits taking into account the past experience of the surveyor as an auditor of any RO in the relevant area.

c) **MLC Audits**

- A qualified ISM Lead Auditor or
- Must have undergone minimum 5 audits as auditor.
- The Principal Officer at his discretion may designate a surveyor as lead auditor for MLC audits taking into account the past experience of the surveyor as an auditor of any RO in the relevant area.

All qualified ISM Lead auditors are also authorized to carry out RO audits on behalf of the administration. To be authorized as lead Auditor for RO Audits, the auditors should have carried out a minimum of two RO audits.

4.4 Maintenance of Authorization

- a) A qualified auditor who has not performed at least two audits (comprising one ISM audit plus one ISPS audit plus one MLC audit) in any twenty-four – month period shall be required to undergo revalidation training of one ISM audit, one ISPS audit and one MLC audit under the supervision of a suitably qualified and experienced auditor.
- b) A qualified auditor who has not performed any audits in any five-year period shall be required to undergo revalidation training to include a one-day refresher course in ISM and two ISM audits. The respective one-day refresher course should include familiarization with the latest version of the audit and certification procedures, changes in regulatory requirements, new or updated reporting systems, the most recent guidance on the interpretation and application of the Codes, etc.
- c) In case of ISPS and MLC audit, one audits, as applicable, under the supervision of a suitably qualified and experienced auditor.
- d) Administration shall ensure that its auditors are kept informed of all regulatory and procedural developments related to the ISM, ISPS Codes & MLC and that they receive guidance on matters of regulatory and procedural interpretation as these evolve.

5. Petroleum License Inspection for Carriage of Petroleum in Bulk by Water

Petroleum License Inspection carried out as per regulation laid out in CHAPTER III TRANSPORT OF PETROLEUM, PETROLEUM RULE, 2002.

The petroleum license survey for an Inland Vessel (IV) barge by the Mercantile Marine Department (MMD) in Mumbai begins with the ship owner submitting an application to the Principal Officer, MMD, Mumbai, to request an inspection for the issuance of a License for Carriage of Petroleum in Bulk by water. Inspections to be carried out as per checklist available at MMD website and any observations found by the surveyor during inspection, same to be closed prior Issuance of License for Carriage of Petroleum in Bulk by water.

The objective of this section of the Training Manual describes the Flag State requirements for the selection, training, qualification and authorization of surveyors approved for issuance of Petroleum License Inspection for Carriage of Petroleum in Bulk by water.

5.1 Competence Requirements

Those authorized to carry out Statutory Surveys and Certification of vessels may also be authorized to conduct surveys for Petroleum Licensing, provided they are able to demonstrate knowledge and understanding of

- a. Petroleum Rule 2002
- b. Inland Vessel Act 1917
- c. All relevant IMO instruments and latest amendments applicable to the vessel.
- d. Conduct the inspection in accordance with relevant legislation and policy;
- e. Action to be taken when deficiencies are noted;
- f. Raise the appropriate fee (where applicable);
- g. Knowledge of Legal authority and requirements
- h. Code of conduct of the Government of India officials.

5.2 Training Requirements

In order to be authorized for the Inspection for Petroleum License of the vessels, the candidate must have, as a minimum: Qualification & experience prescribed for the Statutory Survey and Certification by the Administration.

- a. The officer should have conducted at least one (1) Petroleum License Inspection satisfactorily under a qualified Surveyor before being authorized as an independent Surveyor by the Principal Officer of the district.
- b. The Principal Officer at his discretion may authorize a surveyor for carrying out Petroleum License inspections of vessels based on his experience in carrying out PSC/FSI.

6. Carving And Marking Inspection

The name of the vessel, her port of registry and other markings need only be painted as per specifications at the time of change of flag/name in line with global maritime practices and for new built vessel. However, the IMO Number (Ship Identification Number) has to be permanently marked as per Regulation 3(4) of Chapter XI-1: Special measures to enhance maritime safety, of SOLAS, 1974 as amended. The Official Registration No. and registered net tonnage shall continue to be affixed on bridge as mentioned in Rule 10 of the Merchant Shipping (Registration of Indian Ships) Rules, 1960, as amended.

During onboard inspection MMD Surveyor may verify:

1. The Official Number and Net Tonnage, as stated above, are to be cut in on a brass plate 30 cm x 6 cm and affixed in a conspicuous place on the Navigation Bridge on the vessel.
2. As per DGS Circular No.2 of 2008, the name of the vessel and port of registry only be painted as per specifications. Letter Size: Height 100mm (minimum) and letter width 13mm (minimum). Name to be on Port & Starboard Bows and on Stern [(Both in Hindi (above) & English (below))]. Port of Registry to be marked on stern [Both in Hindi (above) & English (below)]. If space is not available at stern for painting Name and Port of Registry, due to structural issues. Name and Port of Registry may be painted on both quarters. Lettering to be light in colour on dark background or dark on light background.
3. Certificate of Survey as per Section 27 of MS Act 1958.

The objective of this section of the Training Manual describes the Flag State requirements for the selection, training, qualification and authorization of surveyors approved to conduct surveys for the issuance of Ship's Carving and Marking Notes.

6.1 Competence Requirements

Those authorized to carry out Statutory Surveys and Certification of vessels may also be authorized to conduct surveys for Carving and Marking verification, provided they are able to demonstrate knowledge and understanding of

- a. All relevant IMO instruments and latest amendments applicable to the vessel.
- b. Merchant Shipping Registration Rules;
- c. Conduct the inspection in accordance with relevant legislation and policy;
- d. Action to be taken when deficiencies are noted;
- e. Raise the appropriate fee (where applicable);
- f. Knowledge of Legal authority and requirements
- g. Code of conduct of the Government of India officials.

6.2 Training Requirements

In order to be authorized for the Survey to conduct Carving and Marking inspection of the vessels, the candidate must have, as a minimum: Qualification & experience prescribed for the Statutory Survey and Certification by the Administration.

- a. The officer should have conducted at-least one (1) Carving and Marking inspection satisfactorily under a qualified Surveyor before being authorized as an independent Surveyor by the Principal Officer of the district.
- b. The Principal Officer at his discretion may authorize a surveyor for carrying out Petroleum License inspections of vessels based on his experience in carrying out PSC/FSI.

7. Inspections for Towing Permission as per MS Notice 08 of 2013

The objective of this section of the Training Manual describes the Flag State requirements for the selection, training, qualification and authorization of surveyors approved to conduct surveys for the issuance of Towing Permission.

7.1 Competence Requirements

Those authorized to carry out Statutory Surveys and Certification of vessels may also be authorized to conduct surveys for Towing Permission, provided they are able to demonstrate knowledge and understanding of

- a. All relevant IMO instruments and latest amendments applicable to the vessel.
- b. MS Notice 08 of 2013- Operations of Coastal and Ocean Towing – Certification
- c. Conduct the inspection in accordance with relevant legislation and policy;
- d. Action to be taken when deficiencies are noted;
- e. Raise the appropriate fee (where applicable);
- f. Knowledge of Legal authority and requirements
- g. Code of conduct of the Government of India officials.

7.2 Training Requirements

In order to be authorized for the Survey for Towing permission of the vessels, the candidate must have, as a minimum: Qualification & experience prescribed for the Statutory Survey and Certification by the Administration.

- a. The officer should have conducted at-least one (1) Towing Permission survey satisfactorily under a qualified Surveyor before being authorized as an independent Surveyor by the Principal Officer of the district.
- b. The Principal Officer at his discretion may authorize a surveyor for carrying out Towing Permission survey based on his experience in carrying out PSC/FSI.

8. Record

Records shall be created and retained for each Surveyor/FSI/PSCO/Auditor indicating:

- a. Qualifications and experience gained prior to training as a PSC Officer
- b. Theoretical training received
- c. Examination results
- d. Practical training received
- e. Authorizations granted
- f. Updation training received
- g. Re-qualification in the event of lapsed authorizations
- h. Previous qualifications prior joining the DGMA.

For ISM matters all training and authorization records will be maintained by the ISM Cell of the DGMA.

For Survey Certification & other surveys, FSI, PSC, ISPS and MLC matters, Records of training shall be maintained and retained for each Surveyor/PSCO by the Jurisdictional Field Offices (MMD's) and in case of transfer of the officer, it will be the responsibility of the concerned officer to ensure that the records are duly transferred accordingly to the new MMD.

9. Continuous Updation of Knowledge and Training

Updating of qualifications may be done through the following methods:

- a. Self-study (unassisted study);
- b. Different courses and seminars organized in local offices and/or in the DGMA,
- c. Attending IOMOU Expert Mission training for PSCO's.
- d. MSc in Maritime Safety and Environment Administration at WMU
- e. Extraordinary technical seminars in case of significant changes in the National Rules or International Conventions, Codes, etc.
- f. Maintenance of qualifications in accordance with these criteria is to be verified at annual performance review or activity monitoring.

10. Website and Portal Familiarization

As part of the training program, participants shall be familiarized with the following official websites and digital portals relevant to the functioning of the Directorate General of Maritime Administration and associated maritime governance frameworks:

1. DGMA Official Website

Overview of the Directorate General of Maritime Administration website, including access to rules, regulations, circulars, notices, and other statutory publications.

2. Flag State Inspection (FSI) Portal

Introduction to the FSI system, covering inspection procedures, reporting requirements, and compliance monitoring.

3. Indian Ocean Memorandum of Understanding (IOMOU) Portal

Familiarization with Port State Control (PSC) activities, inspection regimes, and regional compliance frameworks under IOMOU.

4. E-Governance Portal

Training on digital services, online applications, certifications, and administrative processes facilitated through the e-Governance system.

5. Recognized Organization (RO) Module

Understanding of the RO module, including interaction with classification societies and statutory certification processes.

6. Swachh Sagar Portal

The information is filled by stakeholder as per International and Domestic Requirements pertaining to Port Reception Facility, Ballast Water Management, Bunker Supplier Management, Fuel consumption reporting, Single Used Plastic.

7. Right to Information (RTI) Portal

Introduction to the RTI framework, procedures for filing applications, and obligations related to transparency and information disclosure.

8. Centralized Public Grievance Redress and Monitoring System (CPGRAMS)

Familiarization with grievance submission, tracking, and resolution mechanisms under the CPGRAMS platform.

11. Role and Responsibilities of the Engineering Wing Staff

The staff of the Engineering Wing are responsible for carrying out the technical, statutory, regulatory, administrative and coordination functions entrusted to the Wing in accordance with the Merchant Shipping Act, the applicable Rules, International Maritime Organization (IMO) Conventions, Merchant Shipping Notices, DGS/DGMA Circulars, Office Orders and other instructions issued by the Government from time to time. The staff process and monitor all matters relating to the International Safety Management (ISM) Code, Safe Manning Documents, dispensations, exemptions, implementation of the SOLAS and MARPOL Conventions, Port Reception Facilities, River-Sea Vessels (RSV), Coastal Vessels, IMO Greenhouse Gas (GHG) initiatives, National Green Tribunal (NGT) matters, Marine Environment Protection Committee (MEPC) work, IMO-related correspondence, the Hong Kong International Convention (HKC) and ship recycling.

The Engineering Wing staff also process matters relating to Port State Control (PSC), Flag State Inspections (FSI), scrutiny and approval of ship plans, drawings, manuals and technical documents, bunker management, registration, inspection and renewal of Life-Saving Appliances (LSA) and Fire-Fighting Appliances (FFA) Service Stations and the statutory surveys, audits, inspections and certification of ships. They monitor compliance with statutory requirements, coordinate with Recognized Organizations (ROs) and handle matters relating to the IMO Member State Audit Scheme (IMSAS) and other international obligations assigned to the Directorate.

The staff are also responsible for processing matters relating to Engineering Examinations, Certificates of Competency (CoC), Certificates of Proficiency (CoP), Certificates of Endorsement (CoE), Maritime Training Institutes and implementation of the Standards of Training, Certification and Watchkeeping (STCW) Convention. They also undertake work relating to the Engineering Advisory Committee (EAC), the Quality Management System (QMS), Right to Information (RTI), e-Governance initiatives and act as the nodal point for references received from the Coordination Branch, except those specifically allocated to other sections, ensuring their timely examination and disposal.

In addition, the Engineering Wing staff process vigilance matters, finance, accounts, budget and procurement-related cases, public grievances, VIP references, Ministry references, court cases and other official references entrusted to the Wing. They prepare office notes, draft communications, reports, certificates, approvals and other official documents, maintain physical and electronic records, monitor files through the e-Office system, coordinate with Regional Offices, Recognized Organizations, Government Departments and other stakeholders, ensure timely disposal of all assigned work, maintain the confidentiality of official records and perform any other duties assigned by the Chief Surveyor, senior officers or the Competent Authority from time to time for the efficient functioning of the Engineering Wing.